Invitation to Bid 2023-02

City of Parker

Water System Improvements Construction Bid No. DW030721

Date of Issue: June 22, 2023
Closing: August 15, 2023, at 2:00 p.m. CST
Bid Opening: August 15, 2023, at 5:30 p.m. CST

ITB Coordinator(s):

Taylor Jeffreys, Public Works Administrator
City of Parker
1001 West Park Street, Parker, Florida 32404
and
Mandy O'Regan
Anchor CEI
450 Magnolia Avenue
Panama City, Florida 32401

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NOTICE IS HEREBY GIVEN that the City of Parker will be accepting sealed bids which will be received until **2:00 p.m., Tuesday, August 15, 2023 at City Hall**, in C/O Ms. Taylor Jeffreys, Public Works Administrator, City of Parker, 1001 West Park Street, Parker, Florida 32404 for the following:

WATER SYSTEM IMPROVEMENTS
CONSTRUCTION BID NO. DW030721

The Work generally consists of furnishing all permits, labor, materials, equipment, tools, transportation, supplies and incidentals necessary to complete the work as called for in the Contract Documents. Work includes, but is not limited to, the removal and replacement of water system components and appurtenances as shown on the plans and specified in the specification to be completely connected to the City's Water System and ready to use by the City, as follows:

- Approximately 1,030 linear feet of 4-inch polyvinyl chloride (PVC) watermain pipe, valves, fittings, and appurtenances.
- Approximately 5,910 linear feet of 6-inch PVC watermain pipe, valves, fittings, and appurtenances.
- Approximately 25,130 linear feet of 8-inch PVC watermain pipe, valves, fittings, and appurtenances.
- Approximately 1,100 linear feet of 8-inch fusible PVC directional bore watermain pipe, valves, fittings, and appurtenances crossing East Highway 98 and for properties along East Highway 98.
- 58 fire hydrants assemblies and appurtenances.
- Concrete sidewalks, concrete driveways, gravel driveways, and asphalt driveways/roads.
- General site restoration.

The City will evaluate the bids and an award will be made to the lowest responsive, responsible bidder for the parts selected by the Owner. Multiple contracts may be awarded.Sealed envelopes should be mailed or delivered in person to the above contact and address.

Questions should be directed in writing by e-mail to the Owner's representative, Mandy O'Regan, Project Administrator with Anchor CEI, Inc. (moregan@anchorcei.com) no later than 5:00 p.m. (CST) on **Friday, August 4, 2023**.

Under no circumstances may a Bidder contact any City Council Member or other City employee concerning this ITB until after the contract has been awarded. Any such contact may result in disqualification.

Bid Documents, Drawings, and any Addenda issued may be obtained from City's webpage at www.cityofparker.com. Hard copies of the solicitation documents (Bid Documents and Drawings) are also available at Parker City Hall, located at 1001 West Park Street, Parker, Florida 32404. The City shall not be responsible for full or partial sets of documents including Addenda, if any, obtained from sources other than the City's website or City Hall.

Bids require a 5% Bid Security in the form of a certified check, bank money order, or a Bid Bond and may not be withdrawn after the scheduled opening time for a period of 60 days.The City reserves the right to waive formalities in any Bid, to reject any or all bids with or without cause, and/or to accept the Bid or any portion thereof that, in its judgment, will be in the best interest of the City.

ORLANDO SENTINEL TO RUN ON: SUNDAY, JUNE 25, 2023
PANAMA CITY NEWS HERALD TO RUN ON: TUESDAY, JUNE 27, 2023 AND JULY 18, 2023

INSTRUCTIONS TO BIDDERS

INTRODUCTION

The objective of this Invitation to Bid (ITB) is to select a **Florida-Licensed Utility Underground Contractor** to provide construction services to the City of Parker (hereinafter referred to as "CITY" or "OWNER") for the rehabilitation of the City's Water System as detailed on the Construction Drawings.

In summary, the OWNER wishes to contract with a Florida-Licensed Utility Underground Contractor to perform the following construction activities for the City of Parker:

1. Remove and replace ±1,030 linear feet of 4-inch polyvinyl chloride (PVC) pipe and appurtenances.

2. Remove and replace ±5,910 linear feet of 6-inch PVC piping and appurtenances.

3. Remove and replace±25,130 linear feet of 8-inch PVC piping and appurtenances.

4. Remove and replace ±1,100 linear feet of 8-inch fusible PVC directional bore and appurtenances crossing East Highway 98 and for driveways for some properties along East Highway 98.

5. Remove and replace 58 fire hydrants assemblies and appurtenances

6. Perform other site improvements throughout the City of Parker detailed on the Contract Drawings to include, but not be limited to:

    a. Removal and replacement of concrete sidewalks.

    b. Removal and replacement of concrete driveways.

    c. Removal and replacement of gravel driveways.

    d. Removal and replacement of asphalt driveways/roads.

    e. Restore sites back to pre-construction condition and other and site improvements.

    f. Other Site Improvements will also include the material required where piping was replaced by saw-cuts such as asphalt, roadway base and subbase materials as well as seeding or sodding in areas where construction disturbed landscape, in accordance with the contract documents.

The OWNER seeks BIDs from a Florida-Licensed General Contractor or Underground Utility Contractor that can provide all permits, labor, materials, equipment, tools, transportation, and supplies required for the coordination and rehabilitation of the City-Wide Roadway Improvements project at the locations referenced above in Parker, Florida.

Work shall be completed in conformance with the Construction Drawings and Specifications provided by the OWNER.

QUALIFICATIONS

The CONTRACTOR shall be a Florida-Licensed General Contractor or Underground Utility Contractor who specializes in water rehabilitation. Subcontractors shall be Florida licensed in their trade. Additional information regarding Contractor's past performance and from references may be requested and considered to determine the Contractor's qualifications. BIDs may be deemed nonresponsive if not accompanied by proof of State of Florida General Contractor's or Underground Utility Contractor's License.

The project may be reimbursed by the City through funding received by the Florida Department of Environmental Protection (FDEP) State Revolving (Project No. DW030721). It is imperative that Bidders examine and become familiar with the FDEP SRF funding program to ensure they meet the requirements set forth by each program.

Funding for the project may be made possible through the FDEP SRF and is contingent on strict conformance to the guidelines set forth by FDEP.

Bidders shall comply with the Federal Regulations Contract Requirements found in ATTACHMENT 2 - SUPPLEMENTAL CONDITIONS (FEDERAL REGULATIONS) of this contract document package.

BID DEADLINE/DELIVERY

SEALED BIDS will be received up until **2:00 p.m. (CDT) on Tuesday, August 15, 2023**, for **ITB 2023-02: WATER SYSTEM IMPROVEMENTS - CONSTRUCTION BID NO. DW030721**.

Bids will be publicly opened and read aloud at the City Council Meeting on **Tuesday, August 15, 2023 at 5:30 p.m.**

Each BID shall be valid to the City of Parker for a period of 90 days after the Bid Opening.

BIDs shall be delivered to:
Ms. Taylor Jeffrey
Public Works Administrator
City of Parker Florida
1001 West Park Street
Parker, Florida 32404

BIDs shall be received by the OWNER no later than the BID deadline. BIDDERs should submit one (1) original BID package labeled as "Original." BIDs shall be enclosed in a sealed envelope bearing the title of the work, the name of the BIDDER and the date of Bid Opening.

It is the sole responsibility of the BIDDER to ensure that the BID is received on time. ANY BID RECEIVED AFTER THE SPECIFIED TIME WILL NOT BE ACCEPTED OR CONSIDERED.

The OWNER will publicly open and read aloud each BID. Once the OWNER has determined the lowest, responsive, responsible BIDDER and has verified all BIDDER documentation, the selected BIDDER will be notified of intent to award the BID and to start the contract process.

SPECIAL ACCOMMODATION

Any person requiring a special accommodation at a Bid Opening because of a disability should call the City Clerk at (850) 871-4104 at least 5 workdays prior to the Bid Opening. For Hearing Impaired, Dial 1-800-955-8771 (TDD), and 1-800-955-8770 (Voice).

BID DOCUMENTS

Electronic versions of the solicitation documents are available on the City's webpage at www.cityofparker.com. Hard copies of the solicitation documents including bid documents, plans, blueprints, or other material associated with the bid may also be obtained from Parker City Hall, located at 1001 West Park Street, Parker, Florida 32404.

POINT OF CONTACT

The OWNER's representative, Mandy O'Regan, Project Administrator with Anchor Consulting Engineering and Inspection, Inc. (moregan@anchorcei.com) is the only point of contact for this ITB. Under no circumstances may a BIDDER contact any City Council Member or other City employee concerning this ITB until after the contract has been awarded. Any such contact may result in disqualification.

QUESTIONS

BIDDERs shall submit all questions, in writing, to Mandy O'Regan at moregan@anchorcei.com. All questions shall be submitted no later than 5:00 p.m. (CST) on **Friday, August 4, 2023**.

ADDENDA

Addenda issued after the initial specifications are released will be posted on the City's website at www.cityofparker.com. It is the responsibility of the BIDDER prior to submission of any BID to check the City's website above or contact the Owner's Representative, Mandy O'Regan, to verify if any addenda have been issued at moregan@anchorcei.com.

The receipt of all addenda must be acknowledged on the addenda response sheet provided within this BID package.

BID CHECKLIST

Please submit one original of the items on the following list and any other items required in the BID FORMS section or appendices (if applicable) of this ITB. The checklist is provided as a courtesy and may not be all inclusive of items required within this ITB.

1. VALID FLORIDA-REGISTERED GENERAL CONTRACTOR'S LICENSE OR UNDERGROUND UTILITY CONTRACTOR LICENSE
2. BID FORM
3. BID BOND
4. ADDENDUM ACKNOWLEDGEMENT
5. ANTI-COLLUSION CLAUSE
6. CONFLICT OF INTEREST DISCLOSURE FORM
7. IDENTICAL TIE BIDS/DRUG FREE WORKPLACE
8. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION
9. 44 C.F.R. PART 18-CERTIFICATION REGARDING LOBBYING
10. CERTIFICATION REGARDING SCRUTINIZED COMPANIES LIST
11. SUB-CONTRACTORS LIST

LICENSING

BIDDER shall be properly licensed for the work specified in this Invitation to Bid. All BIDDERs are requested to submit any required license(s) with their BIDs. License(s) must be effective as of the Bid Opening date and must be maintained throughout the contract period. Failure to be properly licensed as stated above will result in the rejection of the BID as nonresponsive.

BID FORM

To receive consideration, all BIDs shall be made on the forms provided herein, properly executed and with all items filled out. Do not change the wording of the Bid Form and do not add words to the wording of the Bid Form. No conditions, limitation, or provisions will be attached or added to the Bid Form or other Bid Documents by the BIDDER.

No BIDDER shall be permitted to correct a Bid mistake after Bid Opening that would cause such BIDDER to have the low bid, except for the correction of errors in extension of unit prices in the BIDs. In such cases, the Unit Price Bid shall not be changed and shall prevail.

BID BOND

A Bid Bond in the amount of 5% of the proposed Base Bid contract amount, shall accompany each bid. The successful BIDDER's security will be retained until the contract has been signed and the BIDDER has furnished the required Public Construction Bond (found in Contract Forms section of this Bid Document). The County reserves the right to retain the security of the next BIDDER until the selected BIDDER enters into contract or until 90 days after BID OPENING, whichever is shorter. All other Bid Security will be returned as soon as possible.

COMPLETE BID AMOUNTS; EXAMINATIONS OF SPECIFICATIONS; WORK SITES

BIDs shall be calculated on the basis of unit cost pricing. The unit prices shall include all charges for completing the milling and resurfacing as well as reconstruction of the specified roadways depicted on the drawings to include layout, insurance, taxes, field office and supervision, overhead and profit, permits, impact fees, bonds and miscellaneous items needed to complete the BID. No allowance will be made to any BIDDER because of a claimed lack of examination or knowledge. The submission of a BID shall be construed as conclusive evidence that the BIDDER has made such examination.

GENERAL TERMS

Companies that are required to register with the Division of Corporations as a domestic or foreign business entity shall provide evidence of their registration.

PUBLIC ENTITY CRIMES STATEMENT

A person or affiliate who has been placed on the convicted contractor list following a conviction for a public entity crime may not submit a BID on a contract to provide any goods or services to a public entity, may not submit a BID on a contract with a public entity for the construction or repair of a public building or public work, may not submit BIDs on leases of real property to a public entity, may not be awarded or perform work as a contractor, contractor, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida Statutes, Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted contractor list.

WITHDRAWAL OF BIDS

Any BIDDER may withdraw his/her BID, either personally or by written request, at any time prior to the Bid Opening Date as posted in this ITB. A BIDDER may not withdraw his BID for a period of 90 days after the date of Bid Opening and all BIDs shall be subject to acceptance by the OWNER during this period.

CANCELLATION

The OWNER may cancel this ITB, or reject in whole or in part, when it is in the best interest of the OWNER, as determined by the City Council or their designee. Notice of cancellation shall be posted on the City website. The notice shall identify the solicitation, and, where appropriate, explain that an opportunity will be given to compete on any re-solicitation or any future procurement of similar items.

PUBLIC RECORDS

In accordance with Chapter 119 of the Florida Statutes (Public Records Law) and except as may be provided by other applicable state or federal law, all BIDDERs should be aware that BIDs, responses, and proposals are in the public domain. BIDDERs must identify specifically any information contained in their response which they consider confidential and/or proprietary and which they believe to be exempt from disclosure, citing, specifically the applicable exempting law.

Sealed bids, proposals, or replies received by the OWNER as a result of this competitive solicitation are exempt from Florida Statute Section119.071(1) and Section 24(a), Article 1 of the State of Florida Constitution, S until such time as the OWNER provides notice of an intended decision or until 30 days after opening the BIDs, proposals, or final replies, whichever is earlier.

EXEMPTION OF MEETINGS/PRESENTATIONS

Pursuant to Florida Statute Section 286.0113(2), any portion of a meeting at which a negotiation with a Bidder is conducted pursuant to a competitive solicitation, at which a contractor makes an oral presentation as part of a competitive solicitation, or at which a contractor answers questions as part of a competitive solicitation are exempt from public meeting requirements.

However, the OWNER must make a complete recording of any portion of an exempt meeting and no portion of the exempt meeting may be held off the record.

The recording of, and any records presented at, the exempt meeting are exempt from the public records law of Section 119.07(1), Florida Statute and Section 24(a), Article I of the State Constitution, until such time as the agency provides notice of an intended decision or until 30 days after opening the BIDs, submittals, or final replies, whichever occurs earlier.

If the OWNER rejects all BIDs, submittals, or replies and concurrently provides notice of its intent to reissue a competitive solicitation, the recording and any records presented at the exempt meeting remain exempt from Section 119.07(1), Florida Statute (2015) and Section 24(a), Article I of the State Constitution until such time as the agency provides notice of an intended decision concerning the reissued competitive solicitation or until the agency withdraws the reissued competitive solicitation.

A recording and any records presented at an exempt meeting are not exempt for longer than 12 months after the initial agency notice rejecting all BIDs, submittals, or replies.

REPRESENTATIONS

The Contract Documents contain the provisions required for the project. Information obtained from an office, Director, or employee of the OWNER for any other person shall not affect the risks or obligations assumed by the BIDDER or relieve the BIDDER from fulfilling any of the conditions of the contract.

BID PROTEST

A notice of protest must be submitted within three business days after posting of the recommendation of award. The protest must be in writing, via e-mail or letter and must identify the protester and the solicitation and shall include a factual summary of the basis of the protest.

The notice of protest is considered filed when it is received by the City Clerk.

BASIS OF AWARD

The contract will be awarded to the lowest, responsive, responsible BIDDER who has proposed the lowest qualified Base Bid and is deemed qualified by the City of Parker, subject to the OWNER's right to reject any or all BIDs and to waive informality and irregularity in the BIDs and proposing. In addition, the OWNER has the right to accept a BID, other than the lowest, when considered to be in the best interest of the OWNER. The Contractor's past performance and references may be evaluated as part of this process.

RIGHT TO REJECT

In accordance with OWNER policies, the OWNER reserves the right to:

1. Reject any or all BIDs received.
2. Select and award any portion of any or all BID Items.
3. Waive minor informalities and irregularities in the Respondent's BID.

A BID may be rejected if it is non-responsive or does not conform to the requirements and instructions in this ITB. A BID may be non-responsive by reasons, including, but not limited to:

1. Failure to utilize or complete prescribed forms.
2. Conditional BIDs.
3. Incomplete BIDs.
4. Indefinite or ambiguous BIDs.
5. Failure to meet deadlines.
6. Improper and/or undated signatures.

Other conditions which may cause rejection of BIDs include:

1. Evidence of collusion.
2. Obvious lack of experience or expertise to perform the required work.
3. Submission of more than one BID for the same work from an individual.
4. Bidder or corporation under the same or a different name.
5. Failure to perform or meet financial obligations on previous contracts.
6. Not delivered on or before the date and time specified as the due date for submission of the BID.

EXECUTION OF CONTRACT DOCUMENTS

The AWARDED BIDDER shall, within 10 days after receipt of the Notice of Award and the contract forms or documents, sign and deliver all required Contract Documents to the OWNER's Representative for submittal to the OWNER.

The AWARDED BIDDER shall also deliver any required bonds and the policies of insurance or insurance certificate as required. All bonds and insurance documents shall be approved by the OWNER before the successful AWARDED BIDDER may proceed with the work. The execution of the Agreement shall be contingent upon the AWARDED CONTRACTOR obtaining all required building permits.

Neither the Notice of Award nor the execution of the required contract documents by the AWARDED BIDDER creates any rights in the BIDDER. The BIDDER has no rights with respect to the award of contract until a fully executed Agreement is signed by all required parties and all insurance policies and other required deliverables are provided and approved by the OWNER.

CONSTRUCTION TIME

The Agreement will include a stipulation that the work be completed in a period of 180 calendar days following receipt of the Notice to Proceed. Should the CONTRACTOR fail to complete the work by the specified date, the OWNER shall deduct from the Contract Sum the amount of $100.00 per calendar day as liquidated damages for every day subsequent to the specified date until the work is fully completed and receipted by the OWNER as being completed.

For purposes of time calculation, day one of the project is one calendar day after the Notice to Proceed date.

