

**CONSTRUCTION SERVICES AGREEMENT FOR WATER RESOURCES
IMPROVEMENT PROGRAM PROJECTS**

THIS CONSTRUCTION SERVICES AGREEMENT FOR WATER RESOURCES IMPROVEMENT PROGRAM PROJECTS ("Agreement") is entered into by and between the **CITY OF OCALA**, a Florida municipal corporation ("City"), and **MILLER PIPELINE, LLC**, a foreign limited liability company duly organized in the state of Indiana and authorized to do business in the state of Florida (EIN: 35-1959522) ("Contractor").

RECITALS:

WHEREAS, on September 9, 2022, City issued an Invitation to Bid ("ITB") for the provision of construction services related to the City's Water Resources Improvement Program projects planned or requested by the City, ITB No.: CIP/220762 (the "Solicitation"); and

WHEREAS, a total of two (2) firms responded to the Solicitation and, after consideration of price and other evaluation factors set forth in the Solicitation, the bid submitted by Miller Pipeline, Inc., was found to be the lowest; and

WHEREAS, Miller Pipeline, Inc., was chosen as the intended awardee to provide construction services related to the City's Water Resources Improvement Program projects planned or requested by the City for the construction of various water, sewer, reclaimed water and pipe lining projects in the City's service area (the "Project"); and

WHEREAS, Contractor certifies that Contractor and its subcontractors are qualified and possess the required licensure and skill to perform the work required for the Project.

NOW THEREFORE, in consideration of the foregoing recitals, the following mutual covenants and conditions, and other good and valuable consideration, City and Contractor agree as follows:

TERMS OF AGREEMENT:

1. **RECITALS.** City and Contractor hereby represent, warrant, and agree that the Recitals set forth above are true and correct and are incorporated herein by reference.
2. **CONTRACT DOCUMENTS.** The Contract Documents which comprise the entire understanding between City and Contractor shall only include: (a) this Agreement; (b) those documents listed in this section as Exhibits to this Agreement; (c) the City's Solicitation for the Project and the bid submitted by Contractor in response to same (the "Solicitation Documents"); and (d) those documents identified in the Project Specifications section of this Agreement. Each of these documents are incorporated herein by reference for all purposes.

If there is a conflict between the terms of this Agreement and the Contract Documents, then the terms of this Agreement shall control, amend, and supersede any conflicting terms contained in the remaining Contract Documents.

A. **Exhibits to Agreement:** The Exhibits to this Agreement are as follows:

- Exhibit A: Scope of Work (A-1 through A-8)
- Exhibit B: Price Proposal (B-1 through B-11)
- Exhibit C: Detailed Measurement and Payment (C-1 through C-16)
- Exhibit D: Project Sign (D-1 through D-2)

If there is a conflict between the individual Exhibits regarding the scope of work to be performed, then any identified inconsistency shall be resolved by giving precedence in the following order: (1) Exhibit A, then (2) Exhibit B, then (3) Exhibit C, then (4) Exhibit D.

3. **SCOPE OF SERVICES.** Contractor shall provide all materials, labor, supervision, tools, accessories, equipment, permits, fees, testing, inspections, certifications, and all other things necessary for

Contractor to perform its obligations under this Agreement as set forth in the attached **Exhibit A - Scope of Work** and the Solicitation Documents. In the event of a conflict between this Agreement and the Solicitation Documents, this Agreement and all of its Exhibits shall be given precedence to resolve any identified inconsistency. The Scope of Work under this Agreement may only be adjusted by written amendment executed by both parties.

4. **PROJECT SPECIFICATIONS.** This project will require the Contractor to have the following specifications and documents, which are incorporated by reference:

- A. **City of Ocala "Standard Specifications for Construction of Streets, Stormwater, Traffic, Water and Sewer Infrastructure"** available at: <https://bidocala.com/wp-content/uploads/City-of-Ocala-Standard-Specifications-for-Construction-5.21.21.pdf>.
- B. **Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction (MOST RECENT)** available at: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks/>
- C. **Marion County Standard Specifications**, available at: <https://www.marionfl.org/government/departments-facilities-offices/office-of-the-county-engineer/development-review>

In the event of a conflict between the individual Project Specifications regarding the scope of work to be performed, then the specification with the more restrictive provision shall take precedence over the others.

5. **COMPENSATION.** City shall pay Contractor a maximum limiting amount not to exceed **FOUR MILLION AND NO/100 DOLLARS (\$4,000,000)** (the "Contract Sum") over the entire contract term as full and complete compensation for the timely and satisfactory completion of the work in compliance with the Contract Documents, as follows:

- A. **Monthly Progress Payments:** The compensation amount under this section shall be paid by City, monthly, based upon a percentage of completion of the work as invoiced by Contractor and approved by City. The compensation sought under this Agreement is subject to the express terms of this Agreement and any applicable Federal and/or state laws.
- B. **Project Schedule and Progress Reports.** A progress report and updated project schedule must be submitted with each monthly pay request indicating the percent of services completed to date. This report will serve as support for payment to Contractor and the basis for payment in the event project is suspended or abandoned.
- C. **Invoice Submission.** All invoices submitted by Contractor shall include the City Contract Number, an assigned Invoice Number, and an Invoice Date. City will provide Contractor with an invoice cover sheet. Invoice cover sheets are required to be accurately completed and submitted with each invoice. Contractor shall submit the original invoice, no more than once monthly, through the responsible City Project Manager at: **City of Ocala Engineering Department, Attn: Eric Giannino, Address: 1805 NE 30th Avenue, Bldg. 700, Ocala, Florida 34470, E-Mail: egiannino@ocalafl.org.**
- D. **Payment of Invoices by City.** The City Project Manager shall review and approve all invoices prior to payment. City Project Manager's approval shall not be unreasonably withheld, conditioned, or delayed. Payments by City shall be made no later than the time periods established in section 218.735, Florida Statutes.
- E. **Retainage.** City shall withhold an amount equal to **FIVE PERCENT (5%)** of each monthly progress payment as retainage to secure Contractor's full and faithful performance of its

- obligations under this Agreement (the "Retainage"). Contractor shall not be entitled to any interest received by City on Retainage. The Retainage shall be payable to Contractor, subject to the provisions of this subsection, upon satisfaction of the following conditions precedent: (1) confirmation from the City Project Manager that Contractor has satisfactorily completed all work in accordance with the provisions of the Agreement; and (2) receipt of the Consent of Surety of the recorded bond for final payment.
- F. **Withholding of Payment.** City reserves the right to withhold, in whole or in part, payment for any and all work that: (i) has not been completed by Contractor; (ii) is inadequate or defective and has not been remedied or resolved in a manner satisfactory to the City Project Manager; or (iii) which fails to comply with any term, condition, or other requirement under this Agreement. Any payment withheld shall be released and remitted to Contractor within **THIRTY (30)** calendar days of the Contractor's remedy or resolution of the inadequacy or defect.
- G. **Excess Funds.** If due to mistake or any other reason Contractor receives payment under this Agreement in excess of what is provided for by the Agreement, Contractor shall promptly notify City upon discovery of the receipt of the overpayment. Any overpayment shall be refunded to City within **THIRTY (30)** days of Contractor's receipt of the overpayment or must also include interest calculated from the date of the overpayment at the interest rate for judgments at the highest rate as allowed by law.
- H. **Tax Exemption.** City is exempt from all federal excise and state sales taxes (State of Florida Consumer's Certification of Exemption 85-8012621655C-9). The City's Employer Identification Number is 59-60000392. Contractor shall not be exempted from paying sales tax to its suppliers for materials to fulfill contractual obligations with the City, nor will Contractor be authorized to use City's Tax Exemption Number for securing materials listed herein.
6. **TIME FOR PERFORMANCE.** Time is of the essence with respect to the performance of all duties, obligations, and responsibilities set forth in this Agreement and the Contract Documents.
- A. **Effective Date and Term.** This Agreement shall become effective and commence on **JANUARY 9, 2023** and continue in effect for a term of **TWO (2) YEARS**, through and including **JANUARY 8, 2025**. This Agreement may be renewed for up to **TWO (2)** additional **ONE YEAR (1-Year)** terms by written consent between City and Contractor. Any price increase for contract renewal will be subject to negotiation as approved by the City. In no case will the increase exceed **THREE PERCENT (3%) ANNUALLY** unless there are mitigating market conditions. Prices increases shall be based on the CPI-U and vendor must submit its written request for an increase with CPI justification at least 90 days prior to the end of the current term.
- B. **Notices to Proceed on Individual Projects.** City shall issue written Notices to Proceed for individual projects in alignment with project schedules. Notices to Proceed shall be issued at the pre-construction conference, after Contractor and City have agreed upon the time needed to complete each individual project as assigned. Contractor agrees to have project signs in place, be able to mobilize, and commence construction work within **SEVEN (7)** days of the date of issuance of a Notice to Proceed for each individual project. Contractor shall complete assigned projects within the time limits specified in the Notice to Proceed and substantial completion and final completion dates shall be strictly enforced by City. At no time will Contractor be allowed to lag behind. Contractor shall be expected to accurately track contract time and progress for each assigned project. Notices to Proceed for additional

- projects will not be issued if Contractor has failed to properly complete and close out previous projects assigned under this Agreement.
- C. The Time for Performance under this Agreement may only be adjusted by Change Order, in the sole and absolute discretion of City. Any request for an extension of the Time for Performance must be submitted in a writing delivered to the City Project Manager, along with all supporting data. All requests for adjustments in the Contract Time shall be determined by City.
 - D. As to any delay, inefficiency, or interference in this performance of this Agreement caused by any act or failure to act by City, the Contractor's sole remedy shall be the entitlement of an extension of time to complete the performance of the affected work in accordance with the Contract Documents. Contractor agrees to make no claim for extra or additional costs attributable to said delays, inefficiencies or interference, except as provided in this Agreement.
 - E. None of the provisions of this section shall exclude City's right of recovery for damages caused by delays or inefficiencies caused by any act or failure to act by Contractor, to include costs incurred by City for the procurement of additional professional services.
7. **LIQUIDATED DAMAGES FOR LATE COMPLETION.** The parties agree that it would be extremely difficult and impracticable under the presently known facts and anticipated circumstances to ascertain and fix the actual damages that City and its residents would incur should Contractor fail to achieve Substantial Completion and/or Final Completion and readiness for final payment by the dates specified for each individual project under the terms of this Agreement. Accordingly, the parties agree that should Contractor fail to achieve Substantial Completion by the dates specified on each City-issued Notice to Proceed, then Contractor shall pay City, as liquidated damages and not as a penalty, the daily sum given in the schedule below based on individual project cost for each calendar day of unexcused delay in achieving Substantial Completion beyond the date specified for Substantial Completion for each individual project in the City-issued Notice to Proceed:

Original Contract Amount	Charge Per Calendar Day
\$50,000 and under	\$868
Over \$50,000 but less than \$250,000	\$882
\$250,000 but less than \$500,000	\$1,197
\$500,000 but less than \$2,500,000	\$1,694
\$2,500,000 but less than \$5,000,000	\$2,592

After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining work within the time specified in the Contract Documents for Final Completion and readiness for final payment or any proper extension thereof granted by City, Contractor shall pay City, as liquidated damages and not as a penalty, additional sum of **TWO HUNDRED AND NO/100 DOLLARS (\$200.00)** per day for each calendar day of unexcused delay in achieving completion and readiness for final payment.

- A. **No Waiver of Rights or Liabilities.** Permitting Contractor to continue and finish the work, or any part thereof, beyond the dates specified for Substantial Completion and/or Final Completion and readiness for final payment shall not operate as a waiver on the part of the City of any of its rights under this Agreement. Any liquidated damages assessed pursuant to

- this section shall not relieve Contractor from liability for any damages or costs of other contractors caused by a failure of Contractor to complete the work as agreed.
- B. **Right to Withhold or Deduct Damages.** When liquidated damages are due and owing, City shall have the right to: (1) deduct the liquidated damages from any money in its hands or from any money otherwise due or to become due to Contractor; or to (2) initiate any applicable dispute resolution procedure for the recovery of liquidated damages within the times specified under this Agreement.
 - C. **Non-Cumulative.** The parties agree and understand that the amounts set forth under this section for liquidated damages are not cumulative with one another. The amount set forth as liquidated damages for Contractor's failure to achieve Substantial Completion shall be assessed upon default and continue until Substantial Completion is attained. The amount set forth as liquidated damages for Contractor's failure to achieve Final Completion and readiness for payment shall be assessed after Substantial Completion is attained and apply until Final Completion is attained.
 - D. **Additional Costs.** In addition to the liquidated damages set forth under this section, Contractor agrees to pay all costs and expenses incurred by City due to Contractor's delay in performance to include inspection fees, superintendence costs, and travel expenses.
 - E. **Injunctive Relief.** The parties acknowledge that monetary damages may not be a sufficient remedy for Contractor's failure to achieve Substantial Completion or Final Completion in accordance with the terms of this Agreement, and that City shall be entitled, in addition to all other rights or remedies in law and equity, to seek injunctive relief.
8. **FORCE MAJEURE.** Neither party shall be liable for delay, damage, or failure in the performance of any obligation under this Agreement if such delay, damage, or failure is due to causes beyond its reasonable control, including without limitation: fire, flood, strikes and labor disputes, acts of war, acts of nature, terrorism, civil unrest, acts or delays in acting of the government of the United States or the several states, judicial orders, decrees or restrictions, or any other like reason which is beyond the control of the respective party ("Force Majeure"). The party affected by any event of force majeure shall use reasonable efforts to remedy, remove, or mitigate such event and the effects thereof with all reasonable dispatch.
- A. The party affected by force majeure shall provide the other party with full particulars thereof including, but not limited to, the nature, details, and expected duration thereof, as soon as it becomes aware.
 - B. When force majeure circumstances arise, the parties shall negotiate in good faith any modifications of the terms of this Agreement that may be necessary or appropriate in order to arrive at an equitable solution. Contractor performance shall be extended for a number of days equal to the duration of the force majeure. Contractor shall be entitled to an extension of time only and, in no event, shall Contractor be entitled to any increased costs, additional compensation, or damages of any type resulting from such force majeure delays.
9. **INSPECTION AND ACCEPTANCE OF THE WORK.** Contractor shall report its progress to the City Project Manager as set forth herein. All services, work, and materials provided by Contractor under this Agreement shall be provided to the satisfaction and approval of the Project Manager.
- A. The Project Manager shall decide all questions regarding the quality, acceptability, and/or fitness of materials furnished, or workmanship performed, the rate of progress of the work, the interpretation of the plans and specifications, and the acceptable fulfillment of the Agreement, in his or her sole discretion, based upon both the requirements set forth by City and the information provided by Contractor in its Proposal. The authority vested in the

Project Manager pursuant to this paragraph shall be confined to the direction or specification of what is to be performed under this Agreement and shall not extend to the actual execution of the work.

- B. Neither the Project Manager's review of Contractor's work nor recommendations made by Project Manager pursuant to this Agreement will impose on Project Manager any responsibility to supervise, direct, or control Contractor's work in progress or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident Contractor's furnishing and performing the work.

10. **TERMINATION AND DEFAULT.** Either party, upon determination that the other party has failed or refused to perform or is otherwise in breach of any obligation or provision under this Agreement or the Contract Document, may give written notice of default to the defaulting party in the manner specified for the giving of notices herein. Termination of this Agreement by either party for any reason shall have no effect upon the rights or duties accruing to the parties prior to termination.

- A. **Termination by City for Cause.** City shall have the right to terminate this Agreement immediately, in whole or in part, upon the failure of Contractor to carry out any obligation, term, or condition of this Agreement. City's election to terminate the Agreement for default shall be communicated by providing Contractor written notice of termination in the manner specified for the giving of notices herein. Any notice of termination given to Contractor by City shall be effective immediately, unless otherwise provided therein, upon the occurrence of any one or more of the following events:

- (1) Contractor fails to timely and properly perform any of the services set forth in the specifications of the Agreement;
- (2) Contractor provides material that does not meet the specifications of the Agreement;
- (3) Contractor fails to complete the work required within the time stipulated in the Agreement; or
- (4) Contractor fails to make progress in the performance of the Agreement and/or gives City reason to believe that Contractor cannot or will not perform to the requirements of the Agreement.

- B. **Contractor's Opportunity to Cure Default.** City may, in its sole discretion, provide Contractor with an opportunity to cure the violations set forth in City's notice of default to Contractor. Contractor shall commence to cure the violations immediately and shall diligently and continuously prosecute such cure to completion within a reasonable time as determined by City. If the violations are not corrected within the time determined to be reasonable by City or to the reasonable satisfaction of City, City may, without further notice, declare Contractor to be in breach of this Agreement and pursue all remedies available at law or equity, to include termination of this Agreement without further notice.

- C. **City's Remedies Upon Contractor Default.** In the event that Contractor fails to cure any default under this Agreement within the time period specified in this section, City may pursue any remedies available at law or equity, including, without limitation, the following:

- (1) City shall be entitled to terminate this Agreement without further notice;
- (2) City shall be entitled to hire another contractor to complete the required work in accordance with the needs of City;
- (3) City shall be entitled to recover from Contractor all damages, costs, and attorney's fees arising from Contractor's default prior to termination; and

- (4) City shall be entitled to recovery from Contractor any actual excess costs by: (i) deduction from any unpaid balances owed to Contractor; or (ii) placing a claim against the public construction bond; or (iii) any other remedy as provided by law.
- D. **Termination for Convenience.** City reserves the right to terminate this Agreement in whole or in part at any time for the convenience of City without penalty or recourse. The Project Manager shall provide written notice of the termination. Upon receipt of the notice, Contractor shall immediately discontinue all work as directed in the notice, notify all subcontractors of the effective date of the termination, and minimize all further costs to City including, but not limited to, the placing of any and all orders for materials, facilities, or supplies, in connection with its performance under this Agreement. Contractor shall be entitled to receive compensation solely for: (1) the actual cost of the work completed in conformity with this Agreement; and/or (2) such other costs incurred by Contractor as permitted under this Agreement and approved by City.
11. **WARRANTY.** Contractor warrants that all labor, materials, and equipment furnished under the agreement are new, of the type and quality required for the Project, and installed in a good and workmanlike manner in accordance with the Contract Documents. Contractor shall guarantee that the work shall be free from any defects in workmanship for a period of not less than **THREE (3)** years from the date of Final Completion for each project. Contractor shall guarantee that the materials provided shall be free from any defects for the longer of: (1) **THREE (3)** years from the date of Final Completion for each project; or (2) the period of warranty provided by any supplier or manufacturer. All written manufacturers' warranties for materials supplied must be provided to the City Project Manager before final payment will be authorized.
12. **DELAYS AND DAMAGES.** The Contractor agrees to make no claim for extra or additional costs attributable to any delays, inefficiencies, or interference in the performance of this contract occasioned by any act or omission to act by the City except as provided in the Agreement. The Contractor also agrees that any such delay, inefficiency, or interference shall be compensated for solely by an extension of time to complete the performance of the work in accordance with the provision in the standard specification.
13. **MAINTENANCE AND GUARANTEE BOND.** Prior to final Payment, Contractor shall furnish a Maintenance and Guarantee Bond in the amount of **10% OF THE TOTAL PROJECT VALUE** for a period of **THREE (3)** years for labor and **THREE (3)** years for materials from the date of Substantial Completion. Prior to the City's receipt of Contractor's fully executed Maintenance and Guarantee Bond, Contractor will warrant all labor and materials completed pursuant to this Agreement.
14. **PUBLIC CONSTRUCTION BOND.** As required by section 255.05, Florida Statutes, Contractor shall furnish a certified and recorded Public Construction Bond in the amount of **FIVE HUNDRED THOUSAND AND NO/100 DOLLARS (\$500,000)** as security for the faithful performance of the work as required and set forth in Exhibit A – Scope of Work within the time set forth for performance under this Agreement and for prompt payments to all persons defined in section 713.01, Florida Statutes, who furnish labor, services, or materials for the completion of the work provided for herein.
15. **CONSTRUCTION SURVEY LAYOUT.** The City Engineer/City Project Manager may, as required, establish a number of benchmarks on the project which in their opinion will enable the Contractor to perform the work. If Contractor shall remove or destroy any stake, marker or benchmark on the work without first having secured the approval of the City Engineer/City Project Manager,

such stake, or benchmark shall be re-established by and at Contractor's expense. It shall be the responsibility of Contractor to preserve all adjacent property corner markers which might be affected by their operations and replace same if undermined. Corner locations known by City will be made available to Contractor. All original field notes, calculations, and other documents developed by the surveyor in conjunction with this work shall be given to City and become City property. All surveying work must be in accordance with Chapters 177 and 472 of Florida Statutes and Chapter 6G17 of the Florida Administrative Code.