PUBLIC CONSTRUCTION BOND

Prior to signing the Contract, the AWARDED BIDDER will secure and post a Public Construction Bond pursuant to Section 255.05 of the Florida Statutes. All such bonds shall be issued by a Surety acceptable to the OWNER. The OWNER will designate to whom subject bonds shall be posted. Failure or refusal to furnish adequate bonds in a satisfactory form shall subject the AWARDED BIDDER to loss of time from the allowable construction period equal to the time of delay in furnishing the required bonds.

EMPLOYMENT ELIGIBILITY VERIFICATION

CONTRACTOR shall utilize the U.S. Department of Homeland Security's E-Verify system, in accordance with the terms governing use of the system, to confirm the employment eligibility of:

1. All persons employed by the AWARDED BIDDER during the term of the Agreement to perform employment duties within Florida; and

2. All persons, including contractors, subcontractors, assigned by the AWARDED BIDDER to perform work pursuant to the Agreement with the DHS and OWNER. By submission of a proposal in response to this document, the BIDDER certifies compliance with the above requirements.

HOLD HARMLESS AND INDEMNIFICATION

1. The AWARDED BIDDER shall indemnify and hold harmless the OWNER, and its officers, agents, attorneys and employees, from any and all claims, suits, actions, damages, liabilities, expenditures, or causes of action of any kind, losses, penalties, interest, demands, judgments, and costs of suit, including attorneys' fees and paralegals' fees, for any expense, damage, or liability incurred by any of them, whether for bodily or personal injury, death, property damage, direct or consequential damages, or economic loss, including environmental impairment, arising directly or indirectly, on account of or in connection with contractor's performance of the Agreement or by any person, firm, or corporation to whom any portion of the performance of this Agreement is subcontracted to or used by the contractor, or by any other person.

2. The parties understand and agree that such indemnification by the AWARDED BIDDER relating to any matter which is the subject of this Agreement shall extend throughout the term of this Agreement and any statutes of limitations thereafter.

3. The AWARDED BIDDER's obligation shall not be limited by or in any way to any insurance coverage or by any provision in or exclusion or omission from any policy of insurance.

PAYMENTS

Payments shall be made in accordance with the Florida Prompt Payment Act, Chapter 218, Florida Statutes. Refer to the Article 4 of the Agreement for more details.

WARRANTY

The AWARDED BIDDER/CONTRACTOR shall fully warrant all workmanship and material, to meet or exceed the performance of the obligations under this Agreement and specifications, for a period of 1 year after completion of the work. The warranty period begins at the date of final payment for the project. The CONTRACTOR shall expeditiously repair and remedy any defects in the construction that are discovered within 1 year, without cost or charge to the OWNER.

In the event the CONTRACTOR fails, within 5 days after notice, to begin correction of the defect, or fails within a reasonable time thereafter to complete the repair or remedy, the OWNER may have the work done at the CONTRACTOR's expense or may proceed against the CONTRACTOR's Public Construction Bond.

SUBCONTRACTORS

The AWARDED BIDDER will be the prime service provider and shall be responsible for all work performed and Agreement deliverables. Proposed use of subcontracts should be included in the BIDDER's response. Requests for use of subcontractors received subsequent to the solicitation process are subject to review and approval by the OWNER. The OWNER reserves the right to request and review information in conjunction with its determination regarding a subcontract request.

All subcontractors are subject to the same requirements of this solicitation as the AWARDED BIDDER. The AWARDED BIDDER is the single point of contact for all work performed on the awarded project.

AWARDED BIDDER shall provide a single point of contact for matters in relation to the construction, as follows:

1. Name
2. Phone Number(s)
3. Email Address

DUTY TO PAY DEFENSE COSTS AND EXPENSES

1. The AWARDED BIDDER agrees to reimburse and pay on behalf of the OWNER the cost of the OWNER legal defense, through and including all appeals, and to include all attorneys' fees, costs, and expenses of any kind for any and all:
   a. claims described in the Hold Harmless and Indemnification paragraph; or,
   b. other claims arising out of the contractor's performance of the Agreement and in which the OWNER has prevailed.
2. The OWNER shall choose its legal defense team, experts, and consultants and invoice the AWARDED BIDDER accordingly for all fees, costs, and expenses upon the conclusion of the claim.
3. Such payment on the behalf of the OWNER shall be in addition to any and all other legal remedies available to the OWNER and shall not be considered to be the OWNER's exclusive remedy.

TERMINATION FOR CONVENIENCE

The OWNER may terminate any awarded contract at any time for any reason by giving at least a 30-day notice in writing to the AWARDED BIDDER. If the contract is terminated by the OWNER as provided herein, the AWARDED BIDDER will be entitled to receive payment for those services reasonably performed to the date of termination.

TERMINATION FOR CAUSE

This Contract may be terminated by the OWNER if the AWARDED BIDDER is found to have submitted a false certification as required under Section 287.135 (2), Florida Statutes and has been placed on the Scrutinized Companies that Boycott Israel List, Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or been engaged in business operations in Cuba or Syria.

If the AWARDED BIDDER fails to comply with any of the terms and conditions of the awarded Contract, the OWNER may give notice, in writing, to the AWARDED BIDDER of any or all deficiencies claimed. The notice will be sufficient for all purposes if it describes the default in general terms.

If all defaults are not cured and corrected within a reasonable period as specified in the notice, the OWNER may, with no further notice, declare the awarded contract to be terminated.

The AWARDED BIDDER will thereafter be entitled to receive payment for those services reasonably performed to the date of termination, less the amount of reasonable damages suffered by the OWNER by reason of the AWARDED BIDDER's failure to comply with the awarded Contract.

Notwithstanding the above, the AWARDED BIDDER is not relieved of liability to the OWNER for damages sustained by the OWNER by virtue of any breach of this Contract by the AWARDED BIDDER and the OWNER may withhold any payments to the AWARDED BIDDER for the purpose of setoff until such time as the amount of damages due the OWNER from the AWARDED BIDDER is determined.

ANTICIPATED SCHEDULE

This schedule may be altered solely at the OWNER's discretion:

ITB Advertisement	
Orlando Sentinel	Sunday, June 25, 2023, and
Panama City News Herald	Tuesday, June 27, 2023 and
	Tuesday, July 18, 2023
Questions Due Date:	Friday, August 4, 2023 (5:00 p.m. CST)
Bid Deadline:	Tuesday, August 15, 2023 (2:00 p.m. CST)
Bids Read Out Loud at Council Mtg:	Tuesday, August 15, 2023 (5:30 p.m. CST)
Award Recommendation Council Meeting:	Tuesday, September 5, 2023
Installation Complete:	Within 180 days of Notice to Proceed



TECHNICAL SPECIFICATIONS

SECTION 01150
MEASUREMENT AND PAYMENT

PART 1 - SCOPE OF WORK

A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Proposal section of these Specifications.

B. Payment will be made based on the specified items included in the description in this section for each bid item.

1.02 GENERAL

A. All Contract Prices included in the Bid Proposal section will be full compensation for all labor, materials, tools, equipment and incidentals necessary to complete the construction as shown on the drawings and/or as specified in the Contract Documents to be performed under this contract.

B. Actual quantities of each item bid on a unit price basis will be determined upon completion of the construction in the manner set up for each item in this section of the specifications.

C. Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this project.

1.03 ESTIMATED QUANTITIES

A. The quantities shown are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made.

B. The OWNER/ENGINEER does not assume any responsibility for the final quantities, nor shall the CONTRACTOR claim misunderstanding because of such estimate of quantities.

C. Final payment will be made only for satisfactorily completed quantity of each item.

1.04 WORK OUTSIDE AUTHORIZED LIMITS

A. No payment will be made for work constructed outside the authorized limits of work.

1.05 MEASUREMENT STANDARDS

A. Unless otherwise specified for the particular items involved, all measurements of distance shall be taken horizontally or vertically.

1.06 AREA MEASUREMENTS

A. In the measurement of items to be paid for on the basis of area of finished work, the lengths and/or widths to be used in the calculations shall be the final dimensions measured along the surface of the completed work within the neat lines shown or designated.

1.07 LUMP SUM ITEMS

A. Where payment for items is shown to be paid on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum item.

B. Lump sum bid items shall be complete, tested and fully operable prior to request for final payment.

C. Measurement shall be based upon the ENGINEER's estimate of percent complete per partial payment period.

1.08 UNIT PRICE ITEM

A. Separate payment will be made for the items of work described herein and listed on the Bid Form.

B. Any related work not specifically listed but required for satisfactory completion of the work shall be considered to be included in the scope of the appropriate listed work items.

1.09 OTHER PROVISIONS

A. No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work unless indicated otherwise in the individual bid item.

1. Sheeting and shoring.

2. Clearing, grubbing, and grading.

3. Replacement and/or repair of existing utilities damaged during construction.

4. Trench excavation, including necessary pavement removal, rock removal, muck removal and restoration unless a separate bid item is listed in the Bid Form.

5. Ditch and swale restoration.

6. Dewatering and disposal of surplus water, including permitting if required.

7. Bypass pumping.

8. Structural fill, backfill and grading.

9. Adjusting existing valve boxes, manhole frames and covers and other structures.

10. Foundation and borrow materials.

11. Placing system in operation.

12. Any material and equipment required to be installed and utilized for the tests.

13. Maintaining the existing quality of service during construction.

14. Appurtenant work as required for a complete and operable system.

B. Final payment shall not be requested by the CONTRACTOR or made by the OWNER until record drawings have been submitted to the ENGINEER.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 BASE BID

A. BID ITEM 1 - MOBILIZATION/DEMOBILIZATION

1. Payment for all work included under this bid item will be made at the lump sum price bid for mobilization and demobilization of all labor, equipment, materials, and appurtenances necessary for construction of the project.

2. Mobilization shall include all those operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, and sanitary and other facilities.

3. Also included as part of this bid item is the cost for project indemnifications, video and photographs, shop drawings, working drawings, schedules, record drawings and documents, coordination, and phasing and other miscellaneous items associated with the work.

4. Measurement for this bid item will be lump sum. The lump sum price for mobilization/demobilization will be limited to 10% of the total contract base bid amount.

5. Seventy percent (70%) of the lump sum price will be payable with the first month's partial payment.

6. The remaining 30% will be payable with the final partial payment.

B. BID ITEM 2 – BONDS AND INSURANCE

1. Payment for this bid item shall be made at the lump sum price bid for all bonds and insurance policies as required by the Contract Documents.

2. Payment will be made only after proper documentation is provided to the ENGINEER. Measurement of this bid item shall be lump sum.

3. THIS ITEM BID SHALL NOT EXCEED 5.0% OF THE ENTIRE CONTRACT BID AMOUNT.

C. BID ITEM 3 – EROSION CONTROL

1. Payment for all work included under this bid item will be made at the lump sum price bid for all work associated with the prevention, control and abatement of erosion and water pollution in accordance with the contract documents.

2. Payment shall include all items and incidentals necessary to complete the work in conformance with NPDES and other permit requirements.

3. Measurement for work included under this bid item will be lump sum.

D. BID ITEM 4 - MAINTENANCE OF TRAFFIC

1. Payment for all work included under this bid item will be made at the lump sum price bid for maintenance of traffic in accordance with the FDOT Standards.

2. Payment shall include all maintenance of traffic necessary for construction of the improvements indicated in plans.

3. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

4. Measurement for the work included under this bid item shall be lump sum.

E. BID ITEM 5 – LAYOUT AND AS-BUILTS BY PLS

1. Payment for the work included under this bid item shall be made at the lump sum price bid for all work associated with furnishing all layouts of the improvements as well as surveys and preparation of record drawings as required under the contract documents.

2. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

3. Measurement for the work included under this bid item shall be lump sum.

F. BID ITEM 6 – TESTING AND FLUSHING

1. Payment for the work to be performed in this item includes testing and flushing for quality control testing during construction for all completed water work as depicted in the contract documents.

2. The CONTRACTOR shall employ, coordinate, and direct the services of independent testing laboratories required for all testing.

3. The CONTRACTOR shall pay all testing laboratory invoices and submit them for reimbursement.

4. Payment for work completed under this item shall be made at the direct invoice amount without markup of any kind.

G. BID ITEM NO. 7 – 4-INCH PVC WATER MAIN REPLACEMENT

1. Payment for all work included under this bid item will be unit price bid for the replacement of ±1,030 linear feet of 4-inch PVC water mains and appurtenances.

2. This bid item shall include but not be limited to excavation, backfill, connection to the existing water main, cleanouts, trench and rights-of-way restoration per construction plan details and specifications.

3. Measurement for the work included under this bid item shall be unit price for each linear foot of 4-inch PVC water main.

H. BID ITEM NO. 8 – 6-INCH PVC WATER MAIN REPLACEMENT

1. Payment for all work included under this bid item will be unit price bid for the replacement of ±5,910 linear feet of 6-inch PVC water mains and appurtenances.

2. This bid item shall include but not be limited to excavation, backfill, connection to the existing water main, cleanouts, trench and rights-of-way restoration per construction plan details and specifications.

3. Measurement for the work included under this bid item shall be unit price for each linear foot of 6-inch PVC water main.

I. BID ITEM NO. 9 – 8-INCH PVC WATER MAIN REPLACEMENT

1. Payment for all work included under this bid item will be unit price bid for the replacement of ±25,130 linear feet of 8-inch PVC water mains and appurtenances.

2. This bid item shall include but not be limited to excavation, backfill, connection to the existing water main, cleanouts, trench and rights-of-way restoration per construction plan details and specifications.

3. Measurement for the work included under this bid item shall be unit price for each linear foot of 8-inch PVC water main.

J. BID ITEM NO. 10 – 8-INCH FPVC DIRECTION BORE PIPING

1. Payment for all work included under this bid item will be unit price bid for the replacement of ±1,100 linear feet of 8-inch FPVC direction bore pipe and appurtenances.

2. This bid item shall include but not be limited to excavation, backfill, connection to the existing water main, cleanouts, trench and rights-of-way restoration per construction plan details and specifications.

3. Measurement for the work included under this bid item shall be unit price for each linear foot of 8-inch FPVC water main.

K. BID ITEM NO. 11 – FIRE HYDRANT REPLACEMENT

1. Payment for all work included under this bid item will be made at the respective unit price bid for all work related to the replacement of 58 fire hydrant assemblies in accordance with the contract documents.

2. Payment shall include, but not be limited to excavation (as needed), reconnection to existing hydrant line and other required and associated work or materials.

3. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

4. Measurement for the work included under this bid item shall made per fire hydrant assembly replaced.

L. BID ITEM NO. 12 – OTHER SITE IMPROVEMENTS

1. Payment for all work included under this bid item will be made as a percentage of work completed for all work related to restoring each area disturbed to pre-construction conditions and shall include but not limited to removing and replacing concrete sidewalks, concrete driveways, gravel driveways, asphalt driveways/roadways as depicted on the Contract Drawings where piping was replaced by saw-cuts. This material will include asphalt, roadway base and subbase materials as well as seeding or sodding in areas where construction disturbed landscape, in accordance with the contract documents.
2. Payment for all work included under this bid item will be made as a percentage of work completed for any additional improvement noted on the Contract Drawings that has not been indicated through Bid Items 1 through 10 above.
3. Payment shall include, but not be limited to site restoration, removal and replacement of landscaping, concrete, curbing, fencing, drainage and other required and associated work or materials.
4. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item.

M. BID ITEM NO. 13 – RESTORATION

1. Payment for all work included under this bid item will be made as a percentage of work completed for all work related to restoring each area disturbed to pre-construction conditions and shall include removing and replacing asphalt at locations shown on the Contract Drawings where the replacement of pipe was completed by saw cutting existing asphalt, roadway base and subbase materials as well as seeding or sodding in areas where construction disturbed landscape, in accordance with the contract documents.
2. Payment shall include, but not be limited to site restoration, removal and replacement of landscaping, concrete, curbing, fencing, drainage and other required and associated work or materials.
3. Payment shall constitute complete compensation for all labor, materials, and equipment necessary to complete this work item

END OF SECTION 01150

SECTION 01380
CONSTRUCTION PHOTOGRAPHS

PART 1 - GENERAL

1.01 REQUIREMENTS

A. The CONTRACTOR shall employ a competent photographer to take construction record photographs or perform videotaping, including providing all labor, materials, equipment, and incidentals necessary to obtain specified photographs and/or video tapes.

1.02 QUALIFICATIONS

A. All photography shall be accomplished by a competent camera operator who is fully experienced and qualified with the specified equipment.

B. For the video tape recording, the audio portion should be accomplished by a person qualified and knowledgeable in the specifics of the Contract, who shall speak with clarity and diction so as to be easily understood.

1.03 PROJECT PHOTOGRAPHS

A. CONTRACTOR shall provide photographs of the entire work area prior to any construction for the purpose of records of conditions prior to construction.

1. Photographs should be spaced at approximately 100-foot intervals.

2. All special features shall be photographed prior to construction.

B. CONTRACTOR shall provide at a minimum 10 digital photographs each month with CONTRACTOR’s Application for Payment.

C. CONTRACTOR shall require photographer to agree to participate in any litigation requiring, in the sole discretion of the OWNER, the photographer to appear as an expert witness.

D. CONTRACTOR shall pay all cost associated with the required photography and digital prints. Any parties requiring additional photography or prints will pay the photographer directly.

E. All project photographs shall be in color unless otherwise directed by the OWNER/ENGINEER.

F. All project photographs shall be at a high resolution of 300 dots per inch (dpi).

G. All project photographs shall be of a high-definition pixilation in *.jpeg or *png format.

H. Each digital photograph file shall be clearly named and shall include the OWNER and project name, specific location of the image, and the orientation of view (i.e., PCB Reuse_XXXX Road_SSW_No. 1).

I. The photograph's metafile, found in "Details" of the photograph's digital "Properties" shall contain, the following information:

1. Title: PCB Reuse Transmission – Photo No. ___
2. Subtitle: Location (road, street, etc.), direction (NW, SW, etc.)
3. Comments: Photographer's name and address.
4. Date and Time: Image should contain the date and time photo was taken within its properties.

J. All project photographs shall be taken from locations to adequately illustrate conditions prior to construction, or conditions during construction and state of progress or particular construction activities or problems.

K. The CONTRACTOR shall consult with the ENGINEER for instructions concerning views required.

L. The CONTRACTOR shall provide photographs of the sites of the proposed ditch crossings and jack and bore crossings prior to the beginning of construction.

M. The ENGINEER will direct CONTRACTOR of particular views or locations to be photographed.

N. The CONTRACTOR shall deliver photographs in conformance with the above requirements to the ENGINEER.

O. No construction shall start until pre-construction photographs are completed and submitted to the ENGINEER.

P. The CONTRACTOR shall deliver digital photographs of the final completed project prior to payment of last application for payment. Digital photographs shall be high-definition and high-quality photos to be used by the OWNER/ENGINEER to showcase completed project.

1.04 VIDEO TAPE RECORDINGS

A. Digital video recordings shall be accomplished along all routes that are scheduled for construction in addition to required construction digital photographs.

B. Digital video recordings shall be in full color.

C. Digital video recordings shall include full recordings of both sides of all streets on which construction is to be performed.

D. Digital video recordings shall, when viewed, show the image, ¼ of the roadway fronting all property and ¾ of the image shall be of the property. The taping shall be accomplished so as to show the roadway and property in an oblique view (30 degrees).

E. A complete view, in sufficient detail, of all existing facilities with audio description of the exact location shall be provided.

F. The construction plans shall be used as a reference for stationing in the audio portion of the tapes for easy location identifications. If visible, house or business numbers shall be mentioned on the audio.

G. Two complete sets of digital video recordings shall be delivered to the ENGINEER for the permanent and exclusive use of the ENGINEER/OWNER prior to the start of any construction on the project.

H. All digital videos shall be full high-definition resolution 1080 (1920 by 1080 pixels) in MP4 format.

I. Each digital video recording file shall be clearly named and shall include the OWNER and project name, specific location of the image, and the orientation of view (i.e., PCB Reuse_XXXX Road_SSW_No. 1).

J. The digital video recording metafile, found in “Details” of the video’s file “Properties” shall contain, the following information:

1. Title: PCB Reuse Transmission – Photo No. ___

2. Subtitle: Location (road, street, etc.), direction (NW, SW, etc.)

3. Comments: Photographer’s name and address.

4. Date and Time: Image should contain the date and time photo was taken within its properties.

K. The CONTRACTOR shall deliver Digital Video Recordings according to the above requirements to the ENGINEER.

L. No construction shall start until pre-construction Digital Video Recordings are completed and submitted to the ENGINEER.

M. The CONTRACTOR shall deliver a digital video recording of the final completed project prior to payment of last application for payment. The digital video recording shall be high-definition and high-quality to be used by the OWNER/ENGINEER to showcase completed project.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01380

SECTION 02211
SODDING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Sod Installation

1.02 REFERENCES

A. ASPA - American Sod Producers Association - Guideline Specifications to Sodding.

B. FS O-F-241 - Fertilizers, Mixed, Commercial.

1.03 DEFINITIONS

A. Weeds:

1. Dandelion.
2. Jimsonweed.
3. Quackgrass.
4. Horsetail.
5. Morning Glory.
6. Rush Grass.
7. Mustard.
8. Lambsquarter.
9. Chickweed.
10. Cress
11. Crabgrass
12. Canadian Thistle.
13. Nutgrass.
14. Poison Oak.
15. Blackberry.
16. Tansy Ragwort.
17. Bermuda Grass.
18. Johnson Grass.
19. Poison Ivy.
20. Nut Sedge.
21. Nimble Hill.
22. Bindweed.
23. Bent Grass.
24. Wild Garlic.
25. Perennial Sorrel
26. Brome Grass

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver sod on pallets.

B. Protect exposed roots from dehydration.

C. Do not deliver more sod that can be laid within 24 hours.

PART 2 - PRODUCTS

2.01 ACCEPTABLE SOD GROWERS

A. Nurseries and Sod Growers in the surrounding area who have a 5-year record areacceptable.

2.02 MATERIALS

A. Sod that is:

1. American Sod Producers Association (ASPA) approved.
2. Field grown grade.
3. Cultivated grass sod.
4. Low maintenance with traffic durability.
5. Strong fibrous root system.
6. Free of stone, burned or bare spots.
7. Containing no more than 5 weeds per 1000 square feet.

B. Approved Sods:

1. Bermuda, (Cynodon Dactylon).

2.03 HARVESTING SOD

A. Machine cut sod and load on pallets in accordance with ASPA guidelines.

B. Cut sod in area not exceeding one square yard, with minimum 1/2 inch and maximum one inch topsoil base.

PART 3 - EXECUTION

3.01 INSPECTION

A. Verify that prepared soil base is ready to receive the work of this Section.

B. Beginning of installation means acceptance of existing site conditions.

3.02 PREPARATION OF SUBSOIL

A. Prepare subsoil to eliminate uneven areas and low spots. Maintain lines, levels, profiles, and contours. Make changes in grade gradual. Blend slopes into level areas.

B. Remove foreign materials and undesirable plants and roots. Do not bury foreign material beneath areas to be sodded. Remove contaminated subsoil.

3.03 LAYING SOD

A. Moisten prepared surface immediately prior to laying sod.

B. Lay sod immediately on delivery to site and within 24 hours after harvesting to prevent deterioration.

C. Lay sod tight with no open joints visible, and no overlapping.

D. Stagger end joints 12 inches overlapping at a minimum.

E. Do not stretch or overlap sod pieces.

F. Lay smooth. Align with adjoining grass areas. Place top elevation of sod 1/2 inch below adjoining paving or curbs.

G. On slopes 6 inches per foot and steeper, lay sod perpendicular to slope and secure every row with wooden pegs at maximum 2 feet on center. Drive pegs flush with soil portion of sod.

H. Prior to placing sod, on slopes exceeding 8 inches per foot or where indicated, place wire mesh over topsoil. Securely anchor in place with wood pegs sunk firmly into the ground.

I. Water sodded areas immediately after installation. Saturate sod to 4 inches of soil.

J. After sod and soil have dried, roll sodded areas to ensure good bond between sod and soil and to remove minor depressions and irregularities.

K. Sod shall be laid in all disturbed areas as determined by the ENGINEER as well as to “erosion problem” areas. Sod shall be pinned down for stabilization in these areas.

END OF SECTION 02211

SECTION 02222
TRENCHING, BACKFILLING AND COMPACTING

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. The extent of trenching, backfilling, and compacting is shown on the drawings.

B. This Section includes furnishing equipment, labor, and materials, and performing all operations necessary and incidental to perform the required work.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 CLEARING THE SITE

A. The site of the Work shall be cleared of all trees, shrubs, paving and objectionable material which interfere with the execution of the proposed Work.

B. Trees and shrubs which will not interfere with construction shall be protected from damage.

C. Clearing shall be considered as an incidental item of excavation.

3.02 EXCAVATION

A. General:

1. Perform excavation described of whatever substance encountered to the dimensions and depths specified or shown on the drawings.

2. Undercutting will not be permitted, except when ordered by the ENGINEER. Material suitable for backfill shall be stockpiled near the site.

3. Rock or other material undesirable for backfill shall be spoiled outside the area in a neat manner, as directed by the ENGINEER.

4. Where it is necessary to cut roots projecting into an excavation or where it is necessary to trim branches for equipment clearance, all severed root ends, or cuts to branches over 1/2-inch in diameter shall be treated with an asphalt base pruning paint.

5. Backfill over exposed roots as soon as possible.

B. Rock:

1. Where encountered in the trench bed, rock shall be excavated to a depth of 1/4 of the pipe diameter below the bottom of the pipe but in no case less than 4 inches.

2. All undercut trench excavation shall be backfilled and tamped with materials as specified in the Item C (Unstable Subgrade) below.

C. Unstable Subgrade:

1. In the event that unsuitable material is encountered at or below the excavation depth specified or shown on the drawings, the ENGINEER shall be notified.

2. Such material shall be removed and replaced with suitable material.

3. Methods and materials used for replacement shall be one of the following as directed by the ENGINEER in writing.

   a. Suitable earth or sand, compacted in the trench. Materials shall be furnished as a part of the Bid Proposal item covering excavation and backfill.

   b. Gravel or crushed limerock, compacted in the trench and paid for under the appropriate Bid Item.

   c. Existing materials, stabilized after removal and then replaced and compacted in the trench at no additional cost to the OWNER.

4. The Engineer shall determine the methods and materials to be used, based on the condition of the excavation, the pipe structure to be supported, and the availability and character of stabilizing materials.

D. Trenches:

1. Keep pipe laying operations as close to the excavation operation as possible during the execution of the Work. The ENGINEER reserves the right to stop the excavation at any time when, in his opinion, the excavation is opened too far in advance of the pipe laying.

2. Excavate pipe trenches to a depth that will ensure a minimum of:

   a. 36 inches of cover for ductile iron (DI) and polyvinyl chloride (PVC) pipe.

b. 54 inches of cover for polyethylene (PE) pipe, except service laterals.

3. Ensure trenches shall be only of sufficient width to provide a free working space on each side of the pipe.

4. To prevent excess pressure on the pipe, the maximum width of trench at the top of the pipe and at the bottom of the trench shall not be greater than 2 feet more than the greatest exterior diameter of the pipe. If this maximum width is exceeded, it shall be the CONTRACTOR's responsibility to provide, at no additional cost to the OWNER, such additional bedding or select backfill materials as the ENGINEER may require.

5. Conform the excavation below the spring line as near as possible to the shape of the lower third of the pipe.

6. Complete all Work in open trenches to protect the pipelines from unusual stresses.

7. Excavate bells of all pipes and to a sufficient depth to permit access to the joint for construction and inspections. In no case will the bells be used to support the body of the pipe.

8. In order to avoid existing utilities, at times it may be necessary for the pipe to be laid deeper than the minimum cover specified in the preceding paragraph. At such time, the CONTRACTOR will not be allowed extra compensation for additional excavation involved.

9. In case excavation has been made deeper than necessary, a layer of concrete, fine gravel, or other material satisfactory to the ENGINEER shall be placed, at no extra cost, to secure a firm foundation for the lower third of each pipe.

10. Where possible, place excavated material so as not to interfere with public travel.

11. Provide bridging to afford necessary access to public or private premises. Bridging shall be considered as part of the excavation operation and shall be supplied at no additional cost to the OWNER.

E. Structural: (For inlets, manholes, valve pits and similar structures)

1. Sufficient material shall be removed to allow proper space for erecting and removing forms.

2. The elevations of the bottoms of footings, if shown on the drawings, shall be considered as approximate only, and the ENGINEER may order, in writing, such changes in dimensions or elevations of footings as may be deemed necessary to secure a satisfactory foundation. Excavation for structures shall be sufficient to leave at least 12 inches in the clear between their outer surfaces and the embankment of timber that may be used to protect them.

3. Backfill of earth under structures will not be permitted.

4. Excess excavation for structures shall be filled with thoroughly compacted sand, gravel, or concrete at the expense of the CONTRACTOR.

5. After excavation for a structure is completed, the CONTRACTOR shall notify the ENGINEER to that effect.

6. No concrete or reinforcing steel shall be placed until the ENGINEER has approved the depth of the excavation and the character of the foundation material.

F. Sheeting and Shoring:

1. The CONTRACTOR shall provide all trench and structural bracing, sheeting, or shoring necessary to construct and protect the excavation, existing utilities, structures, and private property of all types and as required for the safety of the employees.

2. Sheeting shall be removed or cut off by the CONTRACTOR during backfilling operations as directed by the ENGINEER.

3. Sheeting which is left in place by order of the ENGINEER will be paid for under the item.

4. Shoring for structures shall be removed in such a manner as not to disturb or mar finished masonry or concrete surfaces.

3.03 DRAINAGE

A. Grading shall be controlled in the vicinity of excavations so that the surface of the ground will be properly sloped to prevent water from running into trenches or other excavated areas.

B. Any water which accumulates in the excavations shall be promptly removed by well point or by other means satisfactory to the ENGINEER in such a manner as to not create a nuisance to adjacent property or public thoroughfare.

C. Trenches shall be kept dry while pipe is being laid.

D. Bridging of dewatering pipe shall be provided where necessary.

E. Pumps and engines for well point systems shall be operated with mufflers, and at a minimum noise level suitable to a residential area.

F. The CONTRACTOR will not be allowed to discharge water into the OWNER's storm drainage system without the written approval of the ENGINEER. Approval will be subject to the condition that the storm sewer be returned to its original condition.

G. The CONTRACTOR is responsible for carrying the water to the nearest ditch or body of water and for obtaining the necessary permission to use same.

H. The CONTRACTOR shall be financially responsible for any nuisance created due to carrying off water from his drainage system.

3.04 BACKFILL

A. Trenches:

1. Trenches shall be backfilled immediately after the pipe is laid unless other protection for the pipeline is provided.

    a. Clean earth, sand, crushed limerock or other material approved by the ENGINEER shall be used for backfilling.

    b. Backfill material shall be selected, deposited, and compacted (simultaneously on both sides of the pipe) so as to eliminate the possibility of lateral displacement of the pipe.

    c. Backfill material shall be solidly tamped around the pipes in layers to a level at least 1 foot above the top of the pipe.

    d. Each layer shall be compacted to a maximum thickness of 6 inches.

2. In unpaved areas, the remainder of the backfill shall be deposited and then compacted by puddling, water flooding, or mechanical tampers.

    a. Mechanical tamping of layers in unpaved areas shall be to a maximum thickness of 12 inches.

b. In areas to be paved or repaved, the entire depth of backfill shall be deposited in layers and compacted by hand or mechanical tampers to a maximum thickness of 6 inches.

c. Compaction shall be carried out to achieve a density of at least 98% of the maximum density as determined by AASHTO, Method T-180.

d. Under areas to be paved, puddling may be used for backfill consolidation after tamping to 1 foot over the pipe, as specified, provided the method is first approved by the ENGINEER and the density requirements are met.

3. In areas to be paved, density tests for determination of the specified compaction shall be made by a testing laboratory and spaced one in every 300 feet of trench cut.

4. It is the intent of this specification to secure a condition where no further settlement of trenches will occur.

5. When backfilling is completed, the roadway base for pavement replacement may be placed immediately.

6. It will be the responsibility of the CONTRACTOR to restore the surface to the original grade wherever settlement occurs.

B. Wet Trenches (CONTRACTOR's Option):

1. Backfill for the pipe bed in wet trenches shall be crushed, graded limerock, compacted in the trench.

2. After the pipe is laid, a graded limerock backfill shall be placed and worked in around the haunches to a point 6 inches above the pipe.

3. The width of the limerock material around the pipe shall not be less than the outside diameter of the pipe plus 6 inches on each side of the pipe.

4. Material shall be carefully distributed along the pipe so as to provide full and uniform support under and around the pipe.

5. Six inches above the top of the pipe and up to the water level, material from the excavations with no rock or earth exceeding 4 inches in any one dimension shall then be lifted to the trench and released at the water level.

6. Material shall be uniformly distributed for the full width of the trench.

7. Backfill and compaction above the water level in the trench shall be as specified above.

8. All costs for graded limerock placed in wet trenches shall be included in the cost of stage excavation and backfill for the various sizes of pipe.

C. Bedding and Backfill - Flexible Pipe:

1. For PVC pipe, the bedding and backfill materials shall be such as to limit the vertical ring deflection to 5% of the inside pipe diameter. A deflection greater than 5% of the inside diameter shall be cause for rejection of the pipe.

2. Class IV or Class V materials as defined in ASTM D2321-74 shall not be used for bedding, haunching or initial backfill for flexible pipes.

3. For PVC plastic pipe, bedding shall be in accordance with ASTM D2321-74, using Class I, II or III materials, except under wet conditions. In any area where the pipe will be installed below existing or future groundwater levels or where the trench could be subject to inundation, Class I material shall be placed to the springline of the pipe.

4. A minimum of effort is needed to compact the material.

   a. In the initial stage of placing this type of material, take care to ensure that sufficient material has been worked under the haunch of the pipe to provide adequate side support.

   b. Take precautions to prevent movement of the pipe during placing of the material under the pipe haunch.

   c. Except for the protection of the pipe from large particles of backfill material, little care need be taken, and no compaction is necessary in placing backfill material in the balance of the initial backfill area above the pipe.

   d. Where unstable trench wall exists because of migratory materials, such as water-bearing silts or fine sand, take care to prevent the loss of side support through the migratory action.

5. All bedding requirements for flexible pipe specified in the preceding paragraphs shall be included in the price bid for the applicable pipe material and no additional compensation for bedding material will be allowed.

D. Structural:

1. After completion of foundation footings and walls and other construction below the elevation of the final grades, and prior to backfilling, forms shall be removed, and the excavation shall be cleared of all trash and debris.

2. Material for backfilling shall consist of the excavation, borrow sand or other approved materials, and shall be free of trash, lumber, or other debris.

3. Backfill shall be placed in horizontal layers not in excess of 9 inches in thickness and have a moisture content such that a density may be obtained to prevent excessive settlement or shrinkage.

4. Each layer shall be compacted by hand or approved machine tampers with extreme care being exerted not to damage pipe or structures.

5. Backfill shall be placed and evenly compacted against the exposed surfaces to prevent undue stress on any surface.

3.05 RESTORATION OF SURFACE IMPROVEMENTS

A. Roadways, including shoulders, alleys, and driveways of shell, limerock, stabilized soil or gravel, grass plots, sod, shrubbery, ornamental trees, signs, fences, or other surface improvements on public or private property which have been damaged or removed in excavation, shall be restored to conditions equal to or better than conditions existing prior to beginning Work.

1. Restoration of shoulders shall consist of seeding and mulching or stabilizing with limerock as selected by the ENGINEER.

2. The cost of doing this work shall be included in the cost of the various applicable items.

3. General Quality Control will be used as an aid in determining conditions prior to construction.

B. Materials for unpaved roadways, road shoulders, alleys, or driveways, shall be compacted as described in the plans.

1. The cost of this work and furnishing new materials shall be included in the cost of the applicable items of work as no separate payment will be made unless a separate bid item is provided.

3.06 FINE GRADING

A. Finished areas around structures shall be graded smooth and hand raked and shall meet the elevations and contours shown on the drawings.

B. Lumber, earth clods, rocks and other undesirable materials shall be removed from the site.

3.07 DISPOSAL OF MATERIALS

A. Such portions of the excavated materials as needed and as suitable, shall be used for backfilling and grading about the completed work to the elevations as shown of the drawings or as directed.