16. **PERFORMANCE EVALUATION.** At the end of the contract, City may evaluate Contractor's performance. Any such evaluation will become public record.
17. **NOTICE REGARDING FAILURE TO FULFILL AGREEMENT.** Any contractor who enters into an Agreement with the City of Ocala and fails to complete the contract term, for any reason, shall be subject to future bidding suspension for a period of **ONE (1)** year and bid debarment for a period of up to **THREE (3)** years for serious contract failures.
18. **CONTRACTOR REPRESENTATIONS.** Contractor expressly represents that:
 - A. Contractor has read and is fully familiar with all the terms and conditions of this Agreement, the Contract Documents, and other related data and acknowledges that they are sufficient in scope and detail to indicate and convey understanding of all terms and conditions of the work to be performed by Contractor under this Agreement.
 - B. Contractor has disclosed, in writing, all known conflicts, errors, inconsistencies, discrepancies, or omissions discovered by Contractor in the Contract Documents, and that the City's written resolution of same is acceptable to Contractor.
 - C. Contractor has had an opportunity to visit, has visited, or has had an opportunity to examine and ask questions regarding the sites upon which the work is to be performed and is satisfied with the site conditions that may affect cost, progress, and performance of the work, as observable or determinable by Contractor's own investigation.
 - D. Contractor is satisfied with the site conditions that may affect cost, progress, and performance of the work, as observable or determinable by Contractor's own investigation.
 - E. Contractor is familiar with all local, state, and Federal laws, regulations, and ordinances which may affect cost, progress, or its performance under this Agreement whatsoever.
 - F. **Public Entity Crimes.** Neither Contractor, its parent corporations, subsidiaries, members, shareholders, partners, officers, directors or executives, nor any of its affiliates, contractors, suppliers, subcontractors, or consultants under this Agreement have been placed on the convicted vendor list following a conviction of a public entity crime. Contractor understands that a "public entity crime" as defined in section 287.133(1)(g), Florida Statutes, is "a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States..." Contractor further understands that any person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime: (1) may not submit a bid, proposal, or reply on a contract: (a) to provide any goods or services to a public entity; (b) for the construction or repair of a public building or public work; or (c) for leases of real property to a public entity; (2) may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and (3) may not transact business with any public entity in excess of the threshold amount provided in section 287.017, Florida Statutes, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

19. **CONTRACTOR RESPONSIBILITIES.** Except as otherwise specifically provided for in this Agreement, the following provisions are the responsibility of the Contractor:
 - A. Contractor shall competently and efficiently supervise, inspect, and direct all work to be performed under this Agreement, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract Documents.
 - B. Contractor shall be solely responsible for the means, methods, techniques, sequences, or procedures of construction and safety precautions or programs incident thereto.
 - C. Contractor shall be responsible to see that the finished work complies accurately with the contract and the intent thereof.
 - D. Contractor shall comply with all local, state, and Federal laws, regulations, and ordinances which may affect cost, progress, or its performance under this Agreement, to include obtaining all permits, licenses, and other authorizations necessary for the prosecution of the work and be responsible for all costs associated with same.
 - E. Contractor shall operate and cause all construction equipment and materials supplied for or intended to be utilized in the Project to be operated and stored in only those areas prescribed by City. This includes the operations of workmen.
 - F. Contractor shall be fully responsible for receipt, inspection, acceptance, handling, and storage of all construction equipment and materials supplied for or intended to be utilized in the Project, whether furnished by Contractor or City. Contractor shall be responsible for providing adequate safeguards to prevent loss, theft, damage, or commingling with other materials or projects.
 - G. Contractor shall continue its performance under this Agreement during the pendency of any dispute or disagreement arising out of or relating to this Agreement, except as Contractor and City may otherwise agree in writing.
20. **NO EXCLUSIVITY.** It is expressly understood and agreed by the parties that this is not an exclusive agreement. Nothing in this Agreement shall be construed as creating any exclusive arrangement with Contractor or as prohibit City from either acquiring similar, equal, or like goods and/or services or from executing additional contracts with other entities or sources.
21. **RIGHT OF ACCESS AND OTHER WORK PERFORMED BY THIRD PARTIES.** City may perform additional work related to the Project itself, or have additional work performed by utility service companies, or let other direct contracts therefore which shall contain General Conditions similar to these. Contractor shall afford the utility service companies and the other contractors who are parties to such direct contracts (or City, if City is performing the additional work with City's employees) reasonable opportunity for the introduction and storage of materials and equipment and the execution of work and shall properly connect and coordinate his work with theirs.
 - A. If any part of Contractor's work depends for proper execution or results upon the work of any such other contractor or utility service company (or City), Contractor shall inspect and promptly report to City in writing any latent or apparent defects or deficiencies in such work that render it unsuitable for such proper execution and results. Contractor's failure to so report shall constitute an acceptance of the other work as fit and proper for integration with Contractor's work except for latent or non-apparent defects and deficiencies in the other work.
 - B. Contractor shall do all cutting, fitting, and patching of work that may be required to make the parts come together properly and integrate with such other work. Contractor shall not

- endanger any work of others by cutting, excavating, or otherwise altering their work, and will only cut or alter their work with the written consent of City.
22. **STORAGE OF MATERIALS/EQUIPMENT.** Contractor shall be fully responsible for receipt, inspection, acceptance, handling, and storage of equipment and materials (whether furnished by Contractor or City) to be utilized in the performance of or incorporated into the work.
 23. **RESPONSIBILITIES OF CITY.** City or its representative shall issue all communications to Contractor. City has the authority to request changes in the work in accordance with the terms of this Agreement and with the terms in **Exhibit A – Scope of Work**. City has the authority to stop work or to suspend any work.
 24. **COMMERCIAL AUTO LIABILITY INSURANCE.** Contractor shall procure, maintain, and keep in full force, effect, and good standing for the life of this Agreement a policy of commercial auto liability insurance with a minimum combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury and property damage arising out of Contractor's operations and covering all owned, hired, scheduled, and non-owned automobiles utilized in said operations. If Contractor does not own vehicles, Contractor shall maintain coverage for hired and non-owned automobile liability, which may be satisfied by way of endorsement to Contractor's Commercial General Liability policy or separate Commercial Automobile Liability policy.
 25. **COMMERCIAL GENERAL LIABILITY INSURANCE.** Contractor shall procure, maintain, and keep in full force, effect, and good standing for the life of this Agreement a policy of commercial general liability insurance with limits not less than:
 - A. One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate (or project aggregate, if a construction project) for bodily injury, property damage, and personal and advertising injury; and
 - B. One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate (or project aggregate, if a construction project) for products and completed operations.
 - C. Policy must include coverage for contractual liability and independent contractors.
 - D. The City, a Florida municipal corporation, and its officials, employees, and volunteers are to be covered as additional insureds with a CG 20 26 04 13 Additional Insured – Designated Person or Organization Endorsement or similar endorsement providing equal or broader Additional Insured Coverage with respect to liabilities arising out of activities performed by or on behalf of Contractor. This coverage shall contain no special limitation on the scope of protection to be afforded to the City, its officials, employees, and volunteers.
 26. **WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY.** Contractor shall procure, maintain, and keep in full force, effect, and good standing for the life of this Agreement adequate workers' compensation and employer's liability insurance covering all of its employees in at least such amounts as required by Chapter 440, Florida Statutes, and all other state and federal workers' compensation laws, including the U.S. Longshore Harbor Workers' Act and the Jones Act, if applicable. Contractor shall similarly require any and all of its subcontractors to afford such coverage for all of its employees as required by applicable law. Contractor shall waive and shall ensure that Contractor's insurance carrier waives, all subrogation rights against the City of Ocala and its officers, employees, and volunteers for all losses or damages. Contractor's policy shall be endorsed with WC 00 03 13 Waiver of our Right to Recover from Others or its equivalent. **Exceptions and exemptions to this Section may be allowed at the discretion of the City's**

Risk Manager on a case-by-case basis in accordance with Florida Statutes and shall be evidenced by a separate waiver.

27. MISCELLANEOUS INSURANCE PROVISIONS.

- A. Contractor's insurance coverage shall be primary insurance for all applicable policies. The limits of coverage under each policy maintained by Contractor shall not be interpreted as limiting Contractor's liability or obligations under this Agreement. City does not in any way represent that these types or amounts of insurance are sufficient or adequate enough to protect Contractor's interests or liabilities or to protect Contractor from claims that may arise out of or result from the negligent acts, errors, or omissions of Contractor, any of its agents or subcontractors, or for anyone whose negligent act(s) Contractor may be liable.
- B. No insurance shall be provided by the City for Contractor under this Agreement and Contractor shall be fully and solely responsible for any costs or expenses incurred as a result of a coverage deductible, co-insurance penalty, or self-insured retention to include any loss not covered because of the operation of such deductible, co-insurance penalty, self-insured retention, or coverage exclusion or limitation.
- C. Certificates of Insurance. No work shall be commenced by Contractor under this Agreement until the required Certificate of Insurance and endorsements have been provided nor shall Contractor allow any subcontractor to commence work until all similarly required certificates and endorsements of the subcontractor have also been provided. Work shall not continue after expiration (or cancellation) of the Certificate of Insurance and work shall not resume until a new Certificate of Insurance has been provided. **Contractor shall provide evidence of insurance in the form of a valid Certificate of Insurance (binders are unacceptable) prior to the start of work contemplated under this Agreement to: City of Ocala. Attention: Procurement & Contracting Department, Address: 110 SE Watula Avenue, Third Floor, Ocala Florida 34471, E-Mail: vendors@ocalafl.org.** Contractor's Certificate of Insurance and required endorsements shall be issued by an agency authorized to do business in the State of Florida with an A.M. Best Rating of A or better. The Certificate of Insurance shall indicate whether coverage is being provided under a claims-made or occurrence form. If any coverage is provided on a claims-made form, the Certificate of Insurance must show a retroactive date, which shall be the effective date of the initial contract or prior. Failure to Maintain Coverage. In the event Contractor fails to disclose each applicable deductible/self-insured retention or obtain or maintain in full force and effect any insurance coverage required to be obtained by Contractor under this Agreement, Contractor shall be considered to be in default of this Agreement.
- D. City as an Additional Insured. The City of Ocala shall be named as an Additional Insured and Certificate Holder on all liability policies identified in this Section with the exception of Workers' Compensation and Professional Liability policies.
- E. Notice of Cancellation of Insurance. Contractor's Certificate of Insurance shall provide **THIRTY (30) DAY** notice of cancellation, **TEN (10) DAY** notice if cancellation is for non-payment of premium. In the event that Contractor's insurer is unable to accommodate the cancellation notice requirement, it shall be the responsibility of Contractor to provide the proper notice. Such notification shall be in writing by registered mail, return receipt requested, and addressed to the certificate holder. Additional copies may be sent to the City of Ocala at vendors@ocalafl.org.
- F. Failure to Maintain Coverage. The insurance policies and coverages set forth above are required and providing proof of and maintaining insurance of the types and with such terms

and limits set forth above is a material obligation of Contractor. Contractor's failure to obtain or maintain in full force and effect any insurance coverage required under this Agreement shall constitute material breach of this Agreement.

- G. Severability of Interests. Contractor shall arrange for its liability insurance to include, or be endorsed to include, a severability of interests/cross-liability provision so that the "City of Ocala" (where named as an additional insured) will be treated as if a separate policy were in existence, but without increasing the policy limits.

28. **SAFETY/ENVIRONMENTAL.** Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Contractor shall make an effort to detect hazardous conditions and shall take prompt action where necessary to avoid accident, injury or property damage. EPA, DEP, OSHA and all other applicable safety laws and ordinances shall be followed as well as American National Standards Institute Safety Standards. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:

- A. All employees on the work and other persons that may be affected thereby;
- B. All work, materials and equipment to be incorporated therein, whether in storage on or off the site; and
- C. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

All, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Contractor, any subcontractor, or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, shall be remedied by Contractor. Contractor's duties and responsibilities for the safety and protection of the work shall continue until such time as the work is completed and accepted by City.

29. **TRAFFIC CONTROL AND BARRICADES.** The Contractor shall mitigate impact on local traffic conditions to all extents possible. The Contractor is responsible for establishing and maintaining appropriate traffic control and barricades. The Contractor shall provide sufficient signing, flagging and barricading to ensure the safety of vehicular and pedestrian traffic at all locations where work is being done under this Agreement.

- A. In addition to the requirements set forth in bid, the Contractor shall maintain at all times a good and sufficient fence, railing or barrier around all exposed portions of said work in such a manner as to warn vehicular and pedestrian traffic of hazardous conditions.
- B. Should Contractor fail to properly barricade his work or stored material sites in the manner outlined above, the City may have the necessary barricading done, and all cost incurred for said barricading shall be charged to the Contractor.

30. **WORK SITE AND CLEANUP.** Daily, during the progress of the work, Contractor shall keep the premises free from accumulations of waste materials, rubbish, and all other debris resulting from the work. At the completion of the work, Contractor shall remove all waste materials, rubbish, and debris from and about the premises, as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by City. Contractor shall provide an inventory listing of all surplus materials in an area designated by City. Contractor shall restore to their original condition those portions of the site not designated or alteration by the Contract.

31. **NON-DISCRIMINATORY EMPLOYMENT PRACTICES.** During the performance of the contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, national origin, sex, pregnancy, age, disability, sexual orientation, gender identity, marital or domestic partner status, familial status, or veteran status and shall take affirmative action to ensure that an employee or applicant is afforded equal employment opportunities without discrimination. Such action shall be taken with reference to, but not limited to: recruitment, employment, termination, rates of pay or other forms of compensation and selection for training or retraining, including apprenticeship and on-the-job training.
32. **SUBCONTRACTORS.** Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by City or its representatives to any subcontractor of Contractor or any other persons or organizations having a direct contract with Contractor, nor shall it create any obligation on the part of City or its representatives to pay or seek payment of any monies to any subcontractor of Contractor or any other persons or organizations having a direct contract with Contractor, except as may otherwise be required by law. City shall not be responsible for the acts or omissions of any Contractor, subcontractor, or of any of their agents or employees, nor shall it create any obligation on the part of City or its representatives to pay or to seek the payment of any monies to any subcontractor or other person or organization, except as may otherwise be required by law.
33. **EMERGENCIES.** In an emergency affecting the welfare and safety of life or property, Contractor, without special instruction or authorization from the City Project Manager, is hereby permitted, authorized and directed to act at its own discretion to prevent threatened loss or injury. Except in the case of an emergency requiring immediate remedial work, any work performed after regular working hours, on Saturdays, Sundays or legal holidays, shall be performed without additional expense to the City unless such work has been specifically requested and approved by the City Project Manager. Contractor shall be required to provide to the City Project Manager with the names, addresses and telephone numbers of those representatives who can be contacted at any time in case of emergency. Contractor's emergency representatives must be fully authorized and equipped to correct unsafe or excessively inconvenient conditions on short notice by City or public inspectors.
34. **INDEPENDENT CONTRACTOR STATUS.** Contractor acknowledges and agrees that under this Agreement, Contractor and any agent or employee of Contractor shall be deemed at all times to be an independent contractor and shall be wholly responsible for the manner in which it performs the services and work required under this Agreement. Neither Contractor nor its agents or employees shall represent or hold themselves out to be employees of City at any time. Neither Contractor nor its agents or employees shall have employee status with City. Nothing in this Agreement shall constitute or be construed to create any intent on the part of either party to create an agency relationship, partnership, employer-employee relationship, joint venture relationship, or any other relationship which would allow City to exercise control or discretion over the manner or methods employed by Contractor in its performance of its obligations under this Agreement.
35. **ACCESS TO FACILITIES.** City shall provide Contractor with access to all City facilities as is reasonably necessary for Contractor to perform its obligations under this Agreement.
36. **ASSIGNMENT.** Neither party may assign its rights or obligations under this Agreement to any third party without the prior express approval of the other party, which shall not be unreasonably withheld.

37. **RIGHT OF CITY TO TAKE OVER CONTRACT.** Should the work to be performed by Contractor under this Agreement be abandoned, or should Contractor become insolvent, or if Contractor shall assign or sublet the work to be performed hereunder without the written consent of City, the City Project Manager shall have the power and right to hire and acquire additional men and equipment, supply additional material, and perform such work as deemed necessary for the completion of this Agreement. Under these circumstances, all expenses and costs actually incurred by City to accomplish such completion shall be credited to City along with amounts attributable to any other elements of damage and certified by the Project Manager. The City Project Manager's certification as to the amount of such liability shall be final and conclusive.
38. **PUBLIC RECORDS.** The Contractor shall comply with all applicable provisions of the Florida Public Records Act, Chapter 119, Florida Statutes. Specifically, the Contractor shall:
- A. Keep and maintain public records required by the public agency to perform the service.
 - B. Upon request from the public agency's custodian of public records, provide the public agency with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
 - C. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the Contractor does not transfer the records to the public agency.
 - D. Upon completion of the contract, transfer, at no cost, to the public agency all public records in possession of the Contractor or keep and maintain public records required by the public agency to perform the service. If the Contractor transfers all public records to the public agency upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the public agency, upon request from the public agency's custodian of public records, in a format that is compatible with the information technology systems of the public agency.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT: CITY OF OCALA, OFFICE OF THE CITY CLERK; 352-629-8266; E-mail: clerk@ocalafl.org; City Hall, 110 SE Watula Avenue, Ocala, FL 34471.

39. **AUDIT.** Contractor shall comply and cooperate immediately with any inspections, reviews, investigations, or audits relating to this Agreement as deemed necessary by the Florida Office of the Inspector General, the City's Internal or External auditors or by any other Florida official with proper authority.
40. **PUBLICITY.** Contractor shall not use City's name, logo, seal or other likeness in any press release, marketing materials, or other public announcement without City's prior written approval.
41. **E-VERIFY.** In accordance with Executive Order 11-116, Contractor shall utilize the U.S. Agency of Homeland Security's E-Verify system, <https://e-verify.uscis.gov/emp>, to verify the employment

eligibility of all employees hired during the term of this Agreement. Contractor shall also require all subcontractors performing work under this Agreement to utilize the E-Verify system for any employees they may hire during the term of this Agreement.