B. Excavated material in excess of the quantity required for this purpose shall be disposed of by the CONTRACTOR in those areas designated by the OWNER and as shown on the drawings.

C. The CONTRACTOR shall leave the earth over the trenches or other excavations in a neat and uniform condition acceptable to the OWNER.

3.08 PAVEMENT REPLACEMENT

A. Asphalt pavement shall be removed by saw cutting on a straight line with edges as vertical as possible.

B. Concrete pavement or asphalt surfaced concrete shall be removed by cutting with a concrete saw in as straight a line and vertically as possible.

C. Materials to replace State Highway paving shall conform to the specifications required by the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition, for Type S-I asphaltic concrete surface course, or as specifically shown in the plans.

D. Prior to replacing concrete or asphalt pavement replacement, a limerock base shall be laid.

1. The base for concrete pavement shall be 6 inches of compacted thickness, and that for asphalt pavement shall be 8 inches of compacted thickness.

2. The base course for each shall be compacted to a minimum of 98% of the maximum density as determined by AASHTO, Method T-180.

3. The OWNER will have tests made by an independent testing laboratory to verify compaction results.

4. One test will be made for each block of continuous trench cut.

E. Non-asphalt pavement replacement shall be replaced of like material and thickness.

1. Asphalt or built-up asphalt pavement shall be replaced with like material or concrete as directed by the ENGINEER.

2. Where asphalt or built-up asphalt pavement is replaced by concrete, the concrete shall have a minimum of 6 inches in thickness and be reinforced with 6 by 6 No. 6 gage welded wire fabric.

3. Concrete for paving shall be 3,000 pounds per square inch (psi) design strength.

4. Where the pavement replacement is of like material, it shall be replaced in thickness equal to or better than that existing at the time of removal.

F. Unless the base is sealed or other temporary paving applied over areas to be repaved, pavement shall be replaced no later than 3 weeks after completion of backfill.

3.09 TESTS

A. The CONTRACTOR shall furnish facilities for making all density tests and make such restorations as may be necessary due to test operations.

B. All density tests on backfill or base replacement will be made by a commercial testing laboratory employed by the CONTRACTOR and at such locations as may be recommended by the ENGINEER.

C. If the densities as determined by the specified tests fall below the required minimums, the CONTRACTOR shall pay for all retests.

3.10 SIDEWALK, CURB AND GUTTER REMOVAL AND REPLACEMENT

A. Sidewalk, curb and gutter removal and replacement required in the construction of this Work shall be done by the CONTRACTOR.

B. Reasonable care shall be exercised in removing sidewalk and curb and gutter, and the CONTRACTOR shall either stockpile or dispose of this material as directed by the ENGINEER.

C. Brick, concrete, or built-up asphalt sidewalk replacement as well as curb and gutter replacement shall be replaced of like material in a manner and condition equal to or better than that existing at the time of removal.

D. Materials and methods of replacing State Highway sidewalks or curbs shall conform to the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.

END OF SECTION 02222

SECTION 02505
UNDERGROUND UTILITY PROTECTION

PART 1 - SCOPE

1.01 This section pertains to the protection of all existing underground utilities that exist within and adjacent to Work zones.

A. "Paint Marks" or "Flags" as provided by Local One Call (811) or other utility locate services shall NOT be accepted as exact or definitive.

B. It shall be the responsibility of the CONTRACTOR to physically verify all Paint Marks and/or Flags.

C. It shall be the responsibility of the CONTRACTOR to physically locate all existing utilities within and adjacent to the work zone prior to initiating work.

PART 2 - GENERAL

2.01 GENERAL INFORMATION

A. All utilities within 5 feet of the planned work zone MUST be found and visually located prior to the start of any excavation operations.

B. Potholing shall be performed to verify the location and depth of the existing utilities.

C. Backhoes, trenches, or other type of mechanical equipment shall not be used to find underground utilities within 5 feet of a planned installation.

D. At no time shall picks, round pointed shovels, or any other type of sharp tool be used for locating utilities.

E. Only square blunt non-sharp tools may be used for hand digging.

F. Vacuum Excavation shall be allowed with the use of high-pressure water (up to 4,000 psi) with an approved non-cutting nozzle. Zero-degree nozzles are not allowed.

G. Vacuum Excavation may also be allowed utilizing high-pressure air (with dust containment system) or dry vacuum.

PART 3 - EXECUTION

3.01 GENERAL INFORMATION

A. The CONTRACTOR shall contact One Call (811) utility locate service (in writing) at least 48 hours in advance to order locates within and adjacent to the work zone.

B. The CONTRACTOR shall notify all other known utility companies (those not affiliated with One Call) at least 48 hours in advance to order locates within and adjacent to the work zone.

C. All utility crossings are to be exposed (using methods described in Part 2 above) prior to any excavation.

D. All existing utilities running parallel and within 10 feet of either side of the intended work shall be physically located.

E. The CONTRACTOR shall not assume that utilities found will continue on the same line and grade.

F. Underground utility pothole spacing, and frequency shall be as follows:

1. Gas and electric lines within 25 feet of the work zone shall be potholed and marked every 25 feet to verify the line has not changed directions.

2. Gas and electric lines greater than 25 feet from the work zone shall be potholed at least once on each end of the limits of excavation.

3. Fiber-Optic lines shall be potholed every 25 feet within the work zone.

4. Telephone and cable television lines shall be potholed every 50 feet within the work zone.

5. Water, sewer, and reuse utilities (less than 8 inches in diameter) shall be potholed every 25 feet within the work zone.

6. Water, sewer, and reuse utilities (8 inches through 24 inches in diameter) shall be potholed every 50 feet within the work zone.

7. Water, sewer, and reuse utilities (greater than 24 inches in diameter) shall be potholed every 100 feet within the work zone.

8. At least two potholes shall be obtained for each utility within the work zone regardless of the size of the work zone.

G. Material returned to the inspection hole shall be compacted back in place.

H. All inspection holes shall be returned to original surface condition.

PART 4 - PERMITTING AND SAFETY

A. It shall be the responsibility of the CONTRACTOR to ensure that all applicable permits for underground work have been obtained prior to the commencement of work.

B. All work shall be performed by licensed underground Contractors.

C. The CONTRACTOR shall prepare and follow a written safety plan.

1. This safety plan shall be provided to the permitting agency and shall be made available on-site.

2. The Safety plan shall include a site map and show all known existing utilities and shut-off valves.

D. Shut-off valve handles (for all existing water, sewer, reuse, gas, and electric utilities) are to be in place through the duration of the work for immediate operation if needed.

END OF SECTION 02505

SECTION 02960
RESTORATION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. The work includes the restoration of driveways, lawn areas, trees and plants, roadways, sprinkler systems, walks and any other existing improvement affected by the proposed work.

B. This section includes furnishing equipment, labor, and materials, and performing all necessary and incidental operations to perform the required work.

PART 2 - PRODUCTS

2.01 SOD

A. Any disturbed area shall be sodded and the sod shall be pinned down for stabilization.

B. The CONTRACTOR shall, at his expense, maintain the sodded areas in a satisfactory condition until final acceptance of the project. Such maintenance shall include watering, re-staking sod, filling, leveling, mowing, and repairing of any washed or eroded areas, as may be necessary.

2.02 PLANTS AND TREES

A. Existing damaged plants and tress shall be replaced by plants and trees of equal type, quality, and size whenever possible. All new plants and trees shall be sound, healthy, vigorous, and free from defects, decay, disfiguring, bade abrasions plant diseases, insect pests, their eggs, or larvae. The new plants shall be approved by the ENGINEER before placing.

B. Existing plants may be removed, preserved, and replaced at the CONTRACTOR’s option. Plants shall be handled by an approved nursery.

C. Plants shall be watered and cared for until new growth appears. Dead and dying plants shall be immediately replaced. Plants used shall be in accordance with the standards for Florida No. 1 or better as given in Grades and Standards for Nursery Plants Part I.

D. Plants shall conform to the sizes indicated by the OWNER.

E. Trees shall be guaranteed for 1 year. If the replaced tree dies within 1 year of project completion it shall be replaced by the CONTRACTOR at no expense to the City.

2.03 MULCH

Match existing mulch.

2.04 WATER

The water used in the performance of this Contract shall be of drinking water quality, clean and free from injurious amounts of oil, acid, alkali, or organic matter. The CONTRACTOR shall purchase all testing water from the City.

2.05 PLANTING MIXTURE

The 18-inch planting mixture, when required, shall consist of a thorough mixture of 40% peat and 60% sand. The peat shall be Florahome peat or equivalent and the sand shall be clean and free from debris of any kind.

2.06 FERTILIZER

Fertilizer shall be pelletized 13-13-13 or approved equal.

PART 3 - EXECUTION

3.01 LANDSCAPING RESTORATION

A. Lawn Areas:

Any lawn area affected by the required work shall be restored to a condition equal or better than the conditions existing before the commencement of work.

B. Balled Plants:

1. Plants where required shall be adequately balled with firm natural balls of soil, sized as set forth in “Horticultural Standards.”

2. Balls shall be firmly wrapped with burlap or equally approved strong cloth.

3. A balled plant will not be planted if the ball is cracked or broken before or during the process of planting.

C. Preparation of Plant Pits:

1. All plant pits shall be circular in outline and have vertical sides.

2. Tree pits shall be 2 feet wider than the width of the ball and 1 foot deeper than the depth of the ball.

3. Shrubs that are either balled and burlapped (B&B) or 3 gallons (and plus) shall have pits that are 2 feet wider than the width of the plant ball and 6 inches deeper than the depth of the ball.

4. Smaller shrubs shall have pits that are at least 1 foot wider than the width of the plant ball and 6 inches deeper than the ball depth.

D. Setting Plants:

1. All plants except as otherwise specified, shall be centered in pits.

2. Deep planting shall be avoided and unless otherwise specified, plants shall be set at such a level that after settlement they will bear the same relation to the required grade as they have to the natural grade before being transplanted.

3. B&B Plants and Palm Trees:

a. B&B plants and palm trees shall be placed on 6 to 12 inches of tamped planting mixture and adjusted to be at the proper level.

b. The rope and burlap shall be cut away and the burlap folded down to the bottom of the pit.

c. Exceptionally large B&B plants shall remain wrapped until fully backfilled and then just the upper portion of the burlap shall be removed.

d. Backfill of planting mix shall be placed halfway up the pit and then water tamped.

e. After this water has drained away, backfill around the ball to grade and water tamp again.

f. Finally, form a ridge of soil around the edge of the pit to form a saucer and full area three times with water.

E. Water:

1. Water to be used initially during plant installation shall be furnished by the CONTRACTOR.

2. The existing irrigation system, where damaged, shall be promptly repaired after the installation of the plants.

F. Options as to Methods:

Any plant may be furnished container grown instead of balled if all other requirements are met.

G. Fertilizer:

Immediately before sod is placed, 8-8-8 fertilizer shall be applied at the rate of approximately 500 pounds per acre, by broadcasting and raking into the planting area.

H. Tamping:

1. Sod shall be firmly embedded by light tamping.

2. Wherever necessary to prevent an erosion condition caused by vertical edges at the outer limits of the sodded area, the sod shall be tamped to produce a featheredge at the outer Limits.

3. The sod shall be kept in a moist condition after it is planted.

4. Water shall not be applied between the hours of 8:00 a.m. and 4:00 p.m. nor when there is danger of freezing.

I. The CONTRACTOR shall, at his expense, maintain the planted areas in a satisfactory condition until final acceptance of the project. Such maintenance shall include watering, filling, leveling, and repairing of any washed or eroded areas, as may be necessary.

3.02 PAVEMENT REPLACEMENT

A. Asphalt pavement shall be removed by saw cutting on a straight line with edges as vertical as possible. Concrete pavement or asphalt surfaced concrete shall be removed by cutting with a concrete saw in as straight a line and vertically as possible.

1. Non-asphalt pavement replacement shall be replaced of like material and thickness.

2. Asphalt or built-up asphalt pavement replacement shall be replaced with like material or concrete as directed by the ENGINEER.

3. Where asphalt or built-up asphalt pavement is replaced by concrete, the concrete shall have a minimum of 6 inches in thickness and be reinforced with 6 by 6 No. 6 gage welded wire fabric. Where the pavement replacement is of like material, it shall be replaced in thickness equal to or better than that existing at the time of removal.

B. Road cuts across City or County roads shall not be cut.

C. Unless the base is sealed or other temporary paving applied over driveway areas to be repaved, pavement shall be replaced not later than 3 weeks after completion of backfill.

3.03 CURB REMOVAL AND REPLACEMENT

A. Curb removal and replacement required in the construction of this work shall be done by the CONTRACTOR.

B. Reasonable care shall be exercised in removing the curb, and the CONTRACTOR shall either stockpile or dispose of this material as directed by the ENGINEER.

C. Curb shall be replaced of like material in a manner and condition equal to or better than that existing at the time of removal.

D. Materials and methods of replacing State Highway sidewalks or curbs shall conform to the Florida Department of Transportation specifications.

3.04 TESTS

A. The CONTRACTOR shall furnish facilities for making all density tests and make such restorations as may be necessary due to test operations.

B. All density tests on backfill or base replacement will be made by a commercial testing laboratory employed by the CONTRACTOR at such locations as may be recommended by the ENGINEER.

C. If the densities as determined by the specified tests fall below the required minimums, the CONTRACTOR shall pay for all retests.

END OF SECTION

SECTION 15062
POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. The CONTRACTOR shall furnish all labor, materials, equipment, and incidentals required and install in the locations as shown on the Drawings.

B. The CONTRACTOR shall install the plastic piping, fittings, and appurtenances (as specified herein) as shown on the Drawings.

1.02 DESCRIPTION OF SYSTEM

A. The CONTRACTOR shall install the piping in the locations as shown on the Drawings.

1.03 QUALIFICATIONS

A. All plastic pipe, fittings and appurtenances shall be furnished by a single Manufacturer who is fully experienced, reputable, and qualified in the manufacture of the items to be furnished.

B. The equipment shall be designed, constructed, and installed in accordance with the best practices and methods and shall comply with these Specifications.

1.04 SUBMITTALS

A. The CONTRACTOR shall submit Shop Drawings that include dimensions and technical specifications for all piping to the ENGINEER.

B. The CONTRACTOR shall submit samples of all materials specified herein to the ENGINEER.

C. The CONTRACTOR shall submit and shall comply with pipe Manufacturer’s recommendation for handling, storing, and installing pipe and fittings.

D. The CONTRACTOR shall submit pipe Manufacturer’s certification of compliance with these Specifications.

1.05 TOOLS

A. The CONTRACTOR shall furnish special tools, solvents, lubricants, and caulking compounds required for normal installation with the pipe.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Polyvinyl Chloride (PVC) Pipe:

1. Pressure PVC pipe and accessories 3 inches and smaller in diameter, where shown or as specified in the Drawings, shall meet the requirements of American Society for Testing and Materials (ASTM) D2241 "Polyvinyl Chloride (PVC) Pressure Pipe," and shall be SDR 21, rated pressure of 200 pounds per square inch.

2. PVC Pipe **4 to 8** inches in diameter shall meet the requirements of American Water Works Association (AWWA) Specifications C900 "Polyvinyl Chloride (PVC) Pressure Pipe," and shall be **DR18 (Pressure Class 235).**

3. PVC Pipe **10 and 12** inches shall meet the requirements of AWWA C900 and shall be **DR25 (Pressure Class 165).**

4. AWWA C900 **DR18 (Pressure Class 235)** pipe shall be required for all PVC fire lines downstream of any check valve.

5. PVC Pipe **greater than 12** inches shall meet the requirements of AWWA C900 and shall be **DR25 (Pressure Class 165).**

6. Provisions shall be made for expansion and contraction at each joint with an elastomeric ring and shall have an integral thickened bell as part of each joint.

7. PVC pipe shall be installed as recommended by the Manufacturer.

8. Pipe shall be furnished in nominal lengths of approximately 20 feet, unless otherwise directed by the ENGINEER.

9. Pipe and accessories shall bear the NSF mark indicating pipe size, Manufacturer's name(s), AWWA and/or ASTM Specification Number, working pressure, and production code.

10. Pipe shall be <u>blue</u> for potable water service, <u>green</u> for sewage force main service, and <u>purple</u> for reclaimed water mains (Pantone 522C).

11. All potable water pipe shall be NSF certified and copies of lab certification shall be submitted to the ENGINEER.

B. Joints:

1. The PVC joints for pipe shall be of the push-on type unless otherwise directed by the ENGINEER so that the pipe and fittings may be connected on the job without the use of solvent cement or any special equipment.

2. The push-on joint shall be a single rubber gasket joint designed to be assembled by the positioning of a continuous, molded rubber ring gasket in annular recess in the pipe or fitting socket and the forcing of the plain end of the entering pipe into the socket; thereby, compressing the gasket radially to the pipe to form a positive seal.

3. The gasket and annular recess shall be designed and shaped so that the gasket is locked in place against displacement as the joint is assembled.

4. The rubber ring joint shall be designed for thermal expansion or contraction with a total temperature change of at least 750 degrees Fahrenheit (F) in each joint per length of pipe.

5. The bell shall consist of an integral wall section with a solid cross section elastomeric ring which shall meet requirements of ASTM F-477.

6. The thickened bell section shall be designed to be at least as strong as the pipe wall.

7. Lubricant furnished for lubricating joints shall be nontoxic, shall not support the growth of bacteria, shall not have deteriorating effects on the gasket or pipe material, and shall not impart color, taste, or odor to the water.

C. Fittings and Specials:

1. All fittings for PVC pipe shall be cast iron/ductile iron with mechanical joints and shall conform to the specifications for cast iron/ductile iron fittings, unless otherwise directed by the ENGINEER. PVC C-900 fittings are allowable upon approval by the ENGINEER and required for sewage force main applications. DR ratio shall be the same as the pipe.

2. Bell hardness restraints shall be Megalug Series 2500 by EBBA Iron or approved equal. Restraint devices manufactured of ductile iron conforming to ASTM A536 and shall be coated using MEGA-Bond

3. Fittings for Schedule 80 PVC pipe less than 3 inches in diameter shall be threaded and be PVC as shown on the Drawings, or as directed by the ENGINEER. Threaded PVC fittings shall conform to ASTM Specification D2464-69.

4. The Manufacturer of the pipe shall supply all PVC accessories as well as any adaptors and/or specials required to perform the Work as shown on the Drawings and specified herein.