42. **CONFLICT OF INTEREST.** Contractor is required to have disclosed, with the submission of their bid, the name of any officer, director, or agent who may be employed by the City. Contractor shall further disclose the name of any City employee who owns, directly or indirectly, any interest in Contractor's business or any affiliated business entity. Any additional conflicts of interest that may occur during the contract term must be disclosed to the City of Ocala Procurement Department.
43. **WAIVER.** The failure or delay of any party at any time to require performance by another party of any provision of this Agreement, even if known, shall not affect the right of such party to require performance of that provision or to exercise any right, power or remedy hereunder. Any waiver by any party of any breach of any provision of this Agreement should not be construed as a waiver of any continuing or succeeding breach of such provision, a waiver of the provision itself, or a waiver of any right, power or remedy under this Agreement. No notice to or demand on any party in any circumstance shall, of itself, entitle such party to any other or further notice or demand in similar or other circumstances.
44. **SEVERABILITY OF ILLEGAL PROVISIONS.** Wherever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under the applicable law. Should any portion of this Agreement be declared invalid for any reason, such declaration shall have no effect upon the remaining portions of this Agreement.
45. **INDEMNITY.** Contractor shall indemnify and hold harmless City and its elected officials, employees and volunteers against and from all damages, claims, losses, costs, and expenses, including reasonable attorneys' fees, which City or its elected officials, employees or volunteers may sustain, or which may be asserted against City or its elected officials, employees or volunteers, arising out of the activities contemplated by this Agreement including, without limitation, harm or personal injury to third persons during the term of this Agreement to the extent attributable to the actions of Contractor, its agents, and employees.
46. **NO WAIVER OF SOVEREIGN IMMUNITY.** Nothing herein is intended to waive sovereign immunity by the City to which sovereign immunity may be applicable, or of any rights or limits of liability existing under Florida Statute § 768.28. This term shall survive the termination of all performance or obligations under this Agreement and shall be fully binding until any proceeding brought under this Agreement is barred by any applicable statute of limitations.
47. **NOTICES.** All notices, certifications or communications required by this Agreement shall be given in writing and shall be deemed delivered when personally served, or when received if by facsimile transmission with a confirming copy mailed by registered or certified mail, postage prepaid, return receipt requested. Notices can be concurrently delivered by e-mail. All notices shall be addressed to the respective parties as follows:

If to Contractor:

Miller Pipeline, LLC
 Attention: Charles Bell
 8850 Crawfordville Road
 Indianapolis, Indiana 46234
 Phone: 352-236-3355
 E-mail: charles.bell@millerpipeline.com

If to City of Ocala:

Daphne M. Robinson, Esq., Contracting Officer
City of Ocala
110 SE Watula Avenue, Third Floor
Ocala, Florida 34471
Phone: 352-629-8343
E-mail: notices@ocalafl.org

Copy to:

William E. Sexton, Esq., City Attorney
City of Ocala
110 SE Watula Avenue, Third Floor
Ocala, Florida 34471
Phone: 352-401-3972
E-mail: cityattorney@ocalafl.org

48. **ATTORNEYS' FEES.** If any civil action, arbitration or other legal proceeding is brought for the enforcement of this Agreement, or because of an alleged dispute, breach, default or misrepresentation in connection with any provision of this Agreement, the successful or prevailing party shall be entitled to recover reasonable attorneys' fees, sales and use taxes, court costs and all expenses reasonably incurred even if not taxable as court costs (including, without limitation, all such fees, taxes, costs and expenses incident to arbitration, appellate, bankruptcy and post-judgment proceedings), incurred in that civil action, arbitration or legal proceeding, in addition to any other relief to which such party or parties may be entitled. Attorneys' fees shall include, without limitation, paralegal fees, investigative fees, administrative costs, sales and use taxes and all other charges reasonably billed by the attorney to the prevailing party.
49. **JURY WAIVER.** IN ANY CIVIL ACTION, COUNTERCLAIM, OR PROCEEDING, WHETHER AT LAW OR IN EQUITY, WHICH ARISES OUT OF, CONCERNS, OR RELATES TO THIS AGREEMENT, ANY AND ALL TRANSACTIONS CONTEMPLATED HEREUNDER, THE PERFORMANCE HEREOF, OR THE RELATIONSHIP CREATED HEREBY, WHETHER SOUNDING IN CONTRACT, TORT, STRICT LIABILITY, OR OTHERWISE, TRIAL SHALL BE TO A COURT OF COMPETENT JURISDICTION AND NOT TO A JURY. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY. NEITHER PARTY HAS MADE OR RELIED UPON ANY ORAL REPRESENTATIONS TO OR BY ANY OTHER PARTY REGARDING THE ENFORCEABILITY OF THIS PROVISION. EACH PARTY HAS READ AND UNDERSTANDS THE EFFECT OF THIS JURY WAIVER PROVISION.
50. **GOVERNING LAW.** This Agreement is and shall be deemed to be a contract entered and made pursuant to the laws of the State of Florida and shall in all respects be governed, construed, applied and enforced in accordance with the laws of the State of Florida.
51. **JURISDICTION AND VENUE.** The parties acknowledge that a majority of the negotiations, anticipated performance and execution of this Agreement occurred or shall occur in Marion County, Florida. Any civil action or legal proceeding arising out of or relating to this Agreement shall be brought only in the courts of record of the State of Florida in Marion County or the

United States District Court, Middle District of Florida, Ocala Division. Each party consents to the exclusive jurisdiction of such court in any such civil action or legal proceeding and waives any objection to the laying of venue of any such civil action or legal proceeding in such court and/or the right to bring an action or proceeding in any other court. Service of any court paper may be effected on such party by mail, as provided in this Agreement, or in such other manner as may be provided under applicable laws, rules of procedures or local rules.

52. **REFERENCE TO PARTIES.** Each reference herein to the parties shall be deemed to include their successors, assigns, heirs, administrators, and legal representatives, all whom shall be bound by the provisions hereof.
53. **MUTUALITY OF NEGOTIATION.** Contractor and City acknowledge that this Agreement is a result of negotiations between Contractor and City, and the Agreement shall not be construed in favor of, or against, either party because of that party having been more involved in the drafting of the Agreement.
54. **SECTION HEADINGS.** The section headings herein are included for convenience only and shall not be deemed to be a part of this Agreement.
55. **RIGHTS OF THIRD PARTIES.** Nothing in this Agreement, whether express or implied, is intended to confer any rights or remedies under or because of this Agreement on any persons other than the parties hereto and their respective legal representatives, successors and permitted assigns. Nothing in this Agreement is intended to relieve or discharge the obligation or liability of any third persons to any party to this Agreement, nor shall any provision give any third persons any right of subrogation or action over or against any party to this Agreement.
56. **AMENDMENT.** No amendment to this Agreement shall be effective except those agreed to in writing and signed by both parties to this Agreement.
57. **COUNTERPARTS.** This Agreement may be executed in counterparts, each of which shall be an original and all of which shall constitute the same instrument.
58. **ELECTRONIC SIGNATURE(S).** Contractor, if and by offering an electronic signature in any form whatsoever, will accept and agree to be bound by said electronic signature to all terms and conditions of this Agreement. Further, a duplicate or copy of the Agreement that contains a duplicated or non-original signature will be treated the same as an original, signed copy of this original Agreement for all purposes.
59. **ENTIRE AGREEMENT.** This Agreement, including exhibits, (if any) constitutes the entire Agreement between the parties hereto with respect to the subject matter hereof. There are no other representations, warranties, promises, agreements or understandings, oral, written or implied, among the Parties, except to the extent reference is made thereto in this Agreement. No course of prior dealings between the parties and no usage of trade shall be relevant or admissible to supplement, explain, or vary any of the terms of this Agreement. No representations, understandings, or agreements have been made or relied upon in the making of this Agreement other than those specifically set forth herein.
60. **LEGAL AUTHORITY.** Each person signing this Agreement on behalf of either party individually warrants that he or she has full legal power to execute this Agreement on behalf of the party for whom he or she is signing, and to bind and obligate such party with respect to all provisions contained in this Agreement.



IN WITNESS WHEREOF, the parties have executed this Agreement _____.

ATTEST:

CITY OF OCALA

Angel B. Jacobs
City Clerk

James P. Hilty, Sr.
City Council President

Approved as to form and legality:

MILLER PIPELINE, LLC

William E. Sexton, Esq.
City Attorney

By: _____
(Printed Name)

Title: _____
(Title of Authorized Signatory)

BACKGROUND

1. Contractor shall provide services for the Water Resources Improvement Program, which consists of the construction of various water, sewer gravity/forced, reclaimed water, and pipe lining projects assigned to the Contractor based on the City's needs within the City of Ocala service area.
2. All work shall be coordinated with the City Project Manager, Eric Giannino, 352-351-6684, e-mail: egiannino@ocalafl.org.
3. Contractor must perform all work to current City of Ocala Standards and Specifications throughout the contract duration.
4. Contractor is responsible for providing all materials, labor, and equipment (in good working condition) to complete the assigned projects.

LABOR REQUIREMENTS

1. **Labor Requirements:** Contractor and all subcontractors shall conform to the labor standards and employment requirements set forth in the bid documents. All work shall be performed under the supervision of a qualified, competent foreman or supervisor.

PERMIT REQUIREMENTS

1. **Permits Required:** Contractor will be responsible for obtaining the following City of Ocala permits at no additional cost to the City:
 - Right-of-Way (ROW) Utilization
2. **Estimated Permit Cost:** The ROW permit cost will be waived upon submission.
3. **Permit Application:** The ROW Utilization Permit Application is available under "Documents" at: <https://www.ocalafl.org/government/city-departments-a-h/city-engineer-s-office>
4. **Permit Submission Requirements:**
 - a) **If Road Closure is Needed:** Contractor must submit a City of Ocala ROW permit and MOT/TTC Plan a minimum of two (2) weeks prior to the projected time the project will start.
 - b) **If Lane Closure is not Needed:** Contractor must submit a City of Ocala ROW permit and MOT/TTC Plan a minimum of one (1) week prior to the projected time the project will start to the City Project Manager.

PROJECT WORK

1. The City's normal working hours are Monday through Friday from 7:00 a.m. to 5:00 p.m. If additional hours are necessary, the Contractor must give a 48-hour advance notice to the City Project Manager. City personnel are not obligated to work on weekends. Night work may be allowed, or may be necessary if it would result in less impact to the public or reduced safety issues. Night work, if permitted, shall be performed at no additional Cost to the City.
2. **Weather Days:** Contractor shall submit a written request to the City Project Manager (e-mail is the preferred method) for additional days for which work is suspended or delayed by weather. Contractor performance and execution of work will be considered in the determination for granting additional days.
3. Point repairs will be paid per stick 14LF of pipe. If 2' of pipe is used, a full stick will be paid for. If 16' of pipe is used, 2 sticks of pipe will be paid for.

4. Line item G-04-1 pays for a 8 man crew. If there are less than 8 employees on site, the pay item price will be decreased to reflect the amount of employees on site. *Example dollar amount made for simple math. The bid amount for an 8-man crew is \$100 per hour. If only 6 employees show up on site. The invoice amount can only be \$75 per hour.
5. If a water main has to be grouted, it will be paid for with line item S-19-4 FORCE MAIN GROUTING, because this is not a standalone contract with a plan set. There is no determination of what size or how many feet of water main will be abandoned during the term of this Agreement.
6. The City would pay for a minimum of 100' for directional boring, and bore and jack to lower the price of the line item on the contract. Every foot after 100' will be paid for by the foot contract price. This will be paid for main installation only.

GENERAL, WATER, SEWER GRAVITY & FORCE, RECLAIMED WATER, SEWER LINING CONSTRUCTION

1. Removal and replacement of existing sidewalk and curb and gutter.
2. Removal and replacement of existing landscape and sod.
3. Removal and replacement of asphalt, concrete sidewalks, and curb.
4. Removal and replacement of traffic signs, striping and signal loops.
5. Final grading and sod restorations.
6. Installation of new water mains, sewer mains, reclaimed water mains, force mains, fittings, and valves.
7. Installation of new fire hydrants or relocations.
8. Removal and replacement of water, reclaimed, or sewer services to new or existing mains.
9. Wet taps.
10. Abandonment of existing mains.
11. Installation of new manholes.
12. Installation of new sewer services or relocations.
13. Utility testing.
14. Abandonment of existing mains or manholes.
15. Point Repairs and or sectional liners on existing sewer mains or manholes.
16. Replacement of manhole ring and covers.
17. Sewer main assessment, cleaning, chemical grouting, and lining.

SUB-CONTRACTORS

Contractor must perform a minimum of 60% of the work with their own forces.

MOBILIZATION AND MAINTENANCE OF TRAFFIC/ TEMPORARY TRAFFIC CONTROL

1. **Mobilization:** Contractor is responsible for obtaining required permits and moving the Contractor's operations and equipment required for construction. Contractor shall provide on-site construction power and wiring, as needed. Provide on-site sanitary facilities as required by governing agencies.

Contractor will not be permitted to use the City sanitary facilities during construction. Posting of OSHA required notices and establishing of safety programs and procedures.

2. **Maintenance of Traffic (MOT)/Temporary Traffic Control (TTC):** Maintain traffic per FDOT 100 series index within the limits of the project for the duration of the construction period, including any temporary suspensions of the work. Construct and maintain detours.
 - a) Provide facilities for access to residences, businesses, etc., along the project. Furnish, install and maintain traffic control and safety devices during construction. Furnish and install work zone pavement markings for MOT/TTC in construction areas. Provide any other special requirements for safe and expeditious movement of traffic specified in the Plans.
 - b) MOT/TTC includes all facilities, devices and operations as required for safety and convenience of the public within the work zone. Do not maintain traffic over those portions of the project where no work is to be accomplished or where construction operations will not affect existing roads. Do not obstruct or create a hazard to any traffic during the performance of the work and repair any damage to existing pavement open to traffic. FDOT Design Standards are the minimum standards for the use in the development of all Traffic Control Plans (TCPs).
 - c) Contractor must have one (1) person that is MOT/TTC certified on site at all times during construction

PROJECT SPECIFICATIONS

This project will require the Contractor to follow the following plans and specifications and any other governing specifications that projects shall be constructed in accordance with:

1. **Exhibit D - Project Sign and Construction Detail** for the project attached as **Exhibit D**. (Contractor's responsibility to ensure Council Members are correct and kept up to date).
2. **Exhibit C -Pipe Grouting, Lining & Rehab Measurement and Payment** attached as **Exhibit C**.
3. **City of Ocala Standard Specifications for Construction of Streets, Stormwater, Traffic, Water and Sewer Infrastructure** available at: <http://bidocala.com/wp-content/uploads/City-of-Ocala-Standard-Specifications-for-Construction.pdf>
4. **Florida Department of Transportation Standard Specifications (FDOT) for Road and Bridge Construction**, latest edition available at: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks/>
5. **Marion County Standard Specifications** available at: <https://www.marionfl.org/government/departments-facilities-offices/office-of-the-county-engineer/development-review>
6. **Job Site Documents:** The Contractor must have the above listed documents in addition to up-to-date copies of shop drawings, plans and bid document at job sites at all times.

PROJECT REQUIREMENTS AND EXECUTION OF WORK

1. **Project Schedule:** Contractor must submit project schedule to the City Project Inspector/Project Manager for approval. This schedule must be submitted prior to the starting of a project and must be updated when the schedule is no longer accurate.
2. **As-Builts:** Upon final completion of each individual project, two signed and sealed as-builts hard copies and a CADD file must be submitted and approved by the City.

3. **Material & Construction Equipment:** All material & construction equipment must meet FDOT Standard Specifications for Road and Bridge, latest edition.
4. **Backfilling and Compaction Procedures:** Backfilling and compaction shall be performed in accordance with the FDOT Standard Specifications for Road and Bridge Construction (latest edition) and the City of Ocala Standard Specifications for Construction of Streets, Stormwater, Traffic, Water and Sewer Infrastructure or as otherwise directed in writing by the City of Ocala.
5. **Open Cuts:** All open cuts in the pavement (asphalt and concrete) shall be saw cut and made square. Water must be used during all saw cuts in asphalt or concrete to limit dust.
6. **Damages:** Contractor is responsible for any and all damages including but not limited to buildings, curbing, pavement, landscaping, or irrigation systems caused by their activity. Should any public or private property be damaged or destroyed, the Contractor, at their expense, shall repair or make restoration as acceptable to the City of destroyed or damaged property no later than one (1) month from the date damage occurred.
7. **Compliance:** The Contractor shall complete all work performed under this contract in accordance with policies and procedures of the City of Ocala and all applicable State and Federal laws, policies, procedures, and guidelines.
8. **All water and force main shutdowns, connections, and abandonments must be wet tapped to verify a proper shut down was completed prior to cutting into the main.**

CONTRACTOR EMPLOYEES AND EQUIPMENT

1. Contractor must utilize competent employees in performing the work. Employees performing the work must be properly licensed or qualified as required by the scope/project.
2. At the request of the City, Contractor must replace any incompetent, unfaithful, abusive, or disorderly person in their employment. City and Contractor must each be promptly notified by the other of any complaints received.
3. Contractor shall provide an assigned project manager, who will be the primary point of contact. Contractor must provide a valid telephone number, email, and address to the City Project Manager. The telephone must be answered during normal working hours or voicemail must be available to take a message. On this contract an emergency off hours phone number must also be provided for emergency work.
4. Contractor shall locate, protect, and relocate any and all underground utilities necessary to complete the work specified in the contract, and verify all field conditions, measurements, and elevations.
5. All workers within the right-of-way shall wear ANSI/ISEA Class 2 apparel (safety vest or equivalent).
6. Contractor's employees must wear suitable work clothes and personal protective equipment as defined by OSHA (hard hats, bucket harnesses, etc.) and meeting Manual on Uniform Traffic Control Devices (MUTCD) requirements as indicated for all work conducted and be as clean and in as good appearance as the job conditions permit.
7. Contractor shall operate as an independent Contractor and not as an agent, representative, partner or employee of the City of Ocala, and shall control his operations at the work site, and be solely responsible for the acts or omissions of his employees.

8. Prime Contractor and sub-contractor vehicles shall display their company name located on the side and all personnel shall be required to wear a company shirt.

CONTRACTOR RESPONSIBILITIES

1. Contractor shall complete all work performed under this contract in accordance with policies and procedures of the City of Ocala and all applicable State and Federal laws, policies, procedures, and guidelines.
2. Contractor shall obtain and pay for all licenses, additional equipment, dumping and/or disposal fees, etc., required to fulfill this contract.
3. Construction shall be performed in compliance with all requirements and instructions of applicable manufacturers.
4. Contractor is responsible for any and all damages including but not limited to curbing, pavement, landscaping, or irrigation systems caused by their activity. Should any public or private property be damaged or destroyed, the Contractor, at their expense, shall repair or make restoration as acceptable to the City of destroyed or damaged property no later than one (1) month from the date damage occurred.

PROJECT SIGNS

1. Contractor is required to provide two (2) portable signs to be relocated as project progresses at locations that are approved by City inspectors.
2. If during the Contract Term, the sign becomes broken or inaccurate, Contractor will replace or make the sign accurate at no extra charge to the City of Ocala. Contractor is required to keep the City Council members' names and positions up to date throughout the Contract Term.

SURVEY LAYOUT

1. The City Engineer/Project Manager may, as required, establish a number of benchmarks on the project which in their opinion will enable the Contractor to perform the work.
2. If the Contractor shall remove or destroy any stake, marker, or benchmark on the work without first having secured the approval of the City Engineer, such stake, or benchmark shall be re-established by and at the Contractor's expense.
3. It shall be at the responsibility of the Contractor to preserve all adjacent property corner markers which might be affected by their operation and replace same if undermined. Corner locations known by the City will be available to the Contractor.
4. All survey work must be in accordance with Chapters 177 and 472 of Florida Statutes and Chapter 61G17 of the Florida Administrative Code.

TESTING REQUIREMENTS

1. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required. Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to City Engineer.
2. Results of all required testing and inspections shall be submitted to the project inspector to achieve Final Completion Certification. For other requirements for Tests and Inspection refer to Article 14 in the

City of Ocala Standard Specifications for Construction of Streets, Stormwater, Traffic, Water and Sewer Infrastructure.

CONSTRUCTION WORK AREAS

1. The City of Ocala is not responsible for providing property or lay down yards to the Contractor for their materials or equipment. If private property is used, the City requires a copy of the agreement between the property owner and the Contractor. **Utilizing private property without written permission is prohibited.**
2. Components of the project, including temporary work and storage areas, will be located on-site per project. Staging areas will be sited inside the right-of-way or within City property. Material will be transported to the proper station for construction, assembly, response to possible public concern.
3. Provide on-site sanitary facilities as required by governing agencies. Facilities must be maintained regularly.
4. Any work areas in roadways must at least be filled temporarily with asphalt millings or covered with a FDOT-approved steel road plate before the roadway can be opened to traffic. If millings are used, the Contractor must maintain the millings daily until the millings are replaced with permanent asphalt.

SITE HOUSEKEEPING AND CLEANUP

1. **Waste/Debris:** Contractor shall keep the premises free at all times from accumulation of waste materials and rubbish caused by operations and employees. Contractor shall provide approved containers for collection and disposal of waste materials, debris, and rubbish. Contractor shall dispose of debris in a legal manner. At least once weekly dispose of such waste materials, debris, and rubbish off-site.
2. **Cleanup:** Periodic cleanup to avoid hazards or interference with operations at the site, and to leave the site in a reasonable neat condition. The work site will be completely cleaned after each day of work. Sweep all roadways affected by the construction and where adjacent to work daily.
3. **Water Use:** The use of water to prevent the blowing of dust and debris during cutting operations and or cleaning operations is mandatory.
4. **Individual Project Cleaning:** At completion of each individual project, Contractor shall remove from the site all tools, equipment, surplus materials, debris, temporary facilities, scaffolding, and equipment. The areas of work shall be swept thoroughly and all marks, stains, rust, dirt, paint drippings, and the like shall be removed from all new and existing work to the satisfaction of the City.
5. **Final Cleaning:** Upon completion of work, clean entire work, and project site as applicable.
 - a. Leave the work and adjacent areas affected in a cleaned condition satisfactory to the City Project Manager/City Engineer.
 - b. Remove any foreign materials from exposed surfaces.
 - c. Broom clean exterior paved driveways and parking areas.
 - d. Hose clean sidewalks and concrete exposed surfaces.

SAFETY

1. Contractor shall be fully responsible for meeting all OSHA, local, state, and national codes concerning safety provisions for their employees, sub-contractors, all building and site occupants, staff, public, etc.
2. Prior to completion, storage and adequate protection of all material and equipment shall be the Contractor's responsibility.
3. In no event shall the City be responsible for any damages to any of the Contractor's equipment, materials, property, or clothing lost, damaged, destroyed or stolen.

SUBMITTALS

1. Provide submittals as required by City of Ocala Standard Specifications for Construction of Streets, Stormwater, Traffic, Water and Sewer Infrastructure.
2. Submit copies of permits and approvals for construction as required by laws and regulations of governing agencies.
3. Submit temporary construction parking area plans, storage yard, storage trailer location, staging area plan, and plan for disposal of waste materials.

SUBSTANTIAL COMPLETION PROCESS

1. When the Contractor considers the work as substantially complete, the Contractor shall submit to the City:
 - a) A written notice that the work or designated portion thereof, is substantially complete.
 - b) A list of items to be completed or corrected.
2. Within a reasonable time after receipt of such notice, the City will inspect to determine the status of completion.
3. Should the City determine that the work is not substantially complete:
 - a) The City will promptly notify the Contractor in writing, giving the reasons, therefore.
 - b) The Contractor shall remedy the deficiencies in the work and send a second written notice of substantial completion to the City.
 - c) The City will re-inspect the work.
4. When the City finds that the work is substantially complete, the City shall prepare a Certificate of Substantial Completion with a list of items (punch list) to be completed or corrected before final payment.

FINAL COMPLETION PROCESS

1. When the Contractor considers the work complete, the Contractor shall submit written certification that:
 - a) Contract documents have been reviewed.
 - b) Work has been inspected for compliance with Contract documents.
 - c) Work has been completed in accordance with Contract documents.

- d) Equipment and systems have been tested in the presence of the City representative and are operational.
2. The City will inspect to verify the status of completion with reasonable promptness after receipt of such certification.
3. Should the City consider that the work is incomplete or defective:
 - a) The City will promptly notify the Contractor in writing, listing the incomplete or defective work.
 - a) The Contractor shall take immediate steps to remedy the stated deficiencies and send a second written certification to the City that the work is complete.
 - b) The City will re-inspect the work.
4. When the City finds that the work is acceptable under the Contract documents, the City shall request the Contractor make closeout submittals.
5. **Final Application for Payment:** The Contractor shall submit the final application for payment in accordance with the procedures and requirements stated in the scope of work and general conditions.

CONTRACTOR CLOSEOUT DOCUMENTS

1. Evidence of compliance with requirements of governing authorities.
2. Consent of Surety to final payment.
3. Approved project record documents include electronic (CADD) and two (2) hard copy signed and sealed "As Built" by professional surveyor.
4. Completion of all submittals as required by Contract documents.
5. Warranty.

PRICING

1. This is a unit price contract. City shall pay Contractor only for the actual units that the Contractor provides, installs, or constructs on the project.
2. **Additional Work:** If work has no line-item unit price in the contract, a written proposal of the work must be emailed to the Project Manager and agreed upon in writing by the City prior to the work being started.

Exhibit B - PRICE PROPOSAL

CONTRACT# CIP/220762



Miller Pipeline, LLC

WATER RESOURCES IMPROVEMENT PROGRAM

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
GENERAL CONSTRUCTION (012200-3)			
G-03	PROJECT SIGN	EA	\$850.00
G-04-1	EMERGENCY CALL OUT (24 HOURS A DAY)	HR	\$1,060.00
G-04-2	LABOR AND EQUIPMENT	HR	\$840.00
G-05	MAINTENANCE OF TRAFFIC	DAY	\$685.00
G-06	SILT FENCE & SEDIMENT CONTROL	LF	\$2.75
G-07	TREE PROTECTION/CONSTRUCTION FENCE	LF	\$5.00
G-08	REMOVE & RELOCATE EXISTING MAILBOXES	EA	\$175.00
G-09	CLEARING AND GRUBBING - LIGHT	SY	\$5.00
G-10	CLEARING AND GRUBBING - HEAVY	SY	\$9.00
G-11	EXCAVATION	CY	\$6.00
G-12	IMPORTED BACKFILL MATERIAL	CY	\$27.00
G-15	GRADING	SY	\$3.60
G-17	REMOVE & REPLACE UNSUITABLE MATERIAL	CY	\$36.00
G-19	LIMEROCK BASE 12"	SY	\$20.00
G-20	# 57 STONE	CY	\$95.00
G-21-1	REMOVAL OF EXSITING CONCRETE SIDEWALKS AND DRIVEWAYS (NOT REINSTALLING)	SY	\$12.00
G-21-2	REMOVAL AND REPLACEMENT OF EXSITING CONCRETE SIDEWALKS AND DRIVEWAYS	SY	\$98.00
G-22	REMOVAL OF EXISTING CONCRETE CURB AND GUTTER (NOT REINSTALLING)	LF	\$3.75
G-23	CONCRETE FILL	CY	\$282.00
G-24	ASPHALT COATINGS	GAL	\$30.75
G-25	ASPHALT PAVEMENT REMOVAL	SY	\$9.00
G-26	TEMPORARY ASPHALT MILLINGS	SY	\$9.00
G-31	ASPHALT MILLING AND REPLACEMENT	CY	\$12.00
G-32-1	ASPHALT PAVEMENT SUPERPAVE 9.5	TN	\$255.00
G-32-2	ASPHALT PAVEMENT SUPERPAVE 12.5	TN	\$255.00
G-33	ROADWAY GUARDRAIL	LF	\$130.00
G-34-1	OBJECT MARKER, TYPE 1	EA	\$211.00
G-34-2	OBJECT MARKER, TYPE 2	EA	\$117.00
G-34-3	OBJECT MARKER, TYPE 3	EA	\$227.00
G-34-4	OBJECT MARKER, TYPE 4	EA	\$211.00
G-35-1	DELINEATOR, FLEXIBLE TUBULAR	EA	\$114.00
G-35-2	DELINEATOR, NON-FLEXIBLE	EA	\$110.00
G-35-3	DELINEATOR, FLEXIBLE HIGH VISIBILTY MEDIAN	EA	\$250.00
G-35-4	DELINEATOR, FLEXIBLE HIGH PERFORMANCE	EA	\$128.00
G-36	RUMBLE STRIPS	PS	\$315.00
G-37	GROUNDING ELECTRODE	FT	\$78.00
G-38-1	SIGNAL CONDUIT, FURNISH & INSTALL, UNDERGROUND	LF	\$66.00
G-38-2	SIGNAL CONDUIT, FURNISH & INSTALL, SAWCUT & PLACE UNDER EXISTING PAVEMENT	LF	\$240.00
G-38-3	SIGNAL CONDUIT, F & I, UNDERGROUND-JACKED	LF	\$240.00
G-39-1	SPAN WIRE ASSEMBLY, F & I, SINGLE POINT, DIAGONAL	PI	\$8,400.00
G-39-2	SPAN WIRE ASSEMBLY, F & I, TWO POINT, DIAGONAL	PI	\$12,000.00
G-39-3	SPAN WIRE ASSEMBLY, F & I, TWO POINT, BOX	PI	\$24,000.00
G-39-4	SPAN WIRE ASSEMBLY, ADJUST	PI	\$7,800.00
G-39-5	SPAN WIRE ASSEMBLY, ADJUST, TWO POINT, BOX	PI	\$15,000.00
G-40	PULL & JUNCTION BOX, F & I, PULL BOX	EA	\$6,600.00
G-41	PULL & JUNCTION BOXES, INSTALL	EA	\$2,400.00
G-42	PULL & JUNCTION BOXES, RELOCATE	EA	\$3,600.00
G-52	CONSTRUCTION SURVEY	HR	\$180.00
G-53	ASBUILT DRAWINGS	HR	\$110.00

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
G-54-1	PIPE HANDRAIL-GUIDERAIL, ALUMINUM	LF	\$1,020.00
G-54-2	PEDESTRIAN/BICYCLE, RAILING, ALUMINUM ONLY, 42" PICKET RAIL	LF	\$84.00
G-54-3	PEDESTRIAN/BICYCLE, RAILING, ALUMINUM ONLY, 42" TYPE 1	LF	\$88.00
G-54-4	PIPE HANDRAIL, ALUMINUM	LF	\$51.00
G-55	6" BOLLARDS	EA	\$895.00
G-56	CONCRETE CURB, GUTTER, VALLEY AND DROP CURB (NEW INSTALL)	LF	\$48.00
G-57	CONCRETE CURB, GUTTER, VALLEY AND DROP CURB REMOVAL & REPLACEMENT	LF	\$52.00
G-58-1	CONCRETE 3000 PSI	CY	\$282.00
G-58-2	CONCRETE 4000 PSI	CY	\$295.00
G-60-1	PAVERS, ARCHITECTURAL ROADWAY	SY	\$119.00
G-60-2	PAVERS, ARCHITECTURAL SIDEWALK	SY	\$119.00
G-61	CONCRETE CURB RAMPS WITH DETECTABLE WARNING SURFACE - HANDICAP	EA	\$3,600.00
G-62	DETECTABLE WARNING ON EXISTING WALKING SURFACE, RETROFIT	EA	\$480.00
G-66	RIP RAP	CY	\$169.00
G-67	CONCRETE RUBBLE (2 FT THICK)	SY	\$90.00
G-75	FARM FENCING REMOVAL & REPLACEMENT	LF	\$28.00
G-78	CHAIN LINK FENCING REMOVAL AND REPLACEMENT	LF	\$42.00
G-79	SEED & MULCH	SY	\$1.50
G-80-1	SOD-ST. AUGUSTINE	SY	\$7.00
G-80-2	SOD-BAHIA	SY	\$4.25
G-88-1	LOOP ASSEMBLY- F & I, TYPE A	EA	\$1,500.00
G-88-2	LOOP ASSEMBLY- F & I, TYPE B	EA	\$1,200.00
G-88-3	LOOP ASSEMBLY- F & I, TYPE F	EA	\$1,800.00
G-89	TRAFFIC CONTROL SIGN ASSEMBLY	EA	\$360.00
G-90	TRAFFIC CONTROL SIGN ASSEMBLY REMOVAL AND RELOCATION	EA	\$90.00
G-91	REFLECTIVE PAVEMENT MARKERS	EA	\$6.25
G-92	STANDARD WHEEL STOPS	EA	\$93.00
G-93-1	TEMPORARY, WHITE, SOLID 6"	LF	\$0.25
G-93-2	TEMPORARY, WHITE, SOLID 12"	LF	\$1.00
G-93-3	TEMPORARY, WHITE, SOLID 24"	LF	\$2.00
G-93-4	TEMPORARY SKIP TRAFFIC STRIPE, YELLOW OR WHITE, 6"	GLF	\$0.50
G-93-5	TEMPORARY SOLID TRAFFIC STRIPE - 6" YELLOW	LF	\$0.30
G-93-6	TEMPORARY SOLID TRAFFIC STRIPE - 6" DOUBLE YELLOW	LF	\$0.50
G-94-1	THERMO, WHITE, SOLID, 6"	LF	\$0.90
G-94-2	THERMO, WHITE, SOLID, 12"	LF	\$2.80
G-94-3	THERMO, WHITE, SOLID, 24"	LF	\$6.75
G-94-4	THERMO SKIP TRAFFIC STRIPE, YELLOW OR WHITE, 6"	GLF	\$1.20
G-94-5	THERMO SOLID TRAFFIC STRIPE - 6" YELLOW	LF	\$0.90
G-94-6	THERMO SOLID TRAFFIC STRIPE - 6" DOUBLE YELLOW	LF	\$1.80
G-95	THERMO PAVEMENT MARKINGS	EA	\$78.00
G-96	PAINTED PAVEMENT MARKINGS	EA	\$47.00
G-97	ARROW BOARDS/MESSAGE BOARDS	DAY	\$100.00
G-98	MISCELLANEOUS UTILITY LOCATES / EXPLORATORY EXCAVATION	HR	\$315.00
WATER CONSTRUCTION (012200-35)			
W-01-1	2" PVC WATER MAIN	LF	\$19.00
W-01-2	4" PVC WATER MAIN	LF	\$25.00
W-01-3	6" PVC WATER MAIN	LF	\$33.00
W-01-4	8" PVC WATER MAIN	LF	\$45.00
W-01-5	10" PVC WATER MAIN	LF	\$64.00
W-01-6	12" PVC WATER MAIN	LF	\$85.00
W-01-7	14" PVC WATER MAIN	LF	\$117.00
W-01-8	16" PVC WATER MAIN	LF	\$146.00
W-01-9	18" PVC WATER MAIN	LF	\$177.00
W-01-10	20" PVC WATER MAIN	LF	\$220.00
W-01-11	24" PVC WATER MAIN	LF	\$300.00
W-01-12	4" DIP WATER MAIN	LF	\$65.00
W-01-13	6" DIP WATER MAIN	LF	\$50.00
W-01-14	8" DIP WATER MAIN	LF	\$61.00

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
W-01-15	10" DIP WATER MAIN	LF	\$75.00
W-01-16	12" DIP WATER MAIN	LF	\$94.00
W-01-17	14" DIP WATER MAIN	LF	\$108.00
W-01-18	16" DIP WATER MAIN	LF	\$131.00
W-01-19	18" DIP WATER MAIN	LF	\$149.00
W-01-20	20" DIP WATER MAIN	LF	\$180.00
W-01-21	24" DIP WATER MAIN	LF	\$212.00
W-01-22	30" DIP WATER MAIN	LF	\$397.00
W-02-1	BACKFLOW PREVENTER 1"	EA	\$1,035.00
W-02-2	BACKFLOW PREVENTER 2"	EA	\$2,080.00
W-03-1	2" PVC FITTINGS	EA	\$29.00
W-03-2	2" BRASS POLYETHYLENE FITTINGS	EA	\$370.00
W-03-3	DIP MJ FITTINGS 4"	EA	\$355.00
W-03-4	DIP MJ FITTINGS 6"	EA	\$505.00
W-03-5	DIP MJ FITTINGS 8"	EA	\$635.00
W-03-6	DIP MJ FITTINGS 10"	EA	\$880.00
W-03-7	DIP MJ FITTINGS 12"	EA	\$1,050.00
W-03-8	DIP MJ FITTINGS 14"	EA	\$1,595.00
W-03-9	DIP MJ FITTINGS 16"	EA	\$2,125.00
W-03-10	DIP MJ FITTINGS 18"	EA	\$2,700.00
W-03-11	DIP MJ FITTINGS 20"	EA	\$3,660.00
W-03-12	DIP MJ FITTINGS 24"	EA	\$5,730.00
W-03-13	DIP MJ FITTINGS 30"	EA	\$9,690.00
W-03-14	DIP MJ CROSS 4"	EA	\$690.00
W-03-15	DIP MJ CROSS 6"	EA	\$890.00
W-03-16	DIP MJ CROSS 8"	EA	\$1,045.00
W-03-17	DIP MJ CROSS 10"	EA	\$1,535.00
W-03-18	DIP MJ CROSS 12"	EA	\$2,020.00
W-03-19	DIP MJ CROSS 14"	EA	\$3,235.00
W-03-20	DIP MJ CROSS 16"	EA	\$4,690.00
W-03-21	DIP MJ CROSS 18"	EA	\$5,800.00
W-03-22	DIP MJ CROSS 20"	EA	\$8,355.00
W-03-23	DIP MJ CROSS 24"	EA	\$10,375.00
W-03-24	DIP MJ CROSS 30"	EA	\$19,130.00
W-04-1	4" PIPE JOINT RESTRAINT	EA	\$95.00
W-04-2	6" PIPE JOINT RESTRAINT	EA	\$120.00
W-04-3	8" PIPE JOINT RESTRAINT	EA	\$175.00
W-04-4	10" PIPE JOINT RESTRAINT	EA	\$270.00
W-04-5	12" PIPE JOINT RESTRAINT	EA	\$300.00
W-04-6	14" PIPE JOINT RESTRAINT	EA	\$610.00
W-04-7	16" PIPE JOINT RESTRAINT	EA	\$660.00
W-04-8	18" PIPE JOINT RESTRAINT	EA	\$810.00
W-04-9	20" PIPE JOINT RESTRAINT	EA	\$1,205.00
W-04-10	24" PIPE JOINT RESTRAINT	EA	\$1,915.00
W-05-1	2" GATE VALVE W/SST STEM & VALVE BOX	EA	\$1,020.00
W-05-2	4" GATE VALVE W/SST STEM & VALVE BOX	EA	\$1,365.00
W-05-3	6" GATE VALVE W/SST STEM & VALVE BOX	EA	\$1,660.00
W-05-4	8" GATE VALVE W/SST STEM & VALVE BOX	EA	\$2,270.00
W-05-5	12" BUTTERFLY VALVE & VALVE BOX	EA	\$2,920.00
W-05-6	16" BUTTERFLY VALVE & VALVE BOX	EA	\$5,015.00
W-05-7	18" BUTTERFLY VALVE & VALVE BOX	EA	\$6,145.00
W-05-8	24" BUTTERFLY VALVE & VALVE BOX	EA	\$10,990.00
W-05-9	4" INSERT - A - VALVE	EA	\$7,640.00
W-05-10	6" INSERT - A - VALVE	EA	\$8,850.00
W-05-11	8" INSERT - A - VALVE	EA	\$10,120.00
W-05-12	10" INSERT - A - VALVE	EA	\$15,160.00
W-05-13	12" INSERT - A - VALVE	EA	\$18,860.00
W-05-14	14" INSERT - A - VALVE	EA	\$35,290.00
W-05-15	16" INSERT - A - VALVE	EA	\$37,700.00