5. Standard double bell couplings will not be accepted where the pipe will slip completely through the coupling.

2.02 COPPER LOCATION WIRE

A. The CONTRACTOR shall install all piping (including service lines) with underground 12-gauge single conductor thermoplastic high heat-resistant nylon (THHN) insulated traceable copper wire.

B. The CONTRACTOR shall lay the insulated copper wire in the pipe trench 3 to 6 inches above the sewer force mains and shall be a continuous strand from valve box to valve box, wrapped two times around each valve and extended 24 inches inside each valve box to enable location devices to be attached without digging up the valve box.

C. The CONTRACTOR shall insulate all wire splices.

D. The CONTRACTOR shall backfill the trench following placement of the traceable wire with due caution to prevent displacement or damage to wire.

E. The CONTRACTOR shall perform a detection test after insulation and backfill have been completed in the ENGINEER's presence using a commercially available pipe detector furnished by the CONTRACTOR.

F. The CONTRACTOR shall replace any undetectable wire to the satisfaction of the ENGINEER at no additional expense to the OWNER.

PART 3 - EXECUTION

3.01 STORAGE/INSTALLATION

A. The CONTRACTOR shall be in strict accordance with the Manufacturer's technical data and printed instruction for the storage and installation of plastic pipe.

B. The CONTRACTOR shall cover all plastic pipe to prevent fading.

C. The OWNER reserves the right to reject any pipe not properly stored or pipe

that has faded.

3.02 INSPECTION AND TESTING

A. The CONTRACTOR shall not disturb all pipelines for 24 hours to develop complete strength at all joints.

B. General:

1. Provide temporary equipment for testing, including pump and gauges.
2. Test piping system before insulation is installed (wherever feasible) and remove control devices before testing.
3. Expel air from the pipe before applying the specified test pressure.
4. Make taps (if necessary) at points of highest elevation, and afterwards tightly plugged.
5. Test each natural section of each piping system independently but do not use piping system valves to isolate sections where test pressure exceeds valve pressure rating.
6. Fill each section with water and subject to a hydrostatic pressure equal to the pressure rating of the pipe being tested.

C. The CONTRACTOR shall test for the required 2-hour period.

D. The CONTRACTOR shall test pipe at 150 pounds per square inch (psi), except where fittings are lower class or pressure rating.

1. Pressure Sewer Permissible leakage (2.2 gallons/1,000 feet/24 hours/inch diameter):

Inches	Gallons/1,000 feet/24 Hours	Gallons/1,000 feet/1 Hours
2”	4.4 gal.	0.19 gal.
3”	6.6 gal.	0.28 gal.
4”	8.8 gal.	0.37 gal.
6”	13.2 gal.	0.55 gal.
8”	17.8 gal.	0.74 gal.
10”	22.0 gal.	0.92 gal.
12”	26.4 gal.	1.10 gal.
14”	30.8 gal.	1.29 gal.
16”	35.2 gal.	1.47 gal.
18”	39.6 gal.	1.66 gal.

2. Water System Permissible Leakage:

Inches	gallons/1,000 feet/24 Hours	gallons/1,000 feet/1 Hours
2”	3.6 gal.	0.15 gal.
3”	5.4 gal.	0.23 gal.
4”	7.2 gal.	0.30 gal.
6”	10.8 gal.	0.45 gal.
8”	14.4 gal.	0.60 gal.
10”	18.0 gal.	0.75 gal.
12”	21.6 gal.	1.90 gal.
14”	25.2 gal.	1.05 gal.
16”	28.8 gal.	1.66 gal.
18”	32.4 gal.	1.66 gal.

E. The CONTRACTOR shall repair piping systems sections which fail required piping tests by disassembly and re-installation using new materials to the extent required to overcome leakage. Do not use chemicals, stop-leak compounds, mastics, or other temporary repair methods.

F. The CONTRACTOR shall, at his own expense, locate and repair the defective joints should any test of combined sections of pipe laid disclose leakage greater than the specified limit, until the leakage is within the specified allowance.

G. The CONTRACTOR shall provide water for testing.

H. The CONTRACTOR may subject pipe to hydrostatic pressure, inspect and test for leakage at any convenient time after partial completion of backfill.

I. The CONTRACTOR may test the system with joints exposed or backfilling complete at his/her option. The ENGINEER shall be notified at least 48 hours before beginning testing.

J. The CONTRACTOR shall drain test water from piping systems after testing and repair work has been completed.

3.03 CLEANING, FLUSHING, AND INSPECTING

A. General:

1. Clean installed piping systems' exterior surfaces of superfluous materials and prepare for application of specified coatings (if any).

2. Flush out piping systems with clean water before proceeding with required tests.

3. Inspect each run of each system for completion of joints, supports, and accessory items.

B. The CONTRACTOR shall thoroughly flush each run of pipe after the mains have been laid and pressure tested so as to remove all debris and foreign matter from the lines.

1. Flushing will ordinarily be done by opening fire hydrants or blowoffs along the pipeline.

2. Where fire hydrants or blowoffs are not available or are of insufficient capacity to permit adequate flushing, the pipeline shall be opened, and flumes or piping shall be provided by the CONTRACTOR to waste the water to the nearest approved disposal point.

3. A minimum volume of water equal to six times the volume of the main shall be used to flush the mains.

4. The water shall be introduced into the mains to produce a velocity of not less than 3 feet per second, and this rate of flow shall be continued until the discharge is clear and no evidence of silt or foreign matter is visible.

C. The CONTRACTOR shall inspect pressure piping in accordance with American Society of Mechanical Engineers (ASME) B31 procedures.

D. The CONTRACTOR shall disinfect water mains and water service piping in accordance with AWWA C601 and the Florida Department of Environmental Protection (FDEP), Chapter 17-22 requirements.

E. The CONTRACTOR is responsible for costs (including sampling and analysis) associated with disinfecting the potable water lines.

F. The CONTRACTOR shall submit sample results documenting compliance with disinfection testing requirements to the FDEP with a duplicate copy sent to the ENGINEER.

END OF SECTION 15062

SECTION 15075

FUSIBLE POLYVINYL CHLORIDE PIPE FOR INSTALLATION BY HORIZONTAL DIRECTIONAL DRILL (HDD)

PART 1 - GENERAL

1.01 DESCRIPTION

A. SCOPE:

1. This section specifies fusible PVC pipe, including standards for dimensionality, testing, quality, acceptable fusion practice, safe handling, storage, and installation of the pipe by horizontal directional drilling, directional boring, or guided boring.

2. Quantities shown on the plans may not be the exact length needed for directional bores.

3. The CONTRACTOR shall investigate this before the Bid and shall inform the ENGINEER prior to the bid if additional Fusible PVC pipe will be needed.

4. If any additional Fusible PVC pipe is needed after the Bid, it will be the responsibility of the CONTRACTOR and shall not require any additional costs to the OWNER.

B. REQUIREMENTS:

1. CONTRACTOR shall provide fusible PVC pipe conforming to all standards and procedures and meeting all testing and material properties as described in this specification for installation by horizontal directional drilling.

2. CONTRACTOR shall be responsible for all installation processes and procedures associated with the installation by horizontal directional drilling in accordance with this specification.

C. PIPE DESCRIPTION:

1. Pipe Supplier shall furnish fusible PVC pipe conforming to all standards and procedures and meeting all testing and material properties as described in this specification.

2. Pipe shall conform to the dimensions specified in the plans.

1.02 QUALITY ASSURANCE

A. References:

Reference	Title
ANSI/AWWA C110/A21.10	American National Standard for Ductile-Iron and Gray-Iron Fittings, 3-inch through 48-inch, for Water and Other Liquids
ANSI/AWWA C111/A21.11	American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
AWWA C605-94	Standard for Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water
AWWA C651	Standard for Disinfecting Water Mains
AWWA C900-97	Standard for Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 in. through 12 in. (100mm through 300mm), for Water Distribution
AWWA M23	AWWA Manual of Supply Practices PVC Pipe—Design and Installation, Second Edition
ASTM C923	Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes and Laterals
ASTM D1784	Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds
ASTM D1785	Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120
ASTM D2152	Test Method for Degree of Fusion of Extruded Poly (Vinyl Chloride) (PVC) Pipe and Molded Fittings by Acetone Immersion
ASTM D2241	Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR)
ASTM D2665	Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings
ASTM D3034	Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings
ASTM F477	Elastomeric Seals (Gaskets) for Joining Plastic Pipe

Reference	Title
ASTM F679	Standard Specification for Poly (Vinyl Chloride) (PVC) Large Diameter Plastic Gravity Sewer Pipe and Fittings
ASTM F1057	Standard Practice for Estimating the Quality of Extruded Poly (Vinyl Chloride) (PVC) Pipe by the Heat Reversion Technique
ASTM F1417	Standard Test Method for Installation Acceptance of Plastic Gravity Sewer Lines Using Low-Pressure Air
UNI-B-6	Recommended Practice for Low-Pressure Air Testing of Installed Sewer Pipe
UNI-PUB-08	Tapping Guide for PVC Pressure Pipe
NSF-14	Plastics Piping System Components and Related Materials
NSF-61	Drinking Water System Components--Health Effects
PPI TR-2	PVC Range Composition Listing of Qualified Ingredients

B. Manufacturer Requirements:

1. Fusible PVC pipe shall be tested at the extrusion facility for properties required to meet all applicable parameters as outlined in AWWA C900, applicable sections of ASTM D2241, ASTM D3034, or ASTM F679. Testing priority shall be in conformance with AWWA C900, except for pipe made to the ASTM D3034 or ASTM F679 standards, which shall be tested to those standards.

2. All piping shall be made from a PVC compound conforming to cell classification 12454 per ASTM D1784.

C. Fusion Technician Requirements:

1. Fusion Technician shall be fully qualified by the pipe supplier to install fusible PVC pipe of the type(s) and size(s) being used.

2. Qualification shall be current as of the actual date of fusion performance on the project.

D. Specified Pipe Suppliers:

1. Fusible PVC pipe shall be used as manufactured under the trade names Fusible C-900® and FPVC™, for Underground Solutions,

Inc., Poway, CA, (858) 679-9551.

2. Fusion process shall be as patented by Underground Solutions, Inc., Poway, CA, Patent No. 6,982,051.

3. OWNER and ENGINEER are aware of no other supplier or fusible PVC pipe that is an equal to this specified pipe supplier and product.

E. Warranty:

1. The pipe shall be warranted for 1 year from the date of substantial completion.

2. In addition to the standard pipe warranty, the fusion services shall be warranted for 1 year from the date of substantial completion.

F. Pre-Construction Submittals:

1. The following PRODUCT DATA is required from the pipe supplier and/or fusion provider:

a. Pipe Size.

b. Dimensionality.

c. Pressure Class per applicable standard.

d. Color.

e. Recommended Minimum Bending Radius.

f. Recommended Maximum Safe Pull Force.

g. Pipe and fusion services warranty information.

h. Written procedural documentation for piping products including proper handling and storage, installation, tapping, and testing.

i. Fusion technician qualification indicating conformance with this specification.

2. The following Work Plan and Information is required from the contractor and/or horizontal directional drilling CONTRACTOR. This Work Plan and Information shall also be supplied to the pipe supplier, should it be requested:

a. Work plan shall include for each HDD installation any

excavation locations and dimensions, interfering utilities, bore dimensions and locations including bend radii used, and traffic control schematics.

b. A project safety and contingency plan which shall include but shall not be limited to drilling fluid containment and cleanup procedures, equipment and plan for compromised utility installations including electrical and power lines, water, wastewater, and any other subsurface utility in the area.

c. An HDD schedule identifying daily work hours and working dates for each installation.

G. Post-Construction Submittals:

1. The following As-Recorded Data is required from the contractor and/or fusion provider to the OWNER or pipe supplier upon request:

a. Fusion report for each fusion joint performed on the project, including joints that were rejected. Specific requirements of the Fusion Technician's joint report shall include:

1) Pipe Size and Thickness

2) Machine Size

3) Fusion Technician Identification

4) Job Identification

5) Fusion Joint Number

6) Fusion, Heating, and Drag Pressure Settings

7) Heat Plate Temperature

8) Time Stamp

9) Heating and Cool Down Time of Fusion

10) Ambient Temperature

b. As-recorded Information:

1) The as-recorded plan and profile will reflect the actual installed alignment and reflect the horizontal offset from the baseline and depth of cover.

c. All fittings, valves, or other appurtenances will also be referenced and shown.

1) A daily project log, along with tracking log sheets, should they be used, shall be provided. Tracking log sheet data, should it be employed, shall include any and all that apply, including inclination, depth, azimuth, and hydraulic pull-back and rotational force measured.

PART 2 - PRODUCTS

2.01 FUSIBLE POLYVINYLCHLORIDE PRESSURE PIPE FOR POTABLE WATER

A. Fusible PVC pipe shall conform to AWWA C900. Testing shall be in accordance with AWWA standards for all pipe types. FPVC pipe rating shall be as follows:

1. 4 to 8 inches, AWWA C900, DR 18, Pressure Class 235 psi

2. 10 to 12 inches, AWWA C900, DR 25, Pressure Class 165 psi

3. Greater than 12 inches, AWWA C900, DR 25, Pressure Class 165 psi

B. Rework material shall be allowed per AWWA C900 standards.

C. Fusible PVC pipe shall be extruded with plain ends. The ends shall be square to the pipe and free of any bevel or chamfer. There shall be no bell or gasket of any kind incorporated into the pipe.

D. Fusible PVC pipe shall be manufactured in a standard 20', 30' or 40' nominal length.

E. Fusible PVC pipe shall be blue in color for potable water use.

F. Pipe generally shall be marked per AWWA C900, and shall include as a minimum:

1. Nominal pipe size

2. PVC

3. Dimension Ratio, Standard Dimension Ratio or Schedule

4. AWWA pressure class or standard pressure rating for non-AWWA pipe

5. AWWA Standard designation number or pipe type for non-AWWA

pipe

6. NSF-61 mark verifying suitability for potable water service

7. Extrusion production-record code

8. Trademark or trade name

9. Cell Classification 12454 and/or PVC material code 1120 may also be included

G. Pipe shall be homogeneous throughout and be free of visible cracks, holes, foreign material, blisters, or other visible deleterious faults.

2.02 FUSIBLE POLYVINYLCHLORIDE PRESSURE PIPE FOR NON-POTABLE WATER

A. Fusible PVC pipe shall conform to AWWA C900. Testing shall be in accordance with AWWA standards for all pipe types. FPVC pipe rating shall be as follows:

1. 4 to 8 inches, AWWA C900, DR 18, Pressure Class 235 psi

2. 10 to 12 inches, AWWA C900, DR 25, Pressure Class 165 psi

3. Greater than 12 inches, AWWA C900, DR 25, Pressure Class 165 psi

B. Rework material shall be allowed per AWWA C900 standards.

C. Fusible PVC pipe shall be extruded with plain ends. The ends shall be square to the pipe and free of any bevel or chamfer. There shall be no bell or gasket of any kind incorporated into the pipe.

D. Fusible PVC pipe shall be manufactured in a standard 20', 30' or 40' nominal length.

E. Fusible PVC pipe shall be purple in color for reclaim, reuse, or other non-potable distribution or conveyance. Fusible PVC pipe shall be white in color for raw water collection and transmission, or other non-potable resource or irrigation water uses.

F. Pipe generally shall be marked per AWWA C900, and shall include as a minimum:

1. Nominal pipe size

2. PVC

3. Dimension Ratio, Standard Dimension Ratio or Schedule

4. AWWA pressure class or standard pressure rating for non-AWWA pipe

5. AWWA Standard designation number or pipe type for non-AWWA pipe

6. Extrusion production-record code

7. Trademark or trade name

8. Cell Classification 12454 and/or PVC material code 1120 may also be included

9. For reclaim water service, the wording: “Reclaimed Water, NOT for Potable Use”

G. Pipe shall be homogeneous throughout and be free of visible cracks, holes, foreign material, blisters, or other visible deleterious faults.

2.03 FUSIBLE POLYVINYLCHLORIDE PRESSURE PIPE FOR WASTEWATER

A. Fusible PVC pipe shall conform to AWWA C900. Testing shall be in accordance with AWWA standards for all pipe types. FPVC pipe rating shall be as follows:

1. 4 to 8 inches, AWWA C900, DR 18, Pressure Class 235 psi

2. 10 to 12 inches, AWWA C900, DR 25, Pressure Class 165 psi

3. Greater than 12 inches, AWWA C900, DR 25, Pressure Class 165 psi.

B. Rework material shall be allowed per AWWA C900 standards.

C. Fusible PVC pipe shall be extruded with plain ends. The ends shall be square to the pipe and free of any bevel or chamfer. There shall be no bell or gasket of any kind incorporated into the pipe.

D. Fusible PVC pipe shall be manufactured in a standard 20’, 30’ or 40’ nominal length.

E. Fusible PVC pipe shall be green in color for wastewater use.

F. Pipe generally shall be marked per AWWA C900, and shall include as a minimum:

1. Nominal pipe size

2. PVC
3. Dimension Ratio, Standard Dimension Ratio or Schedule
4. AWWA pressure class or standard pressure rating for non-AWWA pipe
5. AWWA Standard designation number or pipe type for non-AWWA pipe
6. Extrusion production-record code
7. Trademark or trade name
8. Cell Classification 12454 and/or PVC material code 1120 may also be included.

G. Pipe shall be homogeneous throughout and be free of visible cracks, holes, foreign material, blisters, or other visible deleterious faults.

2.04 FUSIBLE POLYVINYLCHLORIDE NON-PRESSURE PIPE FOR WASTEWATER OR SURFACE WATER

A. Fusible PVC pipe shall conform to ASTM D3034 or ASTM F679.

B. Fusible PVC pipe may instead conform to AWWA C900, and/or ASTM D2241 or ASTM D1785 for IPS standard dimensionality, if applicable. Testing shall be in accordance with AWWA standards for any of these pipe types.

C. Rework material shall be allowed per ASTM D3034, ASTM F679, AWWA C900 standards.

D. Fusible PVC pipe shall be extruded with plain ends. The ends shall be square to the pipe and free of any bevel or chamfer. There shall be no bell or gasket of any kind incorporated into the pipe.