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
W-08-1	2" LINE STOP	EA	\$1,550.00
W-08-2	4" LINE STOP	EA	\$6,390.00
W-08-3	6" LINE STOP	EA	\$6,500.00
W-08-4	8" LINE STOP	EA	\$7,670.00
W-08-5	10" LINE STOP	EA	\$10,020.00
W-08-6	12" LINE STOP	EA	\$11,230.00
W-08-7	14" LINE STOP	EA	\$15,690.00
W-08-8	16" LINE STOP	EA	\$18,230.00
W-08-9	18" LINE STOP	EA	\$20,090.00
W-08-10	20" LINE STOP	EA	\$22,290.00
W-08-11	24" LINE STOP	EA	\$28,440.00
W-09-1	FIRE HYDRANT ASSEMBLY ON 6" MAIN - TYPE A	EA	\$5,980.00
W-09-2	FIRE HYDRANT ASSEMBLY ON 8" MAIN - TYPE A	EA	\$5,940.00
W-09-3	FIRE HYDRANT ASSEMBLY ON 10" MAIN - TYPE A	EA	\$6,160.00
W-09-4	FIRE HYDRANT ASSEMBLY ON 12" MAIN - TYPE A	EA	\$6,460.00
W-09-5	FIRE HYDRANT ASSEMBLY ON 16" MAIN - TYPE A	EA	\$7,350.00
W-09-6	FIRE HYDRANT ASSEMBLY ON 6" MAIN - TYPE B	EA	\$6,430.00
W-09-7	FIRE HYDRANT ASSEMBLY ON 8" MAIN - TYPE B	EA	\$6,550.00
W-09-8	FIRE HYDRANT ASSEMBLY ON 10" MAIN - TYPE B	EA	\$6,800.00
W-09-9	FIRE HYDRANT ASSEMBLY ON 12" MAIN - TYPE B	EA	\$6,950.00
W-09-10	FIRE HYDRANT ASSEMBLY ON 16" MAIN - TYPE B	EA	\$8,020.00
W-10	REMOVE AND REPLACE EXISTING FIRE HYDRANTS	EA	\$4,640.00
W-11-1	REMOVE FIRE HYDRANTS	EA	\$950.00
W-11-2	REMOVE AND RELOCATE EXISTING FIRE HYDRANTS	EA	\$1,660.00
W-12-1	FIRE HYDRANT 6" EXTENSION	EA	\$1,120.00
W-12-2	FIRE HYDRANT 12" EXTENSION	EA	\$1,120.00
W-12-3	FIRE HYDRANT 18" EXTENSION	EA	\$1,480.00
W-12-4	FIRE HYDRANT 24" EXTENSION	EA	\$1,680.00
W-14-1	1" SINGLE WATER SERVICE – SHORT	EA	\$705.00
W-14-2	1" SINGLE WATER SERVICE – LONG	EA	\$1,350.00
W-14-3	1" DOUBLE WATER SERVICE – SHORT	EA	\$995.00
W-14-4	1" DOUBLE WATER SERVICE LONG	EA	\$1,650.00
W-14-5	2" SINGLE WATER SERVICE – SHORT	EA	\$2,920.00
W-14-6	2" SINGLE WATER SERVICE – LONG	EA	\$3,730.00
W-14-7	2" DOUBLE WATER SERVICE – SHORT	EA	\$3,990.00
W-14-8	2" DOUBLE WATER SERVICE – LONG	EA	\$4,830.00
W-15-1	REMOVE & REPLACE 1" SINGLE WATER SERVICE – SHORT	EA	\$850.00
W-15-2	REMOVE & REPLACE 1" SINGLE WATER SERVICE – LONG	EA	\$1,880.00
W-15-3	REMOVE & REPLACE 1" DOUBLE WATER SERVICE – SHORT	EA	\$1,260.00
W-15-4	REMOVE & REPLACE 1" DOUBLE WATER SERVICE – LONG	EA	\$2,200.00
W-15-5	REMOVE & REPLACE 2" SINGLE WATER SERVICE – SHORT	EA	\$3,300.00
W-15-6	REMOVE & REPLACE 2" SINGLE WATER SERVICE – LONG	EA	\$4,410.00
W-15-7	REMOVE & REPLACE 2" DOUBLE WATER SERVICE – SHORT	EA	\$4,430.00
W-15-8	REMOVE & REPLACE 2" DOUBLE WATER SERVICE – LONG	EA	\$5,570.00
W-16-1	2" TAP ON EXISTING 4" WATER MAIN W/VALVE & SST STEM	EA	\$1,290.00
W-16-2	2" TAP ON EXISTING 6" WATER MAIN W/VALVE & SST STEM	EA	\$1,300.00
W-16-3	2" TAP ON EXISTING 8" WATER MAIN W/VALVE & SST STEM	EA	\$1,310.00
W-16-4	2" TAP ON EXISTING 10" WATER MAIN W/VALVE & SST STEM	EA	\$1,330.00
W-16-5	2" TAP ON EXISTING 12" WATER MAIN W/VALVE & SST STEM	EA	\$1,500.00
W-16-6	2" TAP ON EXISTING 14" WATER MAIN W/VALVE & SST STEM	EA	\$1,550.00
W-16-7	2" TAP ON EXISTING 16" WATER MAIN W/VALVE & SST STEM	EA	\$1,570.00
W-16-8	2" TAP ON EXISTING 18" WATER MAIN W/VALVE & SST STEM	EA	\$1,680.00
W-16-9	2" TAP ON EXISTING 20" WATER MAIN W/VALVE & SST STEM	EA	\$1,700.00
W-16-10	2" TAP ON EXISTING 24" WATER MAIN W/VALVE & SST STEM	EA	\$1,800.00
W-16-11	4" TAP ON EXISTING 6" WATER MAIN W/VALVE & SST STEM	EA	\$3,370.00
W-16-12	4" TAP ON EXISTING 8" WATER MAIN W/VALVE & SST STEM	EA	\$3,380.00
W-16-13	4" TAP ON EXISTING 10" WATER MAIN W/VALVE & SST STEM	EA	\$3,460.00
W-16-14	4" TAP ON EXISTING 12" WATER MAIN W/VALVE & SST STEM	EA	\$3,410.00
W-16-15	4" TAP ON EXISTING 14" WATER MAIN W/VALVE & SST STEM	EA	\$4,100.00

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
W-16-16	4" TAP ON EXISTING 16" WATER MAIN W/VALVE & SST STEM	EA	\$4,440.00
W-16-17	4" TAP ON EXISTING 18" WATER MAIN W/VALVE & SST STEM	EA	\$4,530.00
W-16-18	4" TAP ON EXISTING 20" WATER MAIN W/VALVE & SST STEM	EA	\$4,860.00
W-16-19	4" TAP ON EXISTING 24" WATER MAIN W/VALVE & SST STEM	EA	\$5,010.00
W-16-20	6" TAP ON EXISTING 6" WATER MAIN W/VALVE & SST STEM	EA	\$3,920.00
W-16-21	6" TAP ON EXISTING 8" WATER MAIN W/VALVE & SST STEM	EA	\$3,970.00
W-16-22	6" TAP ON EXISTING 10" WATER MAIN W/VALVE & SST STEM	EA	\$4,010.00
W-16-23	6" TAP ON EXISTING 12" WATER MAIN W/VALVE & SST STEM	EA	\$4,120.00
W-16-24	6" TAP ON EXISTING 14" WATER MAIN W/VALVE & SST STEM	EA	\$4,690.00
W-16-25	6" TAP ON EXISTING 16" WATER MAIN W/VALVE & SST STEM	EA	\$4,990.00
W-16-26	6" TAP ON EXISTING 18" WATER MAIN W/VALVE & SST STEM	EA	\$5,070.00
W-16-27	6" TAP ON EXISTING 20" WATER MAIN W/VALVE & SST STEM	EA	\$5,410.00
W-16-28	6" TAP ON EXISTING 24" WATER MAIN W/VALVE & SST STEM	EA	\$5,560.00
W-16-29	8" TAP ON EXISTING 8" WATER MAIN W/VALVE & SST STEM	EA	\$4,370.00
W-16-30	8" TAP ON EXISTING 10" WATER MAIN W/VALVE & SST STEM	EA	\$4,380.00
W-16-31	8" TAP ON EXISTING 12" WATER MAIN W/VALVE & SST STEM	EA	\$4,460.00
W-16-32	8" TAP ON EXISTING 14" WATER MAIN W/VALVE & SST STEM	EA	\$5,320.00
W-16-33	8" TAP ON EXISTING 16" WATER MAIN W/VALVE & SST STEM	EA	\$5,450.00
W-16-34	8" TAP ON EXISTING 18" WATER MAIN W/VALVE & SST STEM	EA	\$5,560.00
W-16-35	8" TAP ON EXISTING 20" WATER MAIN W/VALVE & SST STEM	EA	\$6,010.00
W-16-36	8" TAP ON EXISTING 24" WATER MAIN W/VALVE & SST STEM	EA	\$6,170.00
W-16-37	12" TAP ON EXISTING 12" WATER MAIN W/VALVE & SST STEM	EA	\$8,740.00
W-16-38	12" TAP ON EXISTING 14" WATER MAIN W/VALVE & SST STEM	EA	\$9,620.00
W-16-39	12" TAP ON EXISTING 16" WATER MAIN W/VALVE & SST STEM	EA	\$9,760.00
W-16-40	12" TAP ON EXISTING 18" WATER MAIN W/VALVE & SST STEM	EA	\$9,890.00
W-16-41	12" TAP ON EXISTING 20" WATER MAIN W/VALVE & SST STEM	EA	\$10,400.00
W-16-42	12" TAP ON EXISTING 24" WATER MAIN W/VALVE & SST STEM	EA	\$10,580.00
W-16-43	16" TAP ON EXISTING 16" WATER MAIN W/VALVE & SST STEM	EA	\$17,270.00
W-16-44	16" TAP ON EXISTING 18" WATER MAIN W/VALVE & SST STEM	EA	\$16,780.00
W-16-45	16" TAP ON EXISTING 20" WATER MAIN W/VALVE & SST STEM	EA	\$18,060.00
W-16-46	16" TAP ON EXISTING 24" WATER MAIN W/VALVE	EA	\$18,130.00
W-17-1	BORE & JACK 18" STEEL CASING W/8" PVC	LF	\$1,180.00
W-17-2	BORE & JACK 18" STEEL CASING W/8" DIP	LF	\$1,200.00
W-17-3	BORE & JACK 24" STEEL CASING W/12" PVC	LF	\$1,230.00
W-17-4	BORE & JACK 24" STEEL CASING W/12" DIP	LF	\$1,240.00
W-17-5	BORE & JACK 30" STEEL CASING W/16" PVC	LF	\$1,350.00
W-17-6	BORE & JACK 30" STEEL CASING W/16" DIP	LF	\$1,335.00
W-17-7	BORE & JACK 30" STEEL CASING W/ 18" PVC	LF	\$1,400.00
W-17-8	BORE & JACK 30" STEEL CASING W/ 18" DIP	LF	\$1,370.00
W-18-1	DIRECTIONAL BORE 2" HDPE PIPE	LF	\$17.00
W-18-2	DIRECTIONAL BORE 4" HDPE PIPE	LF	\$34.00
W-18-3	DIRECTIONAL BORE 6" HDPE PIPE	LF	\$44.00
W-18-4	DIRECTIONAL BORE 8" HDPE PIPE	LF	\$65.00
W-18-5	DIRECTIONAL BORE 10" HDPE PIPE	LF	\$88.00
W-18-6	DIRECTIONAL BORE 12" HDPE PIPE	LF	\$120.00
W-18-7	DIRECTIONAL BORE 14" HDPE PIPE	LF	\$160.00
W-18-8	DIRECTIONAL BORE 16" HDPE PIPE	LF	\$190.00
W-18-9	DIRECTIONAL BORE 18" HDPE PIPE	LF	\$255.00
W-18-10	DIRECTIONAL BORE 2" PVC PIPE	LF	\$20.00
W-18-11	DIRECTIONAL BORE 4" PVC PIPE	LF	\$38.00
W-18-12	DIRECTIONAL BORE 6" PVC PIPE	LF	\$54.00
W-18-13	DIRECTIONAL BORE 8" PVC PIPE	LF	\$83.00
W-18-14	DIRECTIONAL BORE 10" PVC PIPE	LF	\$116.00
W-18-15	DIRECTIONAL BORE 12" PVC PIPE	LF	\$160.00
W-18-16	DIRECTIONAL BORE 16" PVC PIPE	LF	\$270.00
W-19	BLOW-OFF ASSEMBLY ON WATER MAIN	EA	\$2,340.00
W-20-1	ADJUST EXISTING VALVE BOX	EA	\$540.00
W-20-2	ADJUST EXISTING METER BOX	EA	\$375.00
W-21-1	TEMPORARY JUMPER CONNECTION	EA	\$2,445.00

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
W-22-2	ABANDON WATER SERVICE	EA	\$430.00
W-22-3	ABANDON WATER MAIN	LS	\$2,860.00
SANITARY SEWER CONSTRUCTION (012200-42)			
S-01-1	6" PVC, 0' - 6'	LF	\$38.00
S-01-2	6" PVC, 6' - 12'	LF	\$45.00
S-01-3	6" PVC, 12' - 18'	LF	\$79.00
S-01-4	6" PVC, 18' - 24'	LF	\$158.00
S-01-5	8" PVC, 0' - 6'	LF	\$49.00
S-01-6	8" PVC, 6' - 12'	LF	\$55.00
S-01-7	8" PVC, 12' - 18'	LF	\$89.00
S-01-8	8" PVC, 18' - 24'	LF	\$168.00
S-01-9	10" PVC, 0' - 6'	LF	\$59.00
S-01-10	10" PVC, 6' - 12'	LF	\$66.00
S-01-11	10" PVC, 12' - 18'	LF	\$102.00
S-01-12	10" PVC, 18' - 24'	LF	\$185.00
S-01-13	12" PVC, 0' - 6'	LF	\$73.00
S-01-14	12" PVC, 6' - 12'	LF	\$80.00
S-01-15	12" PVC, 12' - 18'	LF	\$118.00
S-01-16	12" PVC, 18' - 24'	LF	\$205.00
S-02-1	SEWER MANHOLE W/EPOXY, 0' - 6'	EA	\$3,975.00
S-02-2	SEWER MANHOLE W/EPOXY, 6' - 12'	EA	\$5,300.00
S-02-3	SEWER MANHOLE W/EPOXY, 12' - 18'	EA	\$9,025.00
S-02-4	SEWER MANHOLE W/EPOXY, 18' - 24'	EA	\$14,275.00
S-02-5	SEWER MANHOLE W/HDPE LINER, 0' - 6'	EA	\$8,675.00
S-02-6	SEWER MANHOLE W/HDPE LINER, 6' - 12'	EA	\$10,225.00
S-02-7	SEWER MANHOLE W/HDPE LINER, 12' - 18'	EA	\$16,075.00
S-02-8	SEWER MANHOLE W/HDPE LINER, 18' - 24'	EA	\$21,325.00
S-02-9	SEWER MANHOLE OVER EXISTING PIPE, 0' - 6'	EA	\$4,800.00
S-02-10	SEWER MANHOLE OVER EXISTING PIPE, 6' - 12'	EA	\$6,125.00
S-02-11	SEWER MANHOLE OVER EXISTING PIPE, 12' - 18'	EA	\$9,950.00
S-02-12	SEWER MANHOLE OVER EXISTING PIPE, 18' - 24'	EA	\$15,200.00
S-02-13	SEWER MANHOLE OVER EXISTING PIPE WITH HDPE LINER, 0' - 6'	EA	\$9,525.00
S-02-14	SEWER MANHOLE OVER EXISTING PIPE WITH HDPE LINER, 6' - 12'	EA	\$11,075.00
S-02-15	SEWER MANHOLE OVER EXISTING PIPE WITH HDPE LINER, 12' - 18'	EA	\$17,025.00
S-02-16	SEWER MANHOLE OVER EXISTING PIPE WITH HDPE LINER, 18' - 24'	EA	\$22,275.00
S-02-17	CONFLICT MANHOLE, 0' - 6'	EA	\$5,650.00
S-02-18	CONFLICT MANHOLE, 6' - 12'	EA	\$6,975.00
S-02-19	CONFLICT MANHOLE, 12' - 18'	EA	\$10,900.00
S-02-20	CONFLICT MANHOLE, 18' - 24'	EA	\$16,150.00
S-02-21	REMOVE & REPLACE SEWER MANHOLE, 0' - 6'	EA	\$4,800.00
S-02-22	REMOVE & REPLACE SEWER MANHOLE, 6' - 12'	EA	\$6,350.00
S-02-23	REMOVE & REPLACE SEWER MANHOLE, 12' - 18'	EA	\$10,900.00
S-02-24	REMOVE & REPLACE INVERTS IN EXISTING MANHOLE	EA	\$975.00
S-02-25	CORE & CONNECT TO EXISTING MANHOLE 4" - 12"	EA	\$2,500.00
S-03-1	REMOVE EXISTING 22" RING & COVER & REPLACE WITH 24" HINGED RING & COVER	EA	\$1,650.00
S-03-2	REMOVE EXISTING 32" RING & COVER & REPLACE WITH 32" HINGED RING & COVER	EA	\$2,990.00
S-03-3	REMOVE EXISTING 22" RING & COVER & REPLACE WITH 24" HINGED RING & COVER, LABOR ONLY	EA	\$810.00
S-03-4	REMOVE EXISTING 32" RING & COVER & REPLACE WITH 32" HINGED RING & COVER, LABOR ONLY	EA	\$810.00
S-05	ADJUST EXISTING MANHOLE RING & COVER TO GRADE	EA	\$810.00
S-06-1	6" SEWER SERVICE DROP CONNECTION, 0' - 6'	EA	\$2,325.00
S-06-2	6" SEWER SERVICE DROP CONNECTION, 6' - 12'	EA	\$3,800.00
S-06-3	6" SEWER SERVICE DROP CONNECTION, 12' - 18'	EA	\$5,700.00
S-06-4	6" SEWER SERVICE DROP CONNECTION, 18' - 24'	EA	\$7,600.00
S-06-5	8" SEWER MANHOLE DROP CONNECTION, 0' - 6'	EA	\$2,625.00
S-06-6	8" SEWER MANHOLE DROP CONNECTION, 6' - 12'	EA	\$4,150.00
S-06-7	8" SEWER MANHOLE DROP CONNECTION, 12' - 18'	EA	\$6,100.00

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
S-06-8	8" SEWER MANHOLE DROP CONNECTION, 18' – 24'	EA	\$8,050.00
S-06-9	10" SEWER MANHOLE DROP CONNECTION, 0' – 6'	EA	\$3,100.00
S-06-10	10" SEWER MANHOLE DROP CONNECTION, 6' – 12'	EA	\$4,675.00
S-06-11	10" SEWER MANHOLE DROP CONNECTION, 12' – 18'	EA	\$6,675.00
S-06-12	10" SEWER MANHOLE DROP CONNECTION, 18' – 24'	EA	\$8,675.00
S-06-13	12" SEWER MANHOLE DROP CONNECTION, 0' – 6'	EA	\$3,650.00
S-06-14	12" SEWER MANHOLE DROP CONNECTION, 6' – 12'	EA	\$5,725.00
S-06-15	12" SEWER MANHOLE DROP CONNECTION, 12' – 18'	EA	\$7,375.00
S-06-16	12" SEWER MANHOLE DROP CONNECTION, 18' – 24'	EA	\$9,450.00
S-07	RESURFACE EXISTING MANHOLES	VFT	\$545.00
S-09-1	6" 2-WAY CLEANOUT, 0' – 6'	EA	\$615.00
S-09-2	6" 2-WAY CLEANOUT, 6' – 12'	EA	\$870.00
S-09-3	6" 2-WAY CLEANOUT, 12' – 18'	EA	\$1,310.00
S-09-4	8" 2-WAY CLEANOUT, 0' – 6'	EA	\$1,105.00
S-09-5	8" 2-WAY CLEANOUT, 6' – 12'	EA	\$1,355.00
S-09-6	8" 2-WAY CLEANOUT, 12' – 18'	EA	\$1,795.00
S-10-1	8" X 6" PVC WYE & BEND	EA	\$210.00
S-10-2	10" X 6" PVC WYE & BEND	EA	\$375.00
S-10-3	12" X 6" PVC WYE & BEND	EA	\$490.00
S-11	6" PVC SEWER SERVICE	LF	\$38.00
S-12	TELEVISION INSPECTION – SEWER MAIN EXPROATION (OTHER PURPOSES THAN ITEMS B1 - F16)	LF	\$2.50
S-15-1	SEWER MAIN POINT REPAIRS 6" MAIN 0' – 6'	LF	\$1,920.00
S-15-2	SEWER MAIN POINT REPAIRS 6" MAIN 6' – 12'	LF	\$2,755.00
S-15-3	SEWER MAIN POINT REPAIRS 6" MAIN 12' – 18'	LF	\$4,425.00
S-15-4	SEWER MAIN POINT REPAIRS 8" MAIN 0' – 6'	LF	\$2,095.00
S-15-5	SEWER MAIN POINT REPAIRS 8" MAIN 6' – 12'	LF	\$2,935.00
S-15-6	SEWER MAIN POINT REPAIRS 8" MAIN 12' – 18'	LF	\$4,605.00
S-15-7	SEWER MAIN POINT REPAIRS 8" MAIN 18' – 24'	LF	\$8,785.00
S-15-8	SEWER MAIN POINT REPAIRS 10" MAIN 0' – 6'	LF	\$2,400.00
S-15-9	SEWER MAIN POINT REPAIRS 10" MAIN 6' – 12'	LF	\$3,235.00
S-15-10	SEWER MAIN POINT REPAIRS 10" MAIN 12' – 18'	LF	\$4,905.00
S-15-11	SEWER MAIN POINT REPAIRS 10" MAIN 18' – 24'	LF	\$9,085.00
S-15-12	SEWER MAIN POINT REPAIRS 12" MAIN 0' – 6'	LF	\$3,555.00
S-15-13	SEWER MAIN POINT REPAIRS 12" MAIN 6' – 12'	LF	\$5,225.00
S-15-14	SEWER MAIN POINT REPAIRS 12" MAIN 12' – 18'	LF	\$6,900.00
S-15-15	SEWER MAIN POINT REPAIRS 12" MAIN 18' – 24'	LF	\$10,245.00
S-16-1	BYPASS PUMPING, 0 – 250 GPM	DAY	\$7,955.00
S-16-2	BYPASS PUMPING, 250 – 500 GPM	DAY	\$8,165.00
S-16-3	BYPASS PUMPING, 500 – 750 GPM	DAY	\$14,835.00
S-16-4	BYPASS PUMPING, 750 – 1,000 GPM	DAY	\$15,670.00
S-17-1	BORE & JACK 18" STEEL CASING W/ 6" PVC	LF	\$1,165.00
S-17-2	BORE & JACK 18" STEEL CASING W/ 8" PVC	LF	\$1,180.00
S-17-3	BORE & JACK 24" STEEL CASING W/ 8" PVC	LF	\$1,195.00
S-17-4	BORE & JACK 24" STEEL CASING W/ 10" PVC	LF	\$1,215.00
S-17-5	BORE & JACK 24" STEEL CASING W/ 12" PVC	LF	\$1,230.00
S-17-6	BORE & JACK 30" STEEL CASING W/ 12" PVC	LF	\$1,270.00
S-18-1	DIRECTIONAL BORE 2" HDPE PIPE	LF	\$17.00
S-18-2	DIRECTIONAL BORE 4" HDPE PIPE	LF	\$34.00
S-18-3	DIRECTIONAL BORE 6" HDPE PIPE	LF	\$44.00
S-18-4	DIRECTIONAL BORE 8" HDPE PIPE	LF	\$65.00
S-18-5	DIRECTIONAL BORE 10" HDPE PIPE	LF	\$88.00
S-18-6	DIRECTIONAL BORE 12" HDPE PIPE	LF	\$120.00
S-18-7	DIRECTIONAL BORE 14" HDPE PIPE	LF	\$160.00
S-18-8	DIRECTIONAL BORE 16" HDPE PIPE	LF	\$190.00
S-18-9	DIRECTIONAL BORE 18" HDPE PIPE	LF	\$255.00
S-19-1	ABANDON SANITARY SEWER MAIN	LS	\$2,630.00
S-19-2	ABANDON AND REMOVE SANITARY SEWER MANHOLE	EA	\$1,675.00
S-19-3	ABANDON SANITARY SEWER FORCEMAIN	LS	\$2,860.00
S-19-4	FORCE MAIN GROUTING	CY	\$301.00

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
S-21-1	4" HDPE FORCE MAIN RISER PIPE REPLACEMENT AT LIFT STATION	LF	\$490.00
S-21-2	6" HDPE FORCE MAIN RISER PIPE REPLACEMENT AT LIFT STATION	LF	\$525.00
S-21-3	8" HDPE FORCE MAIN RISER PIPE REPLACEMENT AT LIFT STATION	LF	\$625.00
S-21-4	10" HDPE FORCE MAIN RISER PIPE REPLACEMENT AT LIFT STATION	LF	\$725.00
S-21-5	12" HDPE FORCE MAIN RISER PIPE REPLACEMENT AT LIFT STATION	LF	\$835.00
S-22-1	2" PVC FORCE MAIN	LF	\$18.00
S-22-2	4" PVC FORCE MAIN	LF	\$25.00
S-22-3	6" PVC FORCE MAIN	LF	\$33.00
S-22-4	8" PVC FORCE MAIN	LF	\$45.00
S-22-5	10" PVC FORCE MAIN	LF	\$64.00
S-22-6	12" PVC FORCE MAIN	LF	\$85.00
S-22-7	16" PVC FORCE MAIN	LF	\$145.00
S-22-8	18" PVC FORCE MAIN	LF	\$177.00
S-22-9	24" PVC FORCE MAIN	LF	\$300.00
S-22-10	4" DIP FORCE MAIN	LF	\$89.00
S-22-11	6" DIP FORCE MAIN	LF	\$74.00
S-22-12	8" DIP FORCE MAIN	LF	\$91.00
S-22-13	12" DIP FORCE MAIN	LF	\$135.00
S-22-14	16" DIP FORCE MAIN	LF	\$182.00
S-22-15	18" DIP FORCE MAIN	LF	\$211.00
S-22-16	24" DIP FORCE MAIN	LF	\$290.00
S-22-17	30" DIP FORCE MAIN	LF	\$480.00
S-23-1	2" PVC SCH 80 FITTINGS	EA	\$29.00
S-23-2	DIP MJ FITTINGS, 4"	EA	\$585.00
S-23-3	DIP MJ FITTINGS, 6"	EA	\$830.00
S-23-4	DIP MJ FITTINGS, 8"	EA	\$1,080.00
S-23-5	DIP MJ FITTINGS, 10"	EA	\$1,540.00
S-23-6	DIP MJ FITTINGS, 12"	EA	\$1,830.00
S-23-7	DIP MJ FITTINGS, 16"	EA	\$3,290.00
S-23-8	DIP MJ FITTINGS, 18"	EA	\$4,675.00
S-23-9	DIP MJ FITTINGS, 24"	EA	\$9,070.00
S-23-10	DIP MJ FITTINGS, 30"	EA	\$15,365.00
S-25-1	4" PLUG VALVE & VALVE BOX	EA	\$1,740.00
S-25-2	6" PLUG VALVE & VALVE BOX	EA	\$2,140.00
S-25-3	8" PLUG VALVE & VALVE BOX	EA	\$2,855.00
S-25-4	10" PLUG VALVE & VALVE BOX	EA	\$3,700.00
S-25-5	12" PLUG VALVE & VALVE BOX	EA	\$4,530.00
S-25-6	16" PLUG VALVE & VALVE BOX	EA	\$9,925.00
S-25-7	18" PLUG VALVE & VALVE BOX	EA	\$12,235.00
S-25-8	24" PLUG VALVE & VALVE BOX	EA	\$21,805.00
S-25-9	4" FLANGED PLUG VALVE	EA	\$1,065.00
S-25-10	6" FLANGED PLUG VALVE	EA	\$1,535.00
S-25-11	8" FLANGED PLUG VALVE	EA	\$2,115.00
S-25-12	10" FLANGED PLUG VALVE	EA	\$3,395.00
S-25-13	12" FLANGED PLUG VALVE	EA	\$4,215.00
S-25-14	4" FLANGED CHECK VALVE	EA	\$1,290.00
S-25-15	6" FLANGED CHECK VALVE	EA	\$2,010.00
S-25-16	8" FLANGED CHECK VALVE	EA	\$3,165.00
S-25-17	10" FLANGED CHECK VALVE	EA	\$4,555.00
S-25-18	12" FLANGED CHECK VALVE	EA	\$6,440.00
S-27-1	AIR RELEASE VALVE ASSEMBLY – INSIDE VAULT BELOW GROUND	EA	\$16,775.00
S-27-2	AIR RELEASE VALVE ASSEMBLY – ABOVE GROUND	EA	\$7,775.00
S-28	SEWAGE TANKER PUMPING	HR	\$330.00
RECLAIMED WATER CONSTRUCTION (012200-52)			
R-01-1	2" PVC RECLAIMED WATER MAIN	LF	\$18.00
R-01-2	4" PVC RECLAIMED WATER MAIN	LF	\$25.00
R-01-3	6" PVC RECLAIMED WATER MAIN	LF	\$33.00
R-01-4	8" PVC RECLAIMED WATER MAIN	LF	\$45.00
R-01-5	12" PVC RECLAIMED WATER MAIN	LF	\$85.00

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
R-01-6	16" PVC RECLAIMED WATER MAIN	LF	\$145.00
R-01-7	18" PVC RECLAIMED WATER MAIN	LF	\$177.00
R-01-8	4" DIP RECLAIMED WATER MAIN	LF	\$64.00
R-01-9	6" DIP RECLAIMED WATER MAIN	LF	\$50.00
R-01-10	8" DIP RECLAIMED WATER MAIN	LF	\$61.00
R-01-11	12" DIP RECLAIMED WATER MAIN	LF	\$94.00
R-01-12	16" DIP RECLAIMED WATER MAIN	LF	\$130.00
R-01-13	18" DIP RECLAIMED WATER MAIN	LF	\$148.00
R-03-1	2" PVC SCH 80 FITTINGS	EA	\$28.00
R-03-2	DIP MJ FITTINGS, 4"	EA	\$355.00
R-03-3	DIP MJ FITTINGS, 6"	EA	\$505.00
R-03-4	DIP MJ FITTINGS, 8"	EA	\$635.00
R-03-5	DIP MJ FITTINGS, 10"	EA	\$880.00
R-03-6	DIP MJ FITTINGS, 12"	EA	\$1,050.00
R-03-7	DIP MJ FITTINGS, 14"	EA	\$1,595.00
R-03-8	DIP MJ FITTINGS, 16"	EA	\$2,125.00
R-03-9	DIP MJ FITTINGS, 18"	EA	\$2,700.00
R-03-10	DIP MJ CROSS 4"	EA	\$690.00
R-03-11	DIP MJ CROSS 6"	EA	\$890.00
R-03-12	DIP MJ CROSS 8"	EA	\$1,045.00
R-03-13	DIP MJ CROSS 10"	EA	\$1,535.00
R-03-14	DIP MJ CROSS 12"	EA	\$2,020.00
R-03-15	DIP MJ CROSS 14"	EA	\$3,235.00
R-03-16	DIP MJ CROSS 16"	EA	\$4,690.00
R-03-17	DIP MJ CROSS 18"	EA	\$5,800.00
R-05-1	2" GATE VALVE WITH SST STEM & VALVE BOX	EA	\$1,020.00
R-05-2	4" GATE VALVE WITH SST STEM & VALVE BOX	EA	\$1,365.00
R-05-3	6" GATE VALVE WITH SST STEM & VALVE BOX	EA	\$1,660.00
R-05-4	8" GATE VALVE WITH SST STEM & VALVE BOX	EA	\$2,270.00
R-05-5	10" GATE VALVE WITH SST STEM & VALVE BOX	EA	\$3,240.00
R-05-6	12" BUTTERFLY VALVE WITH SST STEM & VALVE BOX	EA	\$2,920.00
R-05-7	16" BUTTERFLY VALVE WITH SST STEM & VALVE BOX	EA	\$5,015.00
R-05-8	18" BUTTERFLY VALVE WITH SST STEM & VALVE BOX	EA	\$6,145.00
R-05-9	24" BUTTERFLY VALVE WITH SST STEM & VALVE BOX	EA	\$10,990.00
R-14-1	1" SINGLE RECLAIMED WATER SERVICE – SHORT	EA	\$610.00
R-14-2	1" SINGLE RECLAIMED WATER SERVICE – LONG	EA	\$1,035.00
R-14-3	1" DOUBLE RECLAIMED WATER SERVICE – SHORT	EA	\$890.00
R-14-4	1" DOUBLE RECLAIMED WATER SERVICE – LONG	EA	\$1,280.00
R-14-5	2" SINGLE RECLAIMED WATER SERVICE – SHORT	EA	\$2,920.00
R-14-6	2" SINGLE RECLAIMED WATER SERVICE – LONG	EA	\$3,470.00
R-14-7	2" DOUBLE RECLAIMED WATER SERVICE – SHORT	EA	\$3,990.00
R-14-8	2" DOUBLE RECLAIMED WATER SERVICE – LONG	EA	\$4,570.00
R-16-1	2" TAP ON EXISTING 8" RECLAIMED WATER MAIN W/ VALVE & SST STEM	EA	\$1,310.00
R-16-2	2" TAP ON EXISTING 12" RECLAIMED WATER MAIN W/ VALVE & SST STEM	EA	\$1,500.00
R-16-3	8" TAP ON EXISTING 8" RECLAIMED WATER MAIN W/ VALVE & SST STEM	EA	\$4,370.00
R-16-4	8" TAP ON EXISTING 12" RECLAIMED WATER MAIN W/ VALVE & SST STEM	EA	\$4,475.00
R-16-5	12" TAP ON EXISTING 12" RECLAIMED WATER MAIN W/ VALVE & SST STEM	EA	\$8,750.00
R-16-6	16" TAP ON EXISTING 16" RECLAIMED WATER MAIN W/ VALVE & SST STEM	EA	\$17,275.00
R-18-1	DIRECTIONAL BORE 2" PVC	LF	\$20.00
R-18-2	DIRECTIONAL BORE 4" PVC	LF	\$38.00
R-18-3	DIRECTIONAL BORE 6" PVC	LF	\$54.00
R-18-4	DIRECTIONAL BORE 8" PVC	LF	\$83.00
R-18-5	DIRECTIONAL BORE 10" PVC	LF	\$116.00
R-18-6	DIRECTIONAL BORE 12" PVC	LF	\$160.00
R-18-7	DIRECTIONAL BORE 16" PVC	LF	\$270.00
R-18-8	DIRECTIONAL BORE 2" HDPE	LF	\$17.00
R-18-9	DIRECTIONAL BORE 4" HDPE	LF	\$34.00
R-18-10	DIRECTIONAL BORE 6" HDPE	LF	\$44.00
R-18-11	DIRECTIONAL BORE 8" HDPE	LF	\$65.00
R-18-12	DIRECTIONAL BORE 10" HDPE	LF	\$88.00

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
R-18-13	DIRECTIONAL BORE 12" HDPE	LF	\$120.00
R-18-14	DIRECTIONAL BORE 16" HDPE	LF	\$190.00
R-22-1	ABANDON RECLAIMED WATER MAIN	LS	\$2,860.00
*ALL BELOW LINE ITEMS ARE FOR CHEMICAL GROUTING & LINING WORK ONLY. INCLUDES BASIC MOT ITEMS AROUND VEHICLES (CONSTRUCTION/MEN WORKING SIGNS & CONES). LINE ITEM G-05 WILL BE USED IF ADDITIONAL MOT OR SAFETY ITEMS ARE NEEDED.			
CHEMICAL GROUTING (EXHIBIT C)			
B1	TEST AND SEAL JOINTS, 8-INCH AND 10-INCH GRAVITY PIPE	EA	\$187.50
B2	TEST AND SEAL JOINTS, 12-INCH AND 15-INCH GRAVITY PIPE	EA	\$187.50
B3	TEST AND SEAL JOINTS, 18-INCH AND 21-INCH GRAVITY PIPE	EA	\$250.00
B4	WORK IN REAR-YARD EASEMENT - (ITEMS B1 THROUGH F16)	EA	\$493.75
B5	CHEMICAL GROUT FOR SEALING SEWER JOINTS	GAL	\$27.50
B6	CHEMICAL ROOT REMOVAL (8-INCH THROUGH 12-INCH)	LF	\$5.00
B7	CHEMICAL ROOT REMOVAL (15-INCH THROUGH 21-INCH)	LF	\$5.65
B8	GROUT/SEAL LATERAL CONNECTION 8 & 10 MAIN, 4 & 6-INCH LATERALS (3' MINIMUM)	EA	\$331.25
B9	GROUT/SEAL LATERAL CONNECTION 12 & 15 MAIN, 4 & 6-INCH LATERALS (3' MINIMUM)	EA	\$375.00
B10	GROUT/SEAL LATERAL CONNECTION 18 & 24 MAIN, 4 & 6-INCH LATERALS (3' MINIMUM)	EA	\$500.00
SECTIONAL AND LATERAL LINERS			
D1	INSTALL CURED-IN-PLACE SECTIONAL PIPE LINERS, 6-INCH TO 12-INCH DIAMETER	EA	\$4,226.25
D2	INSTALL CURED-IN-PLACE SECTIONAL PIPE LINERS, 6-INCH TO 12-INCH DIAMETER (PER LINEAR FOOT BEYOND 6 FEET IN LENGTH, ALL DEPTHS)	LF	\$120.75
D3	INSTALL CURED-IN-PLACE SECTIONAL PIPE LINERS, 15-INCH TO 18-INCH DIAMETER (UP TO 6 FEET IN LENGTH, ALL DEPTHS)	EA	\$8,193.75
D4	INSTALL CURED-IN-PLACE SECTIONAL PIPE LINERS, 15-INCH TO 18-INCH DIAMETER (PER LINEAR FOOT BEYOND 6 FEET IN LENGTH, ALL DEPTHS)	LF	\$189.75
D5	INSTALL CURED-IN-PLACE SECTIONAL PIPE LINERS, 21-INCH DIAMETER (UP TO 6 FEET IN LENGTH, ALL DEPTHS)	EA	\$10,120.00
D6	INSTALL CURED-IN-PLACE SECTIONAL PIPE LINERS, 21-INCH DIAMETER (PER LINEAR FOOT BEYOND 6 FEET IN LENGTH, ALL DEPTHS)	LF	\$247.25
D7	REINSTATE LATERALS AND GROUT ANNULAR SPACE	EA	\$630.00
D8	FCLRL - CURED-IN-PLACE LATERAL LINER 6-INCH TO 10-INCH MAIN, 4 & 6-INCH LATERAL PIPE, UP TO 15 LINEAR FEET (ALL DEPTHS)	EA	\$4,887.50
D9	FCLRL - CURED-IN-PLACE LATERAL LINER 12-INCH TO 15-INCH MAIN, 4 & 6-INCH LATERAL PIPE, UP TO 15 LINEAR FEET (ALL DEPTHS)	EA	\$6,555.00
D10	FCLRL - CURED-IN-PLACE LATERAL LINER 18-INCH TO 21-INCH MAIN, 4 & 6-INCH LATERAL PIPE, UP TO 15 LINEAR FEET (ALL DEPTHS)	EA	\$7,894.75
D11	FCLRL - CURED-IN-PLACE LATERAL LINER 24-INCH MAIN, 4 & 6-INCH LATERAL PIPE, UP TO 15 LINEAR FEET (ALL DEPTHS)	EA	\$10,183.25
D13	FCLRL - CURED-IN-PLACE MH DROP LINER 8-INCH TO 15-INCH MAIN, 8-INCH TO 10-INCH MANHOLE DROP CONNECTION, UP TO 12 LINEAR FEET OF DROP (ALL DEPTHS)	EA	\$4,250.40
D14	LATERAL LINER 4 & 6-INCH PIPE, GREATER THAN 15 LINEAR FEET (ALL DEPTHS)	LF	\$109.25
D15	INSTALL CIP LINER IN 4-INCH TO 6-INCH LATERALS, ALL DEPTHS (INCLUDES 15 FEET OF LATERAL)	EA	\$3,565.00
D16	INSTALL CIP LINER IN 4-INCH TO 6-INCH LATERALS, ALL DEPTHS (PER LINEAR FOOT BEYOND 15 FEET OF LATERAL PIPE)	LF	\$109.25
D17	INSTALL FULL-CIRCLE CIP MAINLINE/LATERAL CONNECTION INTERFACE SEAL (MINIMUM 3) IN 6- 10- INCH MAIN WITH 4-INCH TO 6-INCH LATERALS, ALL DEPTHS	EA	\$3,967.50
D18	INSTALL FULL-CIRCLE CIP MAINLINE/LATERAL CONNECTION INTERFACE SEAL (MINIMUM 3) IN 12- 21- INCH MAIN WITH 4-INCH TO 6-INCH LATERALS, ALL DEPTHS	EA	\$6,583.75
D19	10- INCH MAIN WITH 4-INCH TO 6-INCH LATERAL PIPE, UP TO 6 INCHES OF LATERAL PIPING, ALL DEPTHS	EA	\$3,967.50
D20	TO 21-INCH MAIN, 4-INCH & 6-INCH LATERAL PIPE, UP TO 6 INCHES OF LATERAL PIPING, ALL DEPTHS	EA	\$6,583.75
D21	TRANSITIONAL LINER 6-INCH TO 4-INCH	EA	\$575.00
D22	COATING REMOVAL/SURFACE PREPARATION (ITEMS D17 - D20)	EA	\$327.75