E. Fusible PVC pipe shall be manufactured in a standard 20', 30' or 40' nominal length.

F. Fusible PVC pipe shall be green in color for wastewater use. Fusible PVC pipe shall be white in color for surface or storm water use.

G. Pipe generally shall be marked per AWWA C900, and shall include as a minimum:

1. Nominal pipe size
2. PVC
3. Dimension Ratio, Standard Dimension Ratio or Schedule (omit for ASTM D3034 or ASTM F679 pipe)
4. Pipe legend or stiffness designation, or AWWA pressure class, or

standard pressure rating for non-AWWA pipe

5. AWWA Standard designation number or pipe type for non-AWWA pipe (omit for ASTM D3034 or ASTM F679 pipe)

6. Extrusion production-record code

7. Trademark or trade name

8. Cell Classification 12454 and/or PVC Material Code 1120 may also be included.

H. Pipe shall be homogeneous throughout and be free of visible cracks, holes, foreign material, blisters, or other visible deleterious faults.

2.05 FUSION JOINTS

A. Unless otherwise specified, fusible PVC pipe lengths shall be assembled in the field with butt-fused joints. The CONTRACTOR shall follow the pipe supplier's guidelines for this procedure. All fusion joints shall be completed as described in this specification.

2.06 CONNECTIONS AND FITTINGS FOR PRESSURE APPLICATIONS

A. Connections shall be defined in conjunction with the coupling of project piping, as well as the tie-ins to other piping systems.

B. Ductile Iron Mechanical and Flanged Fittings:

1. Acceptable fittings for use with fusible PVC pipe shall include standard ductile iron fittings conforming to AWWA/ANSI C110/A21.10 and AWWA/ANSI C111/A21.11.

2. Connections to fusible PVC pipe may be made using a restrained or non-restrained retainer gland product for PVC pipe, as well as for MJ or flanged fittings.

3. Bends, tees, and other ductile iron fittings shall be restrained with the use of thrust blocking or other means as indicated in the construction documents.

4. Ductile iron fittings and glands must be installed per the manufacturer's guidelines.

C. PVC Gasketed, Push-On Fittings:

1. Acceptable fittings for use with fusible PVC pipe shall include standard PVC pressure fittings conforming to AWWA C900.

a. Acceptable fittings for use joining fusible PVC pipe other sections of fusible PVC pipe or other sections of PVC pipe shall include gasketed PVC, push-on type couplings and fittings, including bends, tees, and couplings as shown in the drawings.

b. Bends, tees, and other PVC fittings shall be restrained with the use of thrust blocking or other restraint products as indicated in the construction documents.

c. PVC gasketed, push-on fittings and mechanical restraints, if used, must be installed per the manufacturer's guidelines.

D. Fusible Polyvinyl Chloride Sweeps or Bends:

1. Fusible PVC sweeps or bends shall conform to the same sizing convention, diameter, dimensional tolerances, and pressure class of the pipe that they are joining together.

2. Fusible PVC sweeps or bends shall be manufactured from the same fusible PVC pipe being used for the installation and shall have at least 2 feet of straight section on either end of the sweep or bend to allow for fusion of the sweep to the pipe installation.

E. Standard fusible PVC sweep or bend angles shall not be greater than 22.5 degrees and shall be used in nominal diameters ranging from 4 inch through 16 inch.

F. Sleeve-Type Couplings:

1. Sleeve-type mechanical couplings shall be manufactured for use with PVC pressure pipe and may be restrained or unrestrained as indicated in the construction documents. Sleeve-type couplings shall be rated at the same or greater pressure carrying capacity as the pipe itself.

G. Expansion and Flexible Couplings:

1. Expansion-type mechanical couplings shall be manufactured for use with PVC pipe and may be restrained or unrestrained as indicated in the construction documents.

2. Expansion-type mechanical couplings shall be rated at the same or greater pressure carrying capacity as the pipe itself.

H. Connection Hardware:

1. Bolts and nuts for buried service shall be made of non-corrosive, high-strength, low-alloy steel having the characteristics specified in ANSI/AWWA C111/A21.11, regardless of any other protective coating.

2.07 CONNECTIONS FOR GRAVITY SANITARY SEWER AND NON-PRESSURE APPLICATIONS

A. The following connections are to be used in conjunction with tie-ins to other non-pressure, gravity sewer piping and/or structures, and shall be as indicated in the construction documents.

1. PVC Gasketed, Push-On Couplings:

a. Acceptable couplings for joining fusible PVC pipe to other sections of fusible PVC pipe or other sections of PVC pipe shall include gasketed PVC, push-on type couplings as indicated in the construction documents.

b. PVC gasketed, push-on fittings and/or restraint hardware must be installed per the manufacturer's guidelines.

B. Fusible Polyvinyl Chloride Sweeps or Bends:

1. Fusible PVC sweeps or bends shall conform to the same sizing convention, diameter, dimensional tolerances, and pressure class of the pipe that they are joining together.\

2. Fusible PVC sweeps or bends shall be manufactured from the same fusible PVC pipe being used for the installation and shall have at least 2 feet of straight section on either end of the sweep or bend to allow for fusion of the sweep to the pipe installation.

3. Standard fusible PVC sweep or bend angles shall not be greater than 22.5 degrees and shall be used in nominal diameters ranging from 4 inch through 16 inch.

C. Sleeve-Type Couplings:

1. Sleeve-type mechanical couplings shall be manufactured for use with PVC pipe and may be restrained or unrestrained as indicated in the construction documents.

D. Expansion And Flexible Couplings:

1. Expansion-type mechanical couplings shall be manufactured for use with PVC pipe and may be restrained or unrestrained as indicated in the construction documents.

E. Connection Hardware:

1. Bolts and nuts for buried service shall be made of non-corrosive, high-strength, low-alloy steel having the characteristics specified in

ANSI/AWWA C111/A21.11, regardless of any other protective coating.

F. Connection to Sanitary Sewer Manholes and Structures:

1. Fusible PVC pipe shall be connected to manholes and other structures to provide a leak-free, properly graded flow into or out of the manhole or structure.

2. Connections to existing manholes and structures shall be as indicated in the construction documents.

   a. For a cored or drilled opening provide a flexible, watertight connection that meets and/or exceeds ASTM C923.

   b. For a knockout opening, provide a watertight connection (waterstop or other method) meeting the material requirements of ASTM C923 that is securely attached to the pipe with stainless steel bands or other means.

   c. Grout opening in manhole wall with non-shrink grout. Pour concrete collar around pipe and outside manhole opening. Provide flexible pipe joint or flexible connector within 2' of collar.

3. Connections to a new manhole or structure shall be as indicated in the construction documents.

   a. A flexible, watertight gasket per ASTM C 923 shall be cast integrally with riser section(s) for all precast manhole and structures.

   b. Drop connections shall be required where shown on drawings.

   c. Grout internal joint space with non-shrink grout

2.08 DRILLING SYSTEM EQUIPMENT

A. General:

1. The directional drilling equipment, as a minimum, shall consist of a directional drilling rig of sufficient capacity to perform the bore(s) and pull-back of the pipe(s), a drilling fluid mixing & delivery system of sufficient capacity to successfully complete the crossing, a guidance system to accurately guide boring operations, and trained and competent personnel to operate the system.

2. All equipment shall be in good, safe operating condition with sufficient supplies, materials, and spare parts on hand to maintain the system in good working order for the duration of this project.

3. All required equipment shall be included in the emergency and contingency plan as submitted per these specifications.

B. Drilling Rig:

1. The directional drilling machine shall consist of a hydraulically powered system to rotate, push, and pull drill pipe while delivering a pressurized fluid mixture to a drill head.

2. The machine shall be anchored to withstand the pulling, pushing and rotating forces required to complete the project.

3. The drilling rig hydraulic system shall be of sufficient pressure and volume to power drilling operations. The hydraulic system shall be free from leaks.

4. The drilling rig shall have a system to monitor pull-back hydraulic pressure during pull-back operations.

C. Drill Head**:**

1. The horizontal directional drilling equipment shall produce a stable fluid lined tunnel with the use of a steer-able drill head and any subsequent pre-reaming heads.

2. The system must be able to control the depth and direction of the drilling operation.

3. Drill head shall contain all necessary cutters and fluid jets for the operation and shall be of the appropriate design for the ground medium being drilled.

D. Drilling Fluid System:

1. Drilling Fluid (Drilling Mud):

a. Drilling fluid shall be composed of clean water and the appropriate additive(s) for the fluid to be used.

b. Water shall be from a clean source and shall meet the mixing requirements of the mixture manufacturer(s).

c. The water and additives shall be mixed thoroughly to assure the absence of any clumps or clods. No hazardous additives may be used.

d. Drilling fluid shall be maintained at a viscosity sufficient to suspend cuttings and maintain the integrity of bore wall(s).

e. Drilling fluid shall be disposed of off-site in accordance with local, state, and federal requirements and/or permit conditions.

f. No additional chemicals or polymer surfactants shall be allowed to be added to the drilling fluid unless they have been submitted per this specification.

2. Mixing System:

a. A drilling fluid mixing system shall be of sufficient size to mix and deliver drilling fluid for the project.

b. The mixing system shall be able to ensure thorough mixing of the drilling fluid. The drilling fluid reservoir tank shall be sized for adequate storage of the fluid.

c. The mixing system shall continually agitate the drilling fluid during drilling operations.

3. Drilling Fluid Delivery and Recovery System

a. The drilling fluid pumping system shall have a minimum capacity to supply drilling fluid in accordance with the drilling equipment pull-back rating at a constant required pressure.

b. The delivery system shall have filters or other appropriate in-line equipment to prevent solids from being pumped into the drill pipe.

c. Used drilling fluid and drilling fluid spilled during drilling operations shall be contained and properly disposed of.

d. The use of spill containment measures shall be maintained around drill rigs, drilling fluid mixing system, entry and exit pits and drilling fluid recycling system (if used) to prevent spills into the surrounding environment. Pumps, vacuum truck(s), and/or storage of sufficient size shall be in place to contain excess drilling fluid.

e. A closed loop drilling fluid system and a drilling fluid cleaning system should be used to whatever extent practical, depending upon project size and conditions.

f. Under no circumstances shall drilling fluid that has escaped containment be reused in the drilling system.

4. Drilling Control System:

   a. Calibration of the electronic detection and control system shall be verified prior to the start of the bore.

   b. The drilling head shall be remotely steer-able by means of an electronic or magnetic detection system.

   c. The drilling head location shall be monitored in three dimensions:

   d. Offset from the baseline,

   e. Distance along the baseline, and

   f. Depth of cover.

5. Point of rotation of the head shall also be monitored.

6. For gravity application and on-grade drilling, sonde/beacon, or approved equipment applicable for grade increments of 1/10th of one percent shall be used.

2.09 PIPE PULL HEADS

A. Pipe pull heads shall be utilized that employ a positive through-bolt design assuring a smooth wall against the pipe cross-section at all times.

B. Pipe pull heads shall be specifically designed for use with fusible PVC pipe and shall be as recommended by the pipe supplier.

2.10 PIPE ROLLERS

A. Pipe rollers, if required, shall be of sufficient size to fully support the weight of the pipe during handling and pullback operations.

B. A sufficient quantity of rollers and spacing, per the pipe supplier's guidelines shall be used to assure adequate support and excessive sagging of the product pipe.

PART 3 - EXECUTION

3.01 DELIVERY AND OFF-LOADING

A. All pipes shall be bundled or packaged in such a manner as to provide adequate protection of the ends during transportation to the site. Any pipe damaged in shipment shall be replaced as directed by the OWNER or ENGINEER.

B. Each pipe shipment should be inspected prior to unloading to see if the load has shifted or otherwise been damaged. Notify OWNER or ENGINEER immediately if more than immaterial damage is found. Each pipe shipment should be checked for quantity and proper pipe size, color, and type.

C. Pipe should be loaded, off-loaded, and otherwise handled in accordance with AWWA M23, and all of the pipe supplier's guidelines shall be followed.

D. Off-loading devices such as chains, wire rope, chokers, or other pipe handling implements that may scratch, nick, cut, or gouge the pipe are strictly prohibited.

E. During removal and handling, be sure that the pipe does not strike anything. Significant impact could cause damage, particularly during cold weather.

F. If appropriate unloading equipment is not available, pipe may be unloaded by removing individual pieces. Care should be taken to ensure that pipe is not dropped or damaged. Pipe should be carefully lowered, not dropped, from trucks.

3.02 HANDLING AND STORAGE

A. Any length of pipe showing a crack, or which has received a blow that may have caused an incident fracture, even though no such fracture can be seen, shall be marked as rejected and removed at once from the work. Damaged areas, or possible areas of damage may be removed by cutting out and removing the suspected incident fracture area. Limits of the acceptable length of pipe shall be determined by the OWNER or ENGINEER.

B. Any scratch or gouge greater than 10% of the wall thickness will be considered significant and can be rejected unless determined acceptable by the OWNER or ENGINEER.

C. Pipe lengths should be stored and placed on level ground. Pipe should be stored at the job site in the unit packaging provided by the manufacturer. Caution should be exercised to avoid compression, damage, or deformation to the ends of the pipe. The interior of the pipe, as well as all end surfaces, should be kept free from dirt and foreign matter.

D. Pipe shall be handled and supported with the use of woven fiber pipe slings or approved equal. Care shall be exercised when handling the pipe to not cut, gouge, scratch or otherwise abrade the piping in any way.

E. If pipe is to be stored for periods of 1 year or longer, the pipe should be shaded or otherwise shielded from direct sunlight. Covering of the pipe which allows for temperature build-up is strictly prohibited. Pipe should be covered with an opaque material while permitting adequate air circulation above and around

the pipe as required to prevent excess heat accumulation.

F. Pipe shall be stored and stacked per the pipe supplier's guidelines.

3.03 FUSION PROCESS

A. General:

1. Fusible PVC pipe will be handled in a safe and non-destructive manner before, during, and after the fusion process and in accordance with this specification and pipe supplier's guidelines.

2. Fusible PVC pipe will be fused by qualified fusion technicians, as documented by the pipe supplier.

3. Each fusion joint shall be recorded and logged by an electronic monitoring device (data logger) affixed to the fusion machine.

4. Only appropriately sized and outfitted fusion machines that have been approved by the pipe supplier shall be used for the fusion process. Fusion machines must incorporate the following properties, including the following elements:

B. Heat Plate:

1. Heat plates shall be in good condition with no deep gouges or scratches. Plates shall be clean and free of any debris or contamination.

2. Heater controls shall function properly; cord and plug shall be in good condition.

3. The appropriately sized heat plate shall be capable of maintaining a uniform and consistent heat profile and temperature for the size of pipe being fused, per the pipe supplier's guidelines.

4. Carriage:

Carriage shall travel smoothly with no binding at less than 50 psi. Jaws shall be in good condition with proper inserts for the pipe size being fused. Insert pins shall be installed with no interference to carriage travel.

C. General Machine:

1. Overview of machine body shall yield no obvious defects, missing parts, or potential safety issues during fusion.

D. Data Logging Device:

1. The current version of the pipe supplier's recommended and compatible software shall be used.

2. Datalogging device operations and maintenance manual shall be with the unit at all times.

4. If fusing for extended periods of time, an independent 110V power source shall be available to extend battery life.

E. Other equipment specifically required for the fusion process shall include the following:

F. Pipe rollers shall be used for support of pipe to either side of the machine

G. A weather protection canopy that allows full machine motion of the heat plate, fusion assembly and carriage shall be provided for fusion in inclement and /or windy weather.

H. Fusion machine operations and maintenance manual shall be kept with the fusion machine at all times.

I. Facing blades specifically designed for cutting fusible PVC pipe shall be used.

J. Joint Recording:

1. Each fusion joint shall be recorded and logged by an electronic monitoring device (data logger) connected to the fusion machine.

2. The fusion data logging and joint report shall be generated by software developed specifically for the butt-fusion of thermoplastic pipe.

3. The software shall register and/or record the parameters required by the pipe supplier and these specifications.

4. Data not logged by the data logger shall be logged manually and be included in the Fusion Technician's joint report.

3.04 DRILLING OPERATIONS

A. General:

1. Bore path and alignment are as indicated in the contract documents.

2. The path of the bore may be modified based on field and equipment conditions.

3. Entry and exit locations and control-point elevations shall be maintained as indicated in the contract documents.

4. Bend radii shown in the contract documents are minimum allowable radii and shall not be reduced.

B. Location and Protection of Underground Utilities:

1. Correct location of all underground utilities that may impact the HDD installation is the responsibility of the CONTRACTOR, regardless of any locations shown on the drawings or previous surveys completed.

2. Utility location and notification services shall be contacted by the CONTRACTOR prior to the start of construction.

3. All existing lines and underground utilities shall be positively identified, including exposing those facilities that are located within an envelope of possible impact of HDD installation as determined for the project specific site conditions.

4. It is the CONTRACTOR and HDD system operator's responsibility to determine this envelope of safe offset from existing utilities.

5. This will include, but is not limited to, soil conditions and layering, utility proximity and material, HDD system and equipment, and foreign subsurface material.

C. Site Location Preparation:

1. Work site as indicated on drawings shall be graded or filled to provide a level working area. No alterations beyond what is required for operations are to be made

D. CONTRACTOR shall confine all activities to designated work areas.

E. Drilling Layout and Tolerances:

1. The drill path shall be accurately surveyed with entry and exit areas placed in the appropriate locations within the areas indicated on drawings.

2. If using a magnetic guidance system, drill path will be surveyed for any surface geomagnetic variations or anomalies.

3. Instrumentation shall be provided and maintained at all times that accurately locates the pilot hole, measures drill-string axial and torsional loads and measures drilling fluid discharge rate and pressure.

4. Entry and exit areas shall be drilled so as not to exceed the bending limitations of the pipe as recommended by the pipe supplier.

F. Pilot Hole Bore:

1. Pilot hole shall be drilled along bore path. In the event that the pilot bore does deviate from the bore path, it may require contractor to pull-back and re-drill from the location along bore path before the deviation.

2. The CONTRACTOR shall limit curvature in any direction to reduce force on the pipe during pull-back. The minimum radius of curvature shall be no less than that specified by the pipe supplier and as indicated on the drawings.