ITEM #	DESCRIPTION	UNIT OF MEASURE	UNIT PRICE
D23	SEWER LATERAL TV INSPECTION FROM MAIN WITH PAN & TILT CAMERA (UP TO 30 FEET)	EA	\$408.25
D24	SEWER LATERAL TV INSPECTION FROM MAIN with PAN & TILT CAMERA (BEYOND 30 FEET)	LF	\$9.20
D25	SEWER LATERAL TV INSPECTION FROM CLEANOUT (UP TO 30 FEET)	EA	\$327.75
D26	SEWER LATERAL TV INSPECTION FROM CLEANOUT (BEYOND 30 FEET)	LF	\$9.20
D27	LATERAL PIPE GROUTING TO FACILITATE PROPER LATERAL LINER INSTALLATION	EA	\$2,587.50
D28	LATERAL PIPE TESTING (10% OF INSTALLATIONS)	EA	\$517.50
CIP MAINLINE PIPE LINING			
E1	INSTALL CURED-IN-PLACE LINER, 18-INCH DIAMETER GRAVITY MAINS (6 TO 12 FEET IN DEPTH)	LF	\$138.00
E2	INSTALL CURED-IN-PLACE LINER, 18-INCH DIAMETER GRAVITY MAINS (12 TO 16 FEET IN DEPTH)	LF	\$138.00
E3	INSTALL CURED-IN-PLACE LINER, 21-INCH DIAMETER GRAVITY MAINS (6 TO 12 FEET IN DEPTH)	LF	\$270.00
E4	INSTALL CURED-IN-PLACE LINER, 21-INCH DIAMETER GRAVITY MAINS (12 TO 16 FEET IN DEPTH)	LF	\$270.00
E5	INSTALL CURED-IN-PLACE LINER, 24-INCH DIAMETER GRAVITY MAINS (6 TO 12 FEET IN DEPTH)	LF	\$286.00
E6	INSTALL CURED-IN-PLACE LINER, 24-INCH DIAMETER GRAVITY MAINS (12 TO 18 FEET IN DEPTH)	LF	\$286.00
E7	INSTALL CURED-IN-PLACE LINER, 30-INCH DIAMETER GRAVITY MAINS (6 TO 12 FEET IN DEPTH)	LF	\$360.00
E8	INSTALL CURED-IN-PLACE LINER, 30-INCH DIAMETER GRAVITY MAINS (12 TO 18 FEET IN DEPTH)	LF	\$360.00
FORM AND FORM PIPE LINING			
F1	INSTALL FOLD AND FORM LINER, 8-INCH DIAMETER GRAVITY MAINS (ALL DEPTHS)	LF	\$35.00
F2	INSTALL FOLD AND FORM LINER, 10-INCH DIAMETER GRAVITY MAINS (ALL DEPTHS)	LF	\$45.00
F3	INSTALL FOLD AND FORM LINER, 12-INCH DIAMETER GRAVITY MAINS (ALL DEPTHS)	LF	\$50.00
F4	INSTALL FOLD AND FORM LINER, 15-INCH DIAMETER GRAVITY MAINS (ALL DEPTHS)	LF	\$105.00
F5	SEWER MAIN CLEANING AND TV INSPECTION (8-INCH THROUGH 12-INCH)	LF	\$2.35
F6	SEWER MAIN CLEANING AND TV INSPECTION (15-INCH THROUGH 21-INCH)	LF	\$3.10
F7	SEWER MAIN CLEANING AND TV INSPECTION (21-INCH THROUGH 24-INCH)	LF	\$5.60
F8	REINSTATE LATERALS AND GROUT ANNULAR SPACE	EA	\$495.00
F9	MECHANICAL ROOT OR GREASE REMOVAL (12-INCH AND SMALLER)	LF	\$4.15
F10	MECHANICAL ROOT OR GREASE REMOVAL (15-INCH THROUGH 24-INCH)	LF	\$8.15
F11	MECHANICAL TUBERCULATION REMOVAL (12-INCH OR SMALLER)	LF	\$22.50
F12	MECHANICAL TUBERCULATION REMOVAL (15-INCH THROUGH 24-INCH)	LF	\$31.25
F13	PROTRUDING SERVICE CONNECTION REMOVED BY INTERNAL MEANS	EA	\$331.25
F14	BYPASS PUMPING (6-INCH AND 10-INCH SEWER)	DAY	\$1,875.00
F15	BYPASS PUMPING (12-INCH AND 15-INCH SEWER)	DAY	\$10,625.00
F16	BYPASS PUMPING (18-INCH AND 30-INCH SEWER)	DAY	\$18,125.00

- 1. Group “B” – Chemical Grouting:** Testing and chemical grouting of pipe, root removal, cleanout installation, bypass pumping and TV surveying.
- 2. Group “D” – Cured-in-Place Sectionals and Lateral Lining:** Cured-in-place lateral lining, sectional lining of mains and mainline/lateral connection. Television survey on service lateral pipes using special camera systems and associated cleanout installation and bypass pumping. Lateral camera surveys must have pan and tilt capabilities, associated work such as cleaning and preparation, cleanout installation, bypass pumping, traffic control and TV survey.
- 3. Group “E” – Cured-in-place Lining:** Cured-in-place pipe lining for gravity mains and laterals and associated work such as cleaning and preparation, lateral reinstatement, cleanout installation, bypass pumping, traffic control and TV survey. Cured-in-place lateral lining, sectional lining of mains, and mainline/laterals connection interface seal installation. Television survey on service lateral pipes using special camera systems and associated cleanout installation and bypass pumping.
- 4. Group “F” – Fold-and-Form Lining:** Fold-in-form pipelining for gravity mains, and associated work such as cleaning and preparation, lateral reinstatements, cleanout installation, bypass pumping, traffic control and TV survey. Television survey on service lateral pipes using special camera systems and associated cleanout installation and bypass pumping.

Measurement and Payment

1. Group “B” – Chemical Grouting Payment Items

a. Items B1 to B3 – Testing and sealing sewer joints

(1) These items of work will be measured and paid for at the unit price per each joint of pipe tested and sealed as delineated by the pipe size brackets named in the Schedule of Price Bid. Each unit price bid shall include all work including, but not limited to, setups, flow isolation, testing, sealing, maintenance, transportation, traffic control, labor, work, materials, reporting and documentation, or any other costs associated with pipe joint testing and sealing.

b. Item B5 – Chemical grout for sealing sewer joints

(1) This item of work will be measured and paid for at the unit price per gallon of grout used to seal sewer joint regardless of pipe size. The price shall include all setups, maintenance,

transportation, traffic control, labor, work, materials, or any other costs associated with chemical grouting of sewer joints. Chemical grout for sealing sewer laterals or lateral connections will not be paid for by this item

c. Items B7 to B7 – Chemical root removal in sewer lines

(1) This item of work will be measured and paid for at the unit price per linear foot for each sewer size bracket named in the Schedule of Price Bid. Measurement of lines shall be made based on the horizontal projection of the centerline of the pipe between manholes, measured to the nearest foot from inside wall of manhole to inside wall of manhole, not including the manhole chamber, in the pipe which root removal/treatment was performed.

(2) Each unit price bid for root removal and chemical root treatment in sewer lines shall include cleaning; all mechanical methods of root removal specified or not; all herbicides or chemical treatment specified or not and/or all equipment, materials and labor which shall be used to provide an open sewer (no blockages or constrictions due to roots or vegetation) to an acceptable condition and ready for any and all repairs.

(3) The OWNER may authorize root removal as a separate pay item when root intrusion is sufficiently heavy to prevent the completion of inspection or following completion of successful cleaning and inspection. Root removal not authorized in writing by the OWNER shall be considered part of the cleaning operation and shall not be considered a separate pay item.

(4) Sewer line or manhole cleaning is not a separate bid item. The prices for all cleaning of sewers and manholes; verification of adequate cleaning by pulling double squeegees; hoses; nozzles; water; labor; materials and/or any other work required to clean the sewers to a degree acceptable for television inspection and subsequent repairs shall be included in the bid item in which the rehabilitation occurs.

d. Items B8 to B10 – Grout/Sealing Lateral Connection 4&6-inch Laterals with Chemical Grout

(1) This item of work will be measured and paid for at the unit price per each lateral connection sealed. The price bid shall include all setups, maintenance, transportation, traffic control, labor, work, materials, or any other costs associated with chemical grouting of the lateral joints. Measurement shall be made based on the horizontal projection of the centerline of the pipe between sewer main and property line. Chemical grout will not be paid for separately and shall be included in the unit price bid for this item.

2. Group “D” – Sectional Liners and Lateral Liners Payment Items

a. Items D1 to D6 – Install cured-in-place sectional pipe liners

(1) Items D1, D3, and D5 will be measured and paid at the unit price per each cured-in-place sectional pipe liner installed up to 6 feet, as delineated by the pipe size brackets named in the Schedule of Price Bid. Each unit price bid shall provide full compensation for all work including, but not limited to, furnishing, and installing section of liner; pipe cleaning; television inspections; all labor, materials and equipment specified or not which will provide a complete and acceptable liner installation, in accordance with the technical specifications.

(2) Items D2, D4, and D6 will be paid for in addition to the price paid under corresponding Items D1, D3, or D5 as applicable, at the unit price bid per linear foot of liner installed beyond 6 feet and up to 9 feet. This item will be full compensation for all additional costs associated with work of installing sectional liner beyond 6 feet. Any sectional liner extending beyond 9 feet and up to 12 feet shall be paid for as two single liners under Items D1, D3, or D5, in accordance with the technical specifications.

(3) Payment for bypass pumping, if required (other than because of damage caused by the CONTRACTOR), will be paid for under a separate item.

b. Item D7 – Reinstate laterals and grout annular space

(1) This item of work will be measured and paid at the unit price per each lateral reinstated and shall include, but not be limited to, blocking or plugging incoming line; removal, transportation and disposal of material generated by cleaning and preparation; television surveys, furnishing the equipment necessary to internally cut out the liner to at least 95 percent of the circumference of the lateral, cutting out the coupon; wire-brushing the cut to remove jagged edges; recovering all waste material from the sewer; service pipe cleaning; sealing the lateral connection to the liner including the first joint of the lateral connection; grouting the annular space using 3’ minimum lateral bladder; performing all repairs required due to damage caused by the CONTRACTOR, and all appurtenant and miscellaneous items and work, in accordance with the technical specifications.

(2) If the CONTRACTOR damages the host pipe during lateral reinstatement, the CONTRACTOR shall repair the host pipe to the satisfaction of the OWNER at no additional cost.

(3) If grouting of the annular space at the reinstated lateral results in residual grout in greater than 50 percent the circumference of the lateral, such grout shall be removed at no additional cost.

c. Items D8 to D12 – Full Circle Lateral Repairs Liner (FCLRL), in various-sized main with 4-inch to 6-inch laterals

(1) This item of work will be measured and paid for at the unit price per each as delineated by the pipe size and depth brackets named in the Bid Form, and shall include up to 15 feet of lateral. Each unit price bid shall include, but not be limited to, all necessary or required labor, equipment, tools, and materials for traffic control, sewer pipe cleaning and preparation of the existing sewer, including blocking or plugging incoming lines; removal, transportation and disposal of material generated by cleaning and preparation; television surveys; pipe liner; cleaning; testing; cleanup; documentation and reporting; and all labor, materials and equipment required to provide a complete and acceptable liner installation, in accordance with the technical specifications.

(2) This item of work will be measured and paid for at the unit price per linear foot of sewer laterals lined beyond 15 feet of lateral, in addition to the corresponding item with Bid Form units of "EA". This item will be full compensation for all additional costs associated with work of installing liner beyond 15 feet.

(3) Payment for bypass pumping, if required (other than because of damage caused by the CONTRACTOR) will be paid for under a separate item.

d. Items D13 to D16 – Install CIP liner in 4-inch to 6-inch laterals, various depths.

(1) This item of work will be measured and paid for at the unit price per each and shall include up to 15 feet of lateral. Each unit price bid shall include, but not be limited to, all necessary or required labor, equipment, tools, and materials for traffic control, sewer pipe cleaning and preparation of the existing sewer, including blocking or plugging incoming lines; removal, transportation and disposal of material generated by cleaning and preparation; television surveys; pipe liner; cleaning; testing; cleanup; documentation and reporting; and all labor, materials and equipment required to provide a complete and acceptable liner installation, in accordance with the technical specifications.

(2) This item of work will be measured and paid for at the unit price per linear foot of sewer laterals lined beyond 15 feet of lateral, in addition to the corresponding item with Bid Form units of "EA". This item will be full compensation for all additional costs associated with work of installing liner beyond 15 feet.

(3) Payment for bypass pumping, if required (other than because of damage caused by the CONTRACTOR) will be paid under a separate item.

e. Items D17 to D18 – Install Full-Circle CIP mainline/lateral connection interface seal (minimum 3') in 6-inch to 21-inch main with 4-inch to 6-inch laterals, all depths.

(1) This item will be paid at the unit price per each and shall include furnishing all labor, equipment, and materials needed to install a mainline/lateral connection interface seal that extends a minimum of 3-feet into the lateral. Each unit price bid shall include, but not be limited to, all necessary or required labor, equipment, tools, and materials for traffic control, sewer pipe cleaning and preparation of the existing sewer, including blocking or plugging

incoming lines; removal, transportation and disposal of material generated by cleaning and preparation; television surveys; pipe liner; recovering all waste material from the sewer; testing; cleanup; performing all repairs required due to damage caused by the CONTRACTOR; documentation and reporting; and all labor, materials and equipment required to provide a complete and acceptable liner installation, in accordance with the technical specifications.

Coating removal / Surface preparation will be required when an interface seal is installed over an existing Full-Circle CIP liner, and will be separately compensated using the applicable pay item.

f. Items D19 to D20 – Install Full-Circle CIP mainline/lateral connection interface seal 6-in to 21-inch main, 4-inch & 6-inch lateral pipe, up to 6-inch of lateral piping, all depths.

(1) This item will be paid at the unit price per each and shall include furnishing all labor, equipment, and materials needed to install a mainline/lateral connection interface seal that extends a minimum of 6-inches into the lateral. Each unit price bid shall include, but not be limited to, all necessary or required labor, equipment, tools, and materials for traffic control, sewer pipe cleaning and preparation of the existing sewer, including blocking or plugging incoming lines; removal, transportation and disposal of material generated by cleaning and preparation; television surveys; pipe liner; recovering all waste material from the sewer; testing; cleanup; performing all repairs required due to damage caused by the CONTRACTOR; documentation and reporting; and all labor, materials and equipment required to provide a complete and acceptable liner installation, in accordance with the technical specifications.

(2) Coating removal / Surface preparation will be required when an interface seal is installed over an existing CIP liner, and will be separately compensated using the applicable pay item.

g. Item D21 – Transitional liner (6-inch to 4-inch)

(1) This item of work will be measured and paid for at the unit price per each, as defined in the Bid Form. Payment of the unit price per each will provide complete compensation for furnishing materials and all labor, tools, equipment and incidentals, to provide as directed by the OWNER, a transitional liner (6-inch to 4-inch), as part of a T-liner or lateral liner, complete in place. Payment for this item, when authorized by the OWNER, shall be in addition to a T-liner or lateral liner, in accordance with the technical specifications

h. Item D22 – Coating Removal

(1) This item of work will be measured and paid for at the unit price per each, as defined in the Bid Form. Payment of the unit price per each will provide complete compensation for furnishing materials and all labor, tools, equipment and incidentals, to remove the coatings in mainline cured-in-place liners prior to the installation of a mainline/lateral connection interface

seal. Payment for this item, when authorized by the OWNER, shall be in addition to a mainline/lateral connection interface seal, in accordance with the technical specifications.

i. Item D23 – Televis service lateral and locate from mainline (up to 30 feet)

(1) This item of work will be measured and paid at the unit price per each of lateral televised. Payment of the unit price per each will provide for complete compensation for furnishing all labor, equipment, tools, and materials for preparatory cleaning and televising of sanitary sewer service laterals, including all incidentals such as traffic control and sewer plugging, in accordance with the technical specifications.

j. Item D24 – Televis service lateral and locate from mainline (beyond 30 feet)

(1) This item of work will be measured and paid for at the unit price per foot of sewer laterals televised in addition to Item D1. Payment of the unit price for each will provide for complete compensation for furnishing all labor, equipment, tools and materials, preparatory cleaning, and televising service lateral including all incidentals such as traffic control and sewer plugging, in accordance with the technical specifications.

k. Item D25 – Televis lateral from cleanout (up to 30 feet)

(1) This item of work will be measured and paid at the unit price per each of lateral televised. Payment of the unit price per each will provide for complete compensation for furnishing all labor, equipment, tools, and materials for preparatory cleaning and televising sanitary sewer service laterals, including all incidentals such as traffic control and sewer plugging, in accordance with the technical specifications.

l. Item D26 – Televis lateral from cleanout (beyond 30 feet)

(1) This item of work will be measured and paid for at the unit price per foot of sewer laterals televised in addition to Item D4. Payment of the unit price for each will provide for complete compensation for furnishing all labor, equipment, tools and materials, preparatory cleaning and televising service lateral including all incidentals such as traffic control and sewer plugging, in accordance with the technical specifications.

m. Items D27 - Lateral grouting (if required in preparation for FCLRL, lateral liner, or mainline/lateral connection interface seal installation)

(1) This item of work will be measured and paid at the unit price per each lateral grouting performed, with the advance concurrence of the OWNER, in association with the performance

of a FCLRL, lateral liner, or mainline/lateral connection interface seal installation. Payment of the unit price per each will provide complete compensation for furnishing materials and all labor, tools and equipment and incidentals, to chemically grout leaking laterals prior to the installation of a FCLRL, lateral liner, or mainline/lateral connection interface seal, complete in place. Payment for this item, when authorized by the OWNER, shall be in addition to a FCLRL, lateral liner, or mainline/lateral connection interface seal, in accordance with the technical specifications.

Item D28 – Lateral testing

This item of work will be measured and paid at the unit price per each lateral tested (10% of installed liners). Payment of the unit price per each will provide complete compensation for furnishing materials and all labor, tools and equipment and incidentals, to test laterals that have been lined. Payment for this item, when authorized by the OWNER, shall be in addition to a FCLRL, lateral liner, or mainline/lateral connection interface seal. There will be no payment for laterals that fail the test, in accordance with the technical specifications.

3. Group “E” Cured-in-Place Pipe (CIPP) Lining Pay Items

a. Items E1 to E8 – Install CIPP liner in gravity mains.

(1) This work will be measured and paid at the unit price per linear foot of liner as delineated by the pipe size and depth brackets named in the Bid Proposal. Measurement shall be made based on the horizontal projection of the centerline of the permanently installed liner between manholes, including the laying length of fittings along the run, measured to the nearest foot from the inside wall of manhole to inside wall of manhole for each section lined. Each unit price bid shall include, but not be limited to, all necessary or required resident notification, traffic control, sewer pipe cleaning and preparation of the existing sewer, including blocking or plugging incoming lines; removal, transportation and disposal of material generated by cleaning and preparation; pre- and post-lining television surveys; chemical joint sealing if necessary; pipe lining; the cost of obtaining a water meter from the OWNER; cleaning; sample collection; grouting to eliminate infiltration at service connections and liner ends; cleanup; documentation and reporting; and all labor, materials and equipment required to provide a complete and acceptable liner installation, in accordance with the technical specifications.