G. Reaming:

1. After successfully completing the pilot hole, the bore hole shall be reamed to a diameter which meets the requirements of the pipe being installed. The following table is offered as an estimated guide:

Nominal Pipe Diameter	**Bore Hole Diameter**
< 8 inches	Pipe Dia. + 4 inches
8 inches to 24 inches	Pipe Dia. X 1.5
> 24 inches	Pipe Dia. + 12 inches

2. Multiple reaming passes shall be used at the discretion of the CONTRACTOR and shall conform to this specification.

3. In the event of a drilling fluid fracture, returns loss or other loss of drilling fluid, the CONTRACTOR shall be responsible for restoring any damaged property to original condition and cleaning up the area in the vicinity of the damage or loss. PIPE PULL-BACK AND INSERTION

H. Pipe shall be fused prior to insertion, if the site and conditions allow, into one continuous length.

I. CONTRACTOR shall handle the pipe in a manner that will not over-stress the pipe prior to insertion. Vertical and horizontal curves shall be limited so that the pipe does not bend past the pipe supplier's minimum allowable bend radius, buckle, or otherwise become damaged. Damaged portions of the pipe shall be removed and replaced.

J. The pipe entry area shall be graded as needed to provide support for the pipe and to allow free movement into the bore hole.

1. The pipe shall be guided into the bore hole to avoid deformation of, or damage to, the pipe.

2. The fusible PVC pipe may be continuously or partially supported on rollers or other OWNER and ENGINEER approved friction decreasing implement during joining and insertion, as long as the pipe is not over-stressed or critically abraded prior to, or during installation.

3. A swivel shall be used between the reaming head and the fusible PVC pipe to minimize torsion stress on the pipe assembly.

K. Buoyancy modification shall be at the sole discretion of the CONTRACTOR and shall not exceed the pipe supplier's guidelines in regard to maximum pull force or minimum bend radius of the pipe. Damage caused by buoyancy modifications shall be the responsibility of the CONTRACTOR.

L. Once pull-back operations have commenced, the operation shall continue without interruption until the pipe is completely pulled through the bore hole.

M. The pipe shall be installed in a manner that does not cause upheaval, settlement, cracking, or movement and distortion of surface features. Any damages caused by the CONTRACTOR's operations shall be corrected by the CONTRACTOR.

3.05 INSTALLATION CLEANUP

A. Following the installation, the project site shall be returned to a condition equal to or better than the pre-construction condition of the site. All excavations will be backfilled and compacted per the construction documents and jurisdictional standards. All pavement and hardscape shall be repaired per applicable jurisdictional standards, excess materials shall be removed from the site, and disturbed areas shall be re-landscaped. All drilling fluid shall be properly disposed of per these specifications and all applicable jurisdictional laws.

B. CONTRACTOR shall verify that all utilities, structures, and surface features in the project area are sound.

3.06 PREPARATION PRIOR TO MAKING CONNECTIONS INTO EXISTING PIPING SYSTEMS

A. Approximate locations for existing piping systems are shown in the construction documents. Prior to making connections into existing piping systems, the CONTRACTOR shall:

1. Field verify location, size, piping material and piping system of the existing pipe.

2. Obtain all required fittings, which may include saddles, sleeve type couplings, flanges, tees, or others as shown in the construction documents.

3. Have installed all temporary pumps and/or pipes in accordance with established connection plans.

B. Unless otherwise approved, new piping systems shall be completely assembled and successfully tested prior to making connections into existing pipe systems.

3.07 PIPE SYSTEM CONNECTIONS

A. Pipe connections shall be installed per applicable standards and regulations, as well as per the connection manufacturer's guidelines and as indicated in the construction documents. Pipe connections to structures shall be installed per applicable standards and regulations, as well as per the connection manufacturer's guidelines.

3.08 TAPPING FOR POTABLE AND NON-POTABLE WATER APPLICATIONS

A. Tapping shall be performed using standard tapping saddles designed for use on PVC piping in accordance with AWWA C605. Tapping shall be performed only with use of tap saddles or sleeves. NO DIRECT TAPPING WILL BE PERMITTED. Tapping shall be performed in accordance with the applicable sections for Saddle Tapping per Uni-Pub-8.

B. All connections requiring a larger diameter than that recommended by the pipe supplier, shall be made with a pipe connection as specified and indicated on the drawings.

C. Equipment used for tapping shall be made specifically for tapping PVC pipe:

1. Tapping bits shall be slotted "shell" style cutters, specifically made for PVC pipe. 'Hole saws' made for cutting wood, steel, ductile iron, or other materials are strictly prohibited.

2. Manually operated or power operated drilling machines may be used.

D. Taps may be performed while the pipeline is filled with water and under pressure ('wet' tap), or when the pipeline is not filled with water and not under pressure ('dry' tap).

3.09 TESTING

A. Testing shall comply with all applicable jurisdictional building codes, statutes, standards, regulations, and laws.

B. Hydrostatic Testing and Leakage Testing for Pressure Piping:

1. Hydrostatic and leakage testing for piping systems that contain mechanical jointing as well as fused PVC jointing shall comply with AWWA C605.

2. Unless agreed to or otherwise designated by the owner or engineer, for a simultaneous hydrostatic and leakage test following installation, a pressure equal to 150% of working pressure at point of test, but not less than 125% of normal working pressure at highest elevation shall be applied. The duration of the pressure test shall be for two (2) hours.

3. If hydrostatic testing and leakage testing are performed at separate times, follow procedures as outlined in AWWA C605.

4. In preparation for pressure testing the following parameters must be followed:

a. All air must be vented from the pipeline prior to pressurization.

b. This may be accomplished with the use of the air relief valves or corporation stop valves, vent piping in the testing hardware or end caps, or any other method which adequately allows air to escape the pipeline at all high points.

c. Venting may also be accomplished by ‘flushing’ the pipeline in accordance with the parameters and procedures as described in AWWA C605.

d. The pipeline must be fully restrained prior to pressurization.

1) This includes complete installation of all mechanical restraints per the restraint manufacturer’s guidelines, whether permanent or temporary to the final installation.

2) This also includes the installation and curing of any and all required thrust blocking.

3) All appurtenances included in the pressure test, including valves, blow-offs, and air-relief valves shall be checked for proper installation and restraint prior to the beginning of the test.

e. Temporary pipeline alignments that are being tested, such as those that are partially installed in their permanent location shall be configured to minimize the amount of potentially trapped air in the pipeline.

C. Leakage Testing for Non-Pressure Piping

1. Gravity sanitary sewers that contain mechanical jointing in addition to fused PVC joints may need to be tested for excessive leakage.

2. Gravity sanitary sewer leakage testing may include appropriate water or low-pressure air testing. The leakage outward or inward (exfiltration or infiltration) shall not exceed 25 gallons per inch of pipe diameter per mile per day for any section of the system. An exfiltration or infiltration test shall be performed with a minimum positive head of two feet. The air test, if used, shall be conducted in accordance with one of the following Standards:

   a. ASTM F1417

   b. UNI-B-6

3. The testing method selected shall properly consider the existing groundwater elevations during the test.

D. Deflection Testing for Non-Pressure Piping:

1. After completion of the backfill, the ENGINEER or OWNER may require that a deflection test be performed.

2. Deflection tests should be conducted using a go/no-go mandrel.

3. The mandrels outside dimension shall be sized to permit no more than 7.5 percent deflection.

4. The percent deflection shall be established from the base inside diameter of the pipe.

5. If the internal beading of the joints for the pipe is not required to be removed, the mandrel shall account for this clearance as well.

6. The mandrel shall be approved by the OWNER or ENGINEER prior to use.

E. Lines that permit safe entry may allow other deflection test options, such as direct measurements.

F. Disinfection of the Pipeline for Potable Water Piping:

1. After installation, the pipeline, having passed all required testing, shall be disinfected prior to being put into service.

2. Unless otherwise directed by the OWNER or ENGINEER, the pipeline will be disinfected per AWWA C651.

G. Partial Testing:

1. Segments of the pipe may be tested separately in accordance with standard testing procedure, as approved by the OWNER and ENGINEER.

END OF SECTION OF 15075

SECTION 15101
VALVES AND ACCESSORIES

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. The CONTRACTOR shall furnish all labor, materials, equipment, and incidentals required and install complete and ready for operation and test all buried and non-buried valves as shown on the Drawings and as specified herein.

1.02 SUBMITTALS

A. Submit materials required to establish compliance with these Specifications in accordance with Section 01300. Submittals shall include the following:

1. Certified drawings showing all important details of construction and dimensions.

2. Descriptive literature, bulletins and/or catalogs of the equipment.

3. The total weight of each item.

4. A complete bill of materials.

5. Additional submittal data, where noted with individual pieces of equipment.

B. Test Reports:

1. Provide certified hydrostatic test data, per Manufacturers standard procedure or MSS-SP-61 for all valves.

C. Certificates:

1. For each valve specified to be manufactured, tested and/or installed in accordance with AWWA and other standards, submit an affidavit of compliance with the appropriate standards, including certified results of required tests and certification of proper installation.

D. Manufacturer’s Installation and Application Data

E. Operating and Maintenance Data:

1. Operating and maintenance instructions shall be furnished to the ENGINEER. The instructions shall be prepared specifically for this

installation and shall include all required cuts, drawings, equipment lists, descriptions and other information required to instruct operating and maintenance personnel unfamiliar with such equipment.

1.03 REFERENCE STANDARDS

A. American Society for Testing and Materials (ASTM):

1. ASTM A48 - Specification for Gray Iron Castings.

2. ASTM A126 - Specification for Gray Iron Castings for Valves, Flanges and Pipe Fittings.

3. ASTM A159 - Specification for Automotive Gray Iron Castings.

4. ASTM A240 - Standard Specification for Heat-Resisting Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels.

5. ASTM A276 - Standard Specification for Stainless and Heat-Resisting Steel Bars and Shapes.

6. ASTM A436 - Specification for Austenitic Gray Iron Castings.

7. ASTM A536 - Specification for Ductile Iron Castings.

8. ASTM B30 - Specification for Copper-Base Alloys in Ingot Form.

9. ASTM B62 - Standard Specification for Composition Bronze or Ounce Metal Castings

B. American Water Works Association (AWWA):

1. AWWA C111 - Rubber-Gasket Joints for Ductile-Iron and Gray-Iron Pressure Pipe and Fittings.

2. AWWA C500 - Gate Valves, 3-inch Through 48-inch NPS, for Water and Sewage Systems

3. AWWA C509 - Resilient-Seated Gate Valves, 3-inch Through 12-inch NPS, for Water and Sewage Systems

4. AWWA C511 - Reduced Pressure Principal Backflow Prevention Assembly

5. AWWA C540 - Power-Actuating Devices for Valves and Sluice Gates
AWWA C550 - Protective Interior Coatings for Valves and Hydrants

6. AWWA C800 - Underground Service Line Valves and Fittings

7. AWWA C515 – Resilient Seated Valves for 14-inch and Larger

C. American National Standards Institute (ANSI):

1. ANSI B2.1 - Specifications, Dimensions, Gauging for Taper and Straight Pipe Threads (except dry seals).

2. ANSI B16.1 - Cast Iron Pipe Flange and Flanged Fittings Class 25, 125, 250 and 800

3. ANSI B16.10 - Face-to-Face and End-to-End Dimensions of Valves

D. American Iron and Steel Institute (AISI).

E. Manufacturer's Standardization Society of the Valve and Fittings Industry (MSS):

1. MSS-SP-61 - Pressure Testing of Steel Valves.

2. MSS-SP-70 - Cast Iron Gate Valves, Flanged and Threaded Ends.

3. MSS-SP-78 - Cast Iron Plug Valves, Flanged and Threaded Ends.

4. MSS-SP-80 - Bronze Gate, Globe, Angle and Check Valves.

5. MSS-SP-82 - Valve Pressure Testing Methods

6. MSS-SP-98 - Protective Epoxy Coatings for Interior of Valves and Hydrants.

F. National Electrical Manufacturers Association (NEMA).

G. Underwriters Laboratories (UL).

H. Factory Mutual Insurance (FM).

I. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

1.04 QUALITY ASSURANCE

A. Qualifications:

1. Valves and appurtenances shall be products of well-established firms who are fully experienced, minimum 10 years, reputable and qualified in the manufacture of the particular equipment to be furnished.

2. The equipment shall be designed, constructed, and installed in accordance with the best practices and methods and shall comply with these Specifications as applicable.

3. All units of the same type shall be the product of one Manufacturer.

B. Certifications:

1. The Manufacturer's shall furnish an affidavit of compliance with Standards referred to herein as specified in paragraph 1.03C.

2. Refer to Part 3 for testing required for certain items in addition to that required by referenced standards.

C. Provide the services of a qualified and factory-trained service representative of the Manufacturer to provide operational and maintenance instruction, for a one- day, 8-hour period for:

1. Valve motor operators.

2. Valve hydraulic operators.

3. Valve pneumatic operators.

4. Pressure regulating valves.

5. Air release, air and vacuum valves.

D. Inspection of the units may also be made by the ENGINEER or other representative of the OWNER after delivery. The equipment shall be subject to rejection at any due to failure to meet any of the Specification requirements, even though submittal data may have been accepted previously. Equipment rejected after delivery shall be marked for identification and shall be removed from the job site at once.

1.05 SYSTEM DESCRIPTION

A. All the equipment and materials specified herein is intended to be standard for use in controlling the flow of wastewater, sludges, reclaimed water, potable water, air, or chemicals, depending on the individual systems, as noted on the Drawings.

B. Valves, appurtenances, and miscellaneous items shall be installed as shown on the Drawings and as specified, so as to form complete workable systems.

C. Unless otherwise noted all powered valve operators shall have:

1. Valves smaller than 8 inches: electric operators 120-volt, single phase, 60 Hz.

2. Valves larger than 8 inches: electric operators 480-volt, 3 phase, 60 Hz.

3. Solenoid valves: 120-volt, single phase, 60 hz, NEMA 4 enclosure, continuous duty Class F coils and manual operator.

4. See other paragraphs for additional requirements.

D. Packing and Shipping:

1. Care shall be taken in loading, transporting, and unloading to prevent injury to the valves, appurtenances, or coatings. Equipment shall not be dropped. All valves and appurtenances shall be examined before installation and no piece shall be installed which is found to be defective. Any damage to the coatings shall be repaired as acceptable to the ENGINEER.

2. Prior to shipping, the ends of all valves shall be acceptably covered to prevent entry of foreign material. Covers shall remain in place until after installation and connecting piping is completed.

   a. All valves 3-inch and larger shall be shipped and stored on site until time of use with wood or plywood covers on each valve end.

   b. Valves smaller than 3-inch shall be shipped and stored as above except that heavy cardboard covers may be used on the openings.

   c. Rising stems and exposed stem valves shall be coated with a protective oil film which shall be maintained until the valve is installed and put into use.

   d. Any corrosion in evidence at the time of acceptance by the OWNER shall be removed, or the valve shall be removed and replaced.

E. Storage and Protection:

1. Special care shall be taken to prevent plastic and similar brittle items from being directly exposed to the sun, or exposed to extremes in temperature, to prevent deformation. See the individual piping specifications and Manufacturer’s information for further requirements.

1.06 MAINTENANCE

A. Special tools and the Manufacturer's standard spare parts, if required for normal operation and maintenance, shall be supplied with equipment.

B. Provide all special tools required for normal maintenance.

C. Tools shall be packaged in a steel case, clearly and indelibly marked on the exterior to indicate equipment for which tools are intended.

D. Provide to the OWNER a list of all spare and replacement parts with individual prices and location where they are available.

E. Prices shall remain in effect for a period of not less than one year after start-up and final acceptance.

PART 2 - PRODUCTS

2.01 MATERIALS AND EQUIPMENT - GENERAL

A. Nameplates, provisions for temporary pressure gages, protection against electrolysis and anchor bolts are required.

B. The use of a Manufacturer's name and/or model or catalog number is for the purpose of establishing the standard of quality and general configuration desired.

C. Valves and appurtenances shall be of the size shown on the Drawings or as noted and as far as possible equipment of the same type shall be identical and from one Manufacturer.

D. Valves and appurtenances shall have the name of the maker, nominal size, flow directional arrows, working pressure for which they are designed, and standard referenced, cast in raised letters or indelibly marked upon some appropriate part of the body.

E. Unless otherwise noted, items shall have a minimum working pressure of 150 psi or be of the same working pressure as the pipe they connect to, whichever is higher and suitable for the pressures noted where they are installed.

F. Joints, size, and material - unless otherwise noted or required by the ENGINEER:

1. Except where noted, all joints referred to herein shall be of the same type, nominal diameter, material and with a minimum rating equal to the pipe or fittings they are connected to.

2. Valves and appurtenances shall be of the same nominal diameter as the pipe or fittings they are connected to.

3. All valves exposed to view, or in vaults shall have 4-inch and larger flanged ends.

G. Provide all special adaptors as required to ensure compatibility between valves, appurtenances, and adjacent pipe.

H. Valves and actuators located outdoors but not within a building; within maximum 2 feet above liquid; in vaults; or where otherwise noted shall be especially designed for submerged service where water may completely submerge the valve and operator. All other units shall be as a minimum weather tight.

2.02 VALVE ACTUATORS - GENERAL

A. The valve Manufacturer shall supply and integrally, rigidly mount all actuators, including any type of manual or powered actuators, on valves at the factory. The valves and their individual actuators shall be shipped as a unit.

B. The actuating nut for deeper valves shall be extended to come up to 4-foot-depth below finished grade.

C. Unless otherwise noted, valves shall be manually actuated; non-buried valves shall have an operating wheel, handle or lever mounted on the operator; buried valves and those with operating nuts shall have a non-rising stem with an AWWA 2-inch nut. At least two tee handles shall be provided for all operating nuts.

D. Except as otherwise shown on the Drawings or specified herein, all valves 3-inch diameter or larger, with the valve center line located 7 feet or more above the operating floor, shall be provided with chain wheel operators complete with chain guides and hot dipped galvanized steel chain, which loop within 4 feet of the operating floor.

E. All actuators shall be capable of moving the valve from the full open to full close position and in reverse and holding the valve at any position part way between full open or closed.

F. Each operating device shall have cast on it the word “OPEN” and an arrow indicating the direction of operation.

G. Floor boxes for operating nuts recessed in concrete shall be standard cast iron type, cast-in-place, with fastening top by Clow or approved equal.