(2) Where post-installation thickness measurements and/or physical property testing is performed, payment for installed liner will be made as itemized below:

(a) Full payment – If thickness, flexural strength, and flexural modulus of elasticity of installed liner are all 95 percent or more of specified values, full payment will be made accordingly.

(b) Adjusted payment for 90 to 94 percent of specified values –If thickness, flexural strength, or flexural modulus of elasticity of installed liner are between 90 and 95 percent of

specified values, payment will be made based on an Adjusted Unit Price, which shall equal the Unit Price bid, multiplied by a Value Factor calculated as follows:

- 1) Value Factor = * thickness x * flexural strength x * flexural modulus of elasticity'.

* Insert actual measured or test result expressed as a fraction of the specified value.
Maximum allowable is 1.

- 3) Payment for bypass pumping and service lateral connections, if required (other than because of damage caused by the CONTRACTOR) will be paid for under a separate item.

4. Group "F" – Fold and Form Lining Payment Items

a. Items F1 to F4 – Install liner

(1) This work will be measured and paid at the unit price per linear foot of liner as delineated by the pipe size named in the Bid Proposal. Measurement shall be made based on the horizontal projection of the centerline of the permanently installed liner between manholes, including the laying length of fittings along the run, measured to the nearest foot from the inside wall of manhole to inside wall of manhole for each section lined. Each unit price bid shall include, but not be limited to, all necessary or required resident notification, traffic control, sewer pipe cleaning and preparation of the existing sewer, including blocking or plugging incoming lines; removal, transportation and disposal of material generated by cleaning and preparation; pre- and post-lining television surveys; chemical joint sealing if necessary; pipe lining; the cost of obtaining a water meter from the OWNER; cleaning; sample collection; grouting to eliminate infiltration at service connections and liner ends; cleanup; documentation and reporting; and all labor, materials and equipment required to provide a complete and acceptable liner installation, in accordance with the technical specifications.

- (2) Payment for bypass pumping and service lateral connections, if required (other than because of damage caused by the CONTRACTOR) will be paid for under a separate item.

b. Item F5 – Reinstate laterals and grout annular space

(1) This item of work will be measured and paid at the unit price per each lateral reinstated and shall include, but not be limited to, blocking or plugging incoming line, removal, transportation and disposal of material generated by cleaning and preparation; television surveys, furnishing the equipment necessary to internally cut out the liner to at least 95 percent of the circumference of the lateral, cutting out the coupon; wire-brushing the cut to remove jagged edges; recovering all waste material from the sewer; service pipe cleaning; sealing the lateral connection to the liner including the first joint of the lateral connection; grouting the annular space using 3' minimum lateral bladder; performing all repairs required due to damage caused by the CONTRACTOR, and all appurtenant and miscellaneous items and work, in accordance with the technical specifications.

- (2) If the CONTRACTOR damages the host pipe during lateral reinstatement, the CONTRACTOR shall repair the host pipe to the satisfaction of the OWNER at no additional cost.
- (3) If grouting of the annular space at the reinstated lateral results in residual grout in greater than 50 percent the circumference of the lateral, such grout shall be removed at no additional cost.

5. Items in Common

a. Sewer main cleaning and TV inspection

- (1) This item will be paid for at the unit price bid per foot of sewer cleaned and televised for inspection only, when a sewer repair is not performed due to change of field conditions, or as directed by the OWNER. The unit price shall provide full compensation for all work required to perform television inspection of sanitary sewer including, but not limited to, furnishing all labor, equipment and material for cleaning, flow isolation, TV inspection, and all incidentals related to sewer inspection. The products shall be acceptable to the OWNER or otherwise the CONTRACTOR shall re-televiser the sewer line to the satisfaction of the OWNER. Sewer main cleaning shall include drop connections, in accordance with the technical specifications.
- (2) Cleaning and TV inspection performed to prepare for a repair or to document a completed repair are not considered separate pay items. Costs for such cleaning and TV inspection shall be included in the contract unit cost for each particular repair.

b. Sewer lateral cleaning and TV inspection

- (1) This item will be paid for at the unit price bid per foot of sewer lateral cleaned and televised for inspection only, when a sewer repair is not performed due to change of field conditions, or as directed by the OWNER. The unit price shall provide full compensation for all work required to perform television inspection of sanitary sewer service laterals including, but not limited to, furnishing all labor, equipment, tools and material for cleaning, flow isolation, TV inspection, and all incidentals related to sewer inspection. The products shall be acceptable to the OWNER or otherwise the CONTRACTOR shall re-televiser the sewer line to the satisfaction of the OWNER, in accordance with the technical specifications.
- (2) Cleaning and TV inspection performed to prepare for a repair or to document a completed repair are not considered separate pay items. Costs for such cleaning and TV inspection shall be included in the contract unit cost for each particular repair.

c. Mechanical root or grease removal

- (1) Removal of grease or roots involving the use of special equipment will be considered special cleaning and will be measured and paid per linear foot additionally to cleaning, depending on the pipeline diameter and the type of cleaning, as shown on the Schedule of

Prices. The unit price shall provide full compensation for all work required to perform such cleaning including, but not limited to, furnishing all labor, equipment and material for cleaning, flow isolation, pre- and post-cleaning TV inspection, traffic control, and all incidentals. The products shall be acceptable to the OWNER or otherwise the CONTRACTOR shall re-clean and re-televise the sewer line to the satisfaction of the OWNER, in accordance with the technical specifications.

(2) Special cleaning not authorized in writing by the OWNER shall be considered part of the cleaning operation and shall not be considered a separate pay item.

(3) Sewer line or manhole cleaning is not a separate bid item. The prices for all cleaning of sewers and manholes; verification of adequate cleaning by pulling double squeegees; hoses; nozzles; water; labor; materials and/or any other work required to clean the sewers to a degree acceptable for television inspection and subsequent repairs shall be included in the bid item in which the rehabilitation occurs.

d. Mechanical tuberculation/concrete removal

(1) Removal of tuberculation in cast iron pipe, or concrete in pipe, involving the use of special equipment will be considered special cleaning and will be measured and paid per linear foot additionally to cleaning, depending on the pipeline diameter and the type of cleaning, as shown on the Schedule of Prices. The unit price shall provide full compensation for all work required to perform such cleaning including, but not limited to, furnishing all labor, equipment and material for cleaning, flow isolation, pre- and post-cleaning TV inspection, traffic control, and all incidentals. The products shall be acceptable to the OWNER or otherwise the CONTRACTOR shall re-clean and re-televise the sewer line to the satisfaction of the OWNER, in accordance with the technical specifications.

(2) Special cleaning not authorized in writing by the OWNER shall be considered part of the cleaning operation and shall not be considered a separate pay item.

(3) Sewer line or manhole cleaning is not a separate bid item. The prices for all cleaning of sewers and manholes; verification of adequate cleaning by pulling double squeegees; hoses; nozzles; water; labor; materials and/or any other work required to clean the sewers to a degree acceptable for television inspection and subsequent repairs shall be included in the bid item in which the rehabilitation occurs.

e. Protruding service connection removal by internal means

(1) The OWNER may request that the CONTRACTOR remove protruding service connections, typically to allow completion of inspection or as a prelude to lining. The CONTRACTOR shall use non-destructive robotic techniques. The use of equipment that may damage the existing service connection will not be allowed. The CONTRACTOR shall not perform this work prior to receiving written authorization from the OWNER, in accordance with the technical specifications.

- (2) Measurement shall be per protruding service connection removed.
- 3) Payment shall be at the unit price bid, per each protruding service connection removed, provided in the Bid Proposal and shall include full compensation for accessing the site, wastewater flow control, performing the protruding service connection removal, and all else incidental thereto for which separate payment is not provided under other items in the Bid Proposal.

f. Bypass pumping

- (1) These items shall provide full compensation for bypass pumping operations required for sewer and manhole repair work. The CONTRACTOR shall attempt to perform the sewer work without bypass pumping. However, if, in the opinion of the OWNER bypass pumping is necessary, it will be identified as a payment item. The pay item is a charge per day for all bypass pumping operations during a specific sewer repair, including services, regardless of the number of pumps required. Bypass Pumping shall be bid on the basis of sewer size, which is bypassed, in accordance with the technical specifications.

g. Installation in rear-yard easement

- (1) Payment shall be at the unit price bid, per easement repair performed, provided in the Bid Proposal and shall include full compensation for all additional labor, materials, equipment and incidentals required to perform work away from vehicular traveled ways, if so requested by the OWNER, in association with any other work under this contract. This item will be paid in addition to the price paid under the corresponding work item, and will only be paid when the area where work must necessarily be performed is in the easement area and presents restrictions to vehicular access from roads, alleys, driveways, or other features suitable for access by the installation vehicles. This item shall be full compensation for all additional costs associated with working in an easement area.
- (2) When the CONTRACTOR judges that this item is applicable, the CONTRACTOR shall obtain the OWNER's concurrence on such judgment in advance of performing the work.

END OF SECTION

CIP FULL CIRCLE MAIN / LATERAL CONNECTION

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The work specified in this section consists of providing for the reconstruction of a particular mainline section and the adjacent lateral sewer pipe without excavation while providing a structural one-piece leak free connection at the interface of the mainline and lateral pipelines.

1.2 GENERAL

- A. The reconstruction will be accomplished using a non-woven fabric tube of particular length and a thermoset resin with physical and chemical properties appropriate for the application. The lateral tube within a translucent inversion bladder is vacuum impregnated with the resin then placed inside a protective carrying device. The mainline liner that is physically attached to the lateral tube is affixed around a rigid launching device. The launching device and protective carrying device are winched into the existing sewer. When the launching device is properly positioned at the lateral connection, the mainline liner is inflated and the resin saturated tube is inverted up through the lateral pipe, using air or water pressure, by the action of the inversion bladder. Once the tube/resin composite is cured, the inversion bladder and launching/carrying devices are removed. The cured-in-place mainline/lateral connection repair system shall be "T-Liner" or approved equal.

1.3 QUALIFICATIONS

- A. The Qualifications of the CONTRACTOR shall be submitted with submittal. These Qualifications shall include detailed descriptions of the following:
 - 1. The CONTRACTOR shall sign and date the information provided and certify, that to the extent of his knowledge, the information is true and accurate, and that the supervisory personnel submitted will be directly involved with and used on this project. Substitutions of personnel will not be allowed without written authorization of the OWNER.
 - 2. Specialty technicians shall be certified by the proposed product manufacturer and/or its authorized representative. Certifications shall be submitted to the OWNER.

PART 2 - PRODUCTS

2.1 GENERAL

- A. The finished liner shall be fabricated from material as specified in this section which when cured will be resistant to the corrosive effects of the raw sewage and hydrogen sulfide.
- B. The liner shall be fabricated to a size that when installed will neatly fit the internal circumference of the conduit to be repaired as specified by the OWNER.

- C. The liner shall be one piece and will consist of a lateral portion and the mainline portion with one or more layers of flexible needled felt or an equivalent non-woven material. The liner will be continuous in length and the wall thickness shall be uniform. No overlapping sections shall be allowed in the circumference or the length of the lateral liner. The tube will be capable of conforming to offset joints, bells, and disfigured pipe sections. The mainline liner will be flat with one end overlapping the second end and sized accordingly to create a circular lining equal to the diameter of the mainline pipe. The resin will be polyester or vinyl ester or epoxy, with proper catalysts as designed for the specific application. The cured-in-place pipe shall provide a smooth bore interior. Both the lateral pipe and the main connection shall have a design report documenting the design criteria, fully deteriorated pipe section for the lateral and partially deteriorated for the main (if the main has already been lined), relative to the hydrostatic pressures, depth of soil cover, and type of soil. The mainline sectional liner shall be a full-circle 16-inch long CIPP liner integrally manufactured to the lateral liner providing a seamless connection between the mainline pipe liner and the lateral liner. Installation will be accomplished remotely using air or water for inversion and curing. The cured pipe repair system shall be watertight and shall conform to the existing pipe and eliminate any leakage or connection to the outside of the host pipe/service.
- D. The liner shall meet or exceed ASTM F2561-06.
- E. The composite of the materials above will, upon installation inside the host pipe, exceed the minimum test standards specified by the American Society for Testing Methods.

Physical Characteristics	Test Procedure	Minimum Value
Flexural Strength	ASTM D790	4,500 psi
Flexural Modulus	ASTM D790	250,000 psi
Long Term Modulus	Reduction for Creep	50%

Design Considerations	Criteria	
Tube Design	ASTM F 1216	Appendix X1
Hydrostatic Buckling	ASTM F 1216	Appendix X1

The CIPP design for the lateral tube and mainline connection shall assume no bonding to the original host pipe.

2.2 LINER DESIGN

- A. The minimum required structural CIPP wall thickness shall be based on the physical properties described above and in accordance with the design equations in the appendix of ASTM F 1216, and the following design parameters

Design Safety Factor	2.0
Retention Factor for Long-Term Flexural Modulus to be used in Design	50 %
Ovality*	2 %
Groundwater Depth = Pipe Depth (above invert)*	ft.
Soil Depth (above crown)*	ft.
Soil Modulus	700 psi
Soil Density	120 pcf
Live Load	One H20 passing truck
Design Condition (lateral pipe)	Fully deteriorated
Design Condition (main pipe) Lined Main Pipe	Partially deteriorated
Design Condition (main pipe) Unlined Main	Fully deteriorated

PART 3 - EXECUTION

3.1 CLEANING SEWER LINES

- A. Prior to any lining of a pipe, it shall be the responsibility of the CONTRACTOR to remove internal deposits or roots from the pipeline. Both mainline and lateral line shall be cleaned.
- B. Television survey shall be performed. Both main line and lateral line shall be televised under separate pay items utilizing a pan and tilt camera for both mains and laterals.
- C. The interior of the pipeline shall be carefully surveyed to determine the locations and extent of any structural failures. The location of any conditions which may prevent proper installation of lining materials into the pipelines shall be noted so that these conditions can be corrected. A video and suitable log format shall be kept, and a copy turned over to the OWNER.

3.2 FLOW BYPASSING

- A. The CONTRACTOR, when required, shall provide for the transfer of flow, through or around section or sections of pipe that are to be repaired. The proposed bypassing system shall be acceptable in advance by the OWNER. The acceptance of the bypassing system in advance by the OWNER shall in no way relieve the CONTRACTOR of his responsibility and/or public liability.

3.3 LINE OBSTRUCTIONS

A. It shall be the responsibility of the CONTRACTOR to clear the line of obstruction. If survey reveals an obstruction that cannot be removed by conventional cleaning equipment, the CONTRACTOR shall make a point repair excavation. Such excavation shall be approved in writing by the OWNER prior to the commencement of the work.

3.5 LINER INSTALLATION

A. The tube is inspected for tears and frayed sections. The tube, in good condition, will be vacuum impregnated with the thermostat resin. The resin will be introduced into the tube creating a slug of resin at the beginning of the tube. A calibration roller will assist the resin slug to move throughout the tube. All air in the tube shall be removed by vacuum allowing the resin to thoroughly impregnate the tube. All resin shall be contained to ensure no public property or persons are exposed to the liquid resin. The mainline liner will be saturated upon a wet-out platform. The resin impregnated sample (wick) shall be retained by the installer to provide verification of the curing process taking place in the host pipe.

B. The saturated tube along with the inversion bladder will be inserted into the carrying device. The mainline liner is affixed on the launching device. Both the launching and carrying device is pulled into the pipe using a cable winch. The pull is complete when the open port of the launching device is aligned with the interface of the service connection and mainline pipe. The resin saturated lateral tube is completely protected during the pull. No resin shall be lost by contact with manhole walls or the pipe during the pull. The resin saturated mainline liner is supported upon the rigid launcher that is elevated above the pipe invert by means of rotating skid system. The mainline liner should not be contaminated or diluted by exposure to dirt, debris, or water during the pull.

C. The installer shall document the placement of the liner by internal video inspection with the camera being inserted from the lateral pipe down to the mainline pipe.

D. The mainline liner is expanded against the mainline pipe and lateral tube is inverted out of the launcher/carrying device by controlled air or water pressure. The installer shall be capable of viewing the lateral liner contacting the lateral pipe from the beginning to the end of the repair. The mainline liner and the lateral tube are held tightly in place against the wall of the host pipe by controlled pressure until the cure is complete.

E. When the curing process is complete, the pressure will be released. The inversion bladder and launching device shall be removed from the host pipe with the winch. No barriers, coatings, or any material other than the cured tube/resin composite, specifically designed for desirable physical and chemical resistance properties, should ever be left in the host pipe. Any materials used in the installation other than the cured tube/resin composite are to be removed from the pipe by the installer.

3.6 ACCEPTANCE AND TESTING

A. The finished liner shall be continuous over the entire length of the installation. The liner shall be free from visual defects, damage, deflection, holes, delamination, uncured resin, and the like. There shall be no visible infiltration through the liner or from behind the liner.

B. Verification of a non-leaking lateral liner and service connection shall require an air test in accordance with the following specifications. Testing shall be performed at the OWNER'S discretion but at a frequency not to exceed one test for every ten liners installed.

The cost for the test shall be included in the liner installation cost, and no separate payment shall be made.

1. A camera shall be inserted into the lateral pipe via a clean-out upstream of the upper most portion of the cured in-place lateral liner. The camera is then moved through the lateral pipe until it becomes positioned at the lateral/main connection. The camera is utilized to assist in positioning and placing a pair of plugs in the mainline on either side of the lateral opening. A test device with a minimum of a ten-inch clear separation shall be centered on the lateral opening and spanning the lined connection.

2. Next, an air test plug shall be introduced into the lateral pipe. The test plug will be placed inside of the cured in-place lateral liner at its upper most portion. The test plug shall be inflated and sealed against the cured in-place lateral liner at the upstream end of the liner.

3. The testing devices within the mainline are then inflated and sealed across the service connection.

4. Air-pressure not less than 4 PSI shall be introduced through the test plug. The void area between the three plugs shall be pressurized at 4 PSI, held for 2 minutes and during this time the pressure shall not drop below 3.0 PSI.

5. If an installed cured in-place lateral liner fails the specified air test, the following corrective measures shall be taken.

a. The cured in-place lateral liner shall be re-inspected by use of a closed-circuit television camera in attempt to identify the defect.

b. Any repairs made shall consist of materials that are structural and meet or exceed the same criteria as the cured in-place lateral liner is required to meet in a domestic sewer collection system. Such materials shall have a minimum life expectancy of 50 years in accordance with ASTM F-1216 (most recent standard) Appendix X1 Design Considerations and Appendix X2 Chemical-Resistance Test.

c. Once the defect has been corrected, the renewed lateral pipe shall be re-tested in accordance with the air test procedure as described above.

d. Any corrective measures shall be performed at the CONTRACTOR's expense.

6. If any of the air tests fail, the OWNER at its option may require the CONTRACTOR to test an additional lateral at no additional charge to the OWNER. If a second air test shall fail, the OWNER at its option may require the CONTRACTOR to test additional or all of the installed cured in-place lateral linings at no additional charge to the OWNER.

3.7 CLEANUP

A. After the liner installation has been completed and accepted, the CONTRACTOR shall clean up the entire project area and return the ground cover to grade. All excess material and debris not incorporated into the permanent installation shall be disposed of by the CONTRACTOR.

END OF SECTION



YOUR TAXES AT WORK....

WATER RESOURCES IMPROVEMENT PROGRAM

PROJECT ITB # CIP/220762
CITY OF OCALA, FLORIDA

CITY COUNCIL:

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IRE BETHEA, Sr.

DISTRICT 2

JAY MUSLEH

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DISTRICT 4

JAMES HILTY

(COUNCIL PRESIDENT)
DISTRICT 5

KENT GUINN

MAYOR

CITY OF OCALA

**CAPITAL IMPROVEMENT
PROJECTS DIVISION**

CONTRACTOR

(Name)

PROJECT COST

(Dollar Amount)

START DATE

(month, day, year)

COMPLETION DATE

(month, day, year)

**FOR PROJECT INFORMATION CONTACT:
CAPITAL IMPROVEMENT PROJECTS DIVISION**

352-629-8419