H. Stem guides shall be of the adjustable wall bracket type, bronze brushed, with maximum spacing of 10 feet as manufactured by Clow, Rodney Hunt, or approved equal. Extended operating nuts and/or stems shall have universal joints and pin couplings, if longer than 10 feet and a rating of at least five times the maximum operating torque. Stem adaptors shall be provided.

I. Where required by the installation, or as specified, provide the following: extended stem; floor stand and handwheel; position indicator and etched or cast arrow to show direction of rotation to open the valve; resilient seal around stem penetration of slab.

2.03 GATE VALVES (3-INCH AND LARGER)

A. General Requirements:

1. Unless otherwise specified below, these requirements shall apply to all gate valves.

2. Gate valves shall be manufactured by **AVK Brand Valves** or approved equal.

3. Gate valves shall meet the requirements of AWWA C500 and AWWA C509 as applicable to the type of valve specified.

4. Buried and submerged valves shall be furnished with mechanical joints and stainless-steel hardware, non-rising stem design.

5. Exposed valves shall be furnished with Class 125 flanged ends and hand wheel; provide valves with outside screw and yoke.

6. All-metal valves shall be manufactured of ASTM A536, Ductile Iron, with bronze mounting design.

7. Rising stem valves shall be sealed with adjustable and replaceable packing; valve design must permit packing replacement under operating system pressures with only moderate leakage.

8. Non-rising stem valves shall use a double O-ring stem seal, except that packing shall be used where geared operators are required.

9. Except as otherwise specified, valves shall be rated at the working water pressures provided in the table below:

VALVE SIZE	**PRESSURE (PSIG)**
3-inch to 12-inch	250

14-inch to 20-inch	250
24-inch and greater	250

10. All valve bodies shall be hydrostatically tested to at least twice the rated working water pressure. In addition, valves shall be seat-tested, bi-directional at the rated working pressure, with seat leakage not to exceed one fluid ounce per inch of valve diameter per hour. Provide certificates of testing.

11. Flanged valves to have face-to-face dimensions per ANSI B16.1 and flanges per ANAI B16.10.

12. All bonnet and packing gland bolts shall be zinc or cadmium electroplated steel; packing gland bolts shall have bronze nuts.

13. Provide geared operator and chain wheel, chain, and chain guides for valves with handwheel centerline more than 7 feet above operating level.

14. All valves shall be marked per AWWA Standards, including name of Manufacturer, valve size and working pressure and year of manufacture.

15. Unless otherwise indicated, valves 12-inch and smaller shall be capable of installation in the vertical or horizontal position, sealing in both directions at the rated pressure.

16. Valve operation shall be counterclockwise for potable water. Provide permanent label showing “OPEN” and arrows.

17. Resilient seated valves shall be coated, interior and exterior, with fusion bonded epoxy per AWWA C550.

18. Valves shall not be placed in handicapped ramps.

B. Valve Requirements:

1. Double Disc (NOT USED)

2. Double Revolving Disc (NOT USED)

3. Solid Wedge (NOT USED)

4. Resilient Seated:

a. Conform to AWWA C509. Also, UL and FM approved.

b. Internal and external epoxy coating of valve body, including

bonnet, per AWWA C550.

c. Gate shall be encapsulated with synthetic rubber. It shall be bonded and vulcanized in accordance with ASTM B429 Method B.

d. No recesses in valve body.

C. Buried Valves:

1. Conform to the requirements above, except mechanical joint bell ends per AWWA C111. The valve shall be mechanically restrained. All exposed valve hardware (nuts, bolts, washers, etc.) including bonnet, bonnet cover, stuffing box, gear adaptor and joints shall be Type 304 stainless steel.

2. Non-rising stem design, double o-ring seals for non-geared valves and shall incorporate packing for geared valves.

3. Provide valve box as detailed in Section 2.04 – Valve Boxes below, 2-inch operating nut and extension stem and stem cover.

D. Tracer Wire:

1. A 12-gauge tracer wire shall be connected for service to the main waterline tracer wire.

2. The 12-gauge tracer wire shall be stripped, wrapped, and taped to valve box with pipe wrap tape that is UPC approved, completely covering wire and vertically wrapped around gate valve and valve box ending at ½-inch hole in concrete, next to valve box, as indicated on Gate Valve detail of the construction drawings.

E. Tapping Valves and Sleeves:

1. Tapping valves shall comply with the same requirements as resilient seated gate valves or double revolving disc gate valves except they shall have the flanged end and port opening modified for tapping service. Valves shall be capable of passing a full nominal sized cutter without damage to the valve. The tapping sleeve shall be gray cast iron or ductile iron mechanical joint type with the outlet flange conforming to MSS-SP- 60.

2. All water valves, 4-inch and larger, shall be iron body gates, bronze trim, flanged ends, O.S. & Y. pattern, solid wedge, rising spindle, Jenkins No. 651, or Hammond 1R-1140.

2.04 VALVE BOXES

A. Valve boxes shall be provided for all buried valves.

B. Valve boxes shall be placed on a 6-inch-thick concrete pad made with two #3 rebars at 6 inches off center both ways for structural stability (a total of four #3 rebars per valve box construction).

C. All exposed edges of concrete pad shall be chamfered to ½ inch.

D. Valve boxes shall be 24-inch long by 24-inch wide (square) with a 2,500-psi concrete minimum rating.

E. Valve boxes shall include ½-inch hole placed in the concrete next to valve box (see drawings for detail of placement).

F. Valve boxes shall include an adjustable 3-inch diameter bronze disc cover, marked “WATER,” centered directly in the middle of the valve box with the center of the disc being 12 inches from any edge (see drawings for detail of placement).

G. All existing and proposed valve boxes shall be adjusted to finished grade as established in field.

H. PVC extensions shall not be used on valve box installation.

2.05 INSULATING FITTINGS

A. Fittings shall be of type to provide control of electrolysis and equal to “Dielectric” as manufactured by Watts Regulator Co. or approved equal.

2.06 SURFACE PREPARATION AND SHOP COATINGS

A. Notwithstanding any of these Specifications, all coatings, and lubricants in contact with non-potable water shall be certified as acceptable for use with that fluid.

B. In case of a conflict, the requirements of this Section govern.

C. If the Manufacturer’s requirement is not to require finished coating on any interior surfaces, then Manufacturer shall so state and no interior finish coating will be required, if acceptable to the ENGINEER.

D. The exterior surface of various parts of valves, operators, floor-stands, and miscellaneous piping shall be thoroughly cleaned of all scale, dirt, grease, or other foreign matter and thereafter one shop coat of an approved rust-inhibitive primer such as Inertol Primer No. 621 shall be applied in accordance with the instructions of the paint Manufacturer or other primer

compatible with the finish coat provided.

E. Unless otherwise noted, interior ferrous surfaces of all valves shall be given a shop finish of an asphalt varnish conforming to AWWA C509, (except mounting faces/surfaces) or epoxy AWWA C550 with a minimum thickness of 4 mil.

F. Ferrous surfaces obviously not to be painted shall be given a shop coat of grease or other suitable rust-resistant coating.

G. Mounting surfaces shall be especially coated with a rust preventative.

H. Special care shall be taken to protect uncoated items and plastic items, especially from environmental damage.

2.07 FACTORY INSPECTION, TESTING AND CORRECTION OF DEFICIENCIES

A. Factory inspection, testing and correction of deficiencies shall be done in accordance with the referenced Standards and as noted herein.

B. Refer to Part 1 of this Section, especially for required submission of test data to the ENGINEER.

PART 3 - EXECUTION

3.01 INSTALLATION - GENERAL

A. All valves and appurtenances shall be installed per the Manufacturer's instructions in the locations shown, true to alignment and rigidly supported.

B. Any damage to the above items shall be repaired to the satisfaction of the ENGINEER before they are installed.

C. Install all brackets, extension rods, guides, the various types of operators and appurtenances as shown on the Drawings, or otherwise required.

D. Before setting these items, the CONTRACTOR shall check all Drawings and figures which have a direct bearing on their location.

E. The CONTRACTOR shall be responsible for the proper location of valves and appurtenances during the construction of the Work.

F. All materials shall be carefully inspected for defects in construction and materials. All debris and foreign material shall be cleaned out of openings, etc.

G. All valve flange covers shall remain in place until connected piping is in place.

H. All operating mechanisms shall be operated to check their proper functioning and all nuts and bolts checked for tightness.

I. Valves and other equipment which do not operate easily, or are otherwise defective, shall be repaired or replaced at no additional cost to the OWNER.

J. Where installation is covered by a Referenced Standard, installation shall be in accordance with that Standard, except as herein modified, and the CONTRACTOR shall certify such. Also note additional requirements in other parts of this Specification.

K. Unless otherwise noted, joints for valves and appurtenances shall be made up utilizing the same procedures as specified under the applicable type connecting pipe joint and all valves and other items shall be installed in the proper position as recommended by the Manufacturer.

L. CONTRACTOR shall be responsible for verifying Manufacturer's torquing requirements for all valves.

3.02 INSTALLATION OF MANUAL OPERATIONAL DEVICES

A. Unless otherwise noted, all operational devices shall be installed with the units of the factory, as shown on the Drawings or as acceptable to the ENGINEER to allow accessibility to operate and maintain the item and to prevent interference with other piping, valves and appurtenances.

B. Floor boxes, valve boxes, extension stems, and low floor stands shall be installed vertically centered over the operating nut, with couplings as required and the elevation of the box top shall be adjusted to conform with the elevation of the finished floor surface or grade at the completion of the Contract.

C. Boxes and stem guides shall be adequately supported during concrete pouring to maintain vertical alignment.

3.03 INSPECTION, TESTING AND CORRECTION OF DEFICIENCIES

A. Take care not to over pressure valves or appurtenances during pipe testing.

B. If any unit proves to be defective, it shall be replaced or repaired to the satisfaction of the ENGINEER.

C. Functional Test:

1. Prior to plant start-up, all items shall be inspected for proper alignment, quite operation, proper connection, and satisfactory performance.

2. All units shall be operated continuously while connected to the attached piping for at least 8 hours, without vibration, jamming, leakage, or overheating and perform the specified function.

D. The various pipelines in which the valves and appurtenances are to be installed are specified to be field tested.

E. During these tests, any defective valve or appurtenance shall be adjusted, removed, and replaced, or otherwise made acceptable to the ENGINEER.

F. Various regulating valves, strainers, or other appurtenances shall be tested to demonstrate their conformance with the specified operational capabilities and any deficiencies shall be corrected or the device replaced or otherwise made acceptable to the ENGINEER.

3.04 IDENTIFICATION OF VALVES

A. All valves shall be designated by distinguishing numbers and/or letters on required chart(s) and/or diagram(s).

B. The CONTRACTOR shall install approved brass tags for all designated items with numbers and/or letters on the tags corresponding to those on the chart(s) and/or diagram(s).

C. Each valve identification tag to be minimum 19-gauge polished brass: 2-inch diameter.

D. Each tag to designate appropriate service (1/4 inch stamped black-filled letters) and appropriate valve number (1/2 inch stamped black-filled number).

E. Tags shall be securely fastened to valves with approved stainless-steel screws or rivets, or brass jack chain, in a manner to permit easy reading.

F. CONTRACTOR shall prepare piping flow diagrams (or re-use those on the contract plans) indicating valve numbers, service, normal position, etc., of each valve.

G. Diagrams shall be mounted on an ornamental iron frame with hinged plexiglass face for wall mounting. Four frames with plexiglass are required.

H. The requirements for valve identification specified above applies equally to all valves installed under this and under other sections of these specifications.

3.05 CLEANING

A. All items (including valve interiors) shall be cleaned prior to installation, testing,disinfection, and final acceptance.

3.06 DISINFECTION

A. Disinfection of valves and appurtenances shall be in accordance with AWWA Requirements.

3.07 SETTING VALVES AND BOXES

A. Valves and valve boxes as specified in the preceding paragraphs shall be installed where shown on the drawings unless otherwise directed.

B. Valves shall be set plumb with the base of the valve box centered over the valve and resting on compacted backfill.

C. The top section of the box shall be set to allow equal movement above and below finished grade.

D. After being correctly positioned, fill shall be carefully tamped around the valve box for a distance of 4 feet on all sides of the box.

E. In paved areas, top of the cover shall be flush with the finished paving.

F. In off-street areas, the cover shall be set 1-inch above existing grade unless otherwise directed by the ENGINEER and a concrete pad shall be poured around the top of the box as shown in the standard details.

END OF SECTION 15101



ATTACHMENT 1

BID FORMS

(REQUIRED FOR SUBMITTAL WITH BIDS)

BID FORM ITB NO: 2023-02

This proposal of_____, hereinafter called "BIDDER," organized and existing under the laws of the State of_____ doing business as (Insert "a corporation" or "a partnership" or "an individual" as applicable) _____ is hereby submitted to the City of Parker.

In compliance with the ADVERTISEMENT FOR BIDS, BIDDER hereby proposes to rehabilitate the water system at certain locations within the City of Parker as identified in the Instruction to Bidders of this Contract Document and Construction Drawings, as described in this BID, complete in every detail. Please see BID-FORM page 2 to complete BID FORM in detail.

BID should include all applicable taxes, shipping charges and fees as applicable.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any other competitor.

The Unit Contract Price is:

_____($_____)

(Words)

submitted by:

_____

Name of BIDDER Submitting This BID

BID Prepared By:_____

SEAL: (If BID is by Corporation)

_____

Name of Individual Who Prepared This BID

Contact Email: _____

Address:_____

Phone:_____

Signature of Authorized Representative of BIDDER:

_____Date:_____

BID FORM (PLEASE COMPLETE)					
Bid Item #	**Description**	**Qty**	**Unit**	**Cost**	**Total**
1.	Mobilization/Demobilization	1	LS		
2.	Bonds and Insurance	1	LS		
3.	Erosion Control	1	LS		
4.	Maintenance of Traffic	1	LS		
5.	Layout and As-Builts by PLS	1	LS		
6.	Testing and Flushing	1	LS		
7.	4-Inch PVC Water Main Replacement Piping and Appurtenances	1,030	LF		
8.	6-Inch PVC Water Main Piping Replacement and Appurtenances	5,910	LF		
9.	8-Inch PVC Water Main Piping Replacement and Appurtenances	25,130	LF		
10.	8-Inch FPVC Directional Bore	1,100	LF		
11.	Fire Hydrant Assemblies and Appurtenances	58	EA		
12.*	Other Site Improvements	1	LS		
13.	Restoration	1	LS		
				Total	

Notes:

* Other Site Improvements include but not limited to removing and replacing concrete sidewalks, concrete driveways, gravel driveways, asphalt driveways/roadways as depicted on the Contract Drawings where piping was replaced by saw-cuts. This material will include asphalt, roadway base and subbase materials as well as seeding or sodding in areas where construction disturbed landscape, in accordance with the contract documents. This bid item includes any additional improvement noted on the Contract Drawings that has not been indicated through Bid Items 1 through 10 above.

BID BOND

BY THIS BOND, we _____ as Principal and _____, a corporation, as Surety, are bound to the City of Parker, Florida, as OWNER, in the sum of $_____ for the payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally. THE CONDITION of this bond is such that:

1. The Principal has submitted to the OWNER a certain BID dated _____ _____.

2. If said BID shall be rejected, or, if said BID shall be accepted and the Principal shall execute and deliver a Contract and furnish bonds for the faithful performances of work and for the payment of all persons performing labor and furnishing materials in connection therewith and shall fulfill all other aspects created by the acceptance of said BID, then this obligation shall be void. Otherwise, this bond shall remain in full force and effect with it being expressly understood and agreed that the liability of the Surety and for any and all claims hereunder shall, in no event, exceed the amount of this obligation. This Surety, for value received, hereby stipulates, and agrees that the obligations of said Surety and this bond shall, in no way, be impaired or affected by any extension of time within which the OWNER may accept such BID; and Surety hereby waives notice of any such extension. Signed, sealed, and delivered in three counterparts on CORPORATE PRINCIPAL

By: _____

Attest: _____

Its: _____

Seal: _____

Acknowledged and subscribed on _____, before the undersigned authority by _____, as the _____ of the Corporation named as _____ Principal and with due authorization of the Corporation.

Notary Public

SURETY

By:_____

Attest: _____

Countersigned: By:_____

Seal:

Attorney-in-Fact, State of Florida

ADDENDUM ACKNOWLEDGEMENT

I acknowledge receipt of the following addenda:

ADDENDUM NO._____DATED _____

ADDENDUM NO._____DATED _____

ADDENDUM NO._____DATED _____

ADDENDUM NO._____DATED _____

ADDENDUM NO._____DATED _____

Name of BIDDER: _____

Authorized Signature: _____

Printed Name: _____

Title:_____Date: _____

It is the responsibility of the BIDDER to ensure that they have received addenda if issued.

Call (850) 215-1285 or email Mandy O'Regan, Anchor Consulting Engineering and Inspection, Inc. (OWNER's Representative), moregan@anchorcei.com prior to submitting your BID to ensure that you have received all issued addenda.

ANTI-COLLUSION CLAUSE

BIDDER certifies that his/her response is made without prior understanding, agreement or connection with any Corporation, Firm or person submitting a response for the same services and is in all respects fair and without collusion or fraud.

Name of Firm: _____

Authorized Signature: _____

Printed Name: _____

Title:_____ Date: _____

CONFLICT OF INTEREST DISCLOSURE FORM

For purposes of determining any possible conflict of interest, all BIDDERs, must disclose if any City Council Member(s), employee(s), elected officials(s), or any of its agencies is also an owner, corporate officer, agency, employee, etc., of their BIDDER's firm.

Indicate either "yes" (a City employee, elected official, or agency is also associated with your firm), or "no" for no conflict of interest.

If yes, give person(s) name(s) and position(s) with your firm.

YES_____ NO _____

NAME(S) **POSITION(S)**

_____

_____

_____

_____

_____

_____

Name of BIDDER's firm: _____

Authorized Signature: _____

Printed Name: _____

Title:_____ Date: _____

IDENTICAL TIE BIDS/DRUG FREE WORKPLACE

Preference shall be given to businesses with drug-free workplace programs. Whenever two or more submittals, which are equal with respect to price, quality, and service, are received by the OWNER for the procurement of commodities or contractual services, a submittal received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the awarding process. Established procedures for processing tie BIDs will be followed if none of the tied firms have a drug-free workplace program. To have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under BID a copy of the statement specified in subsection (1).

4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under BID, the employees will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than 5 days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in, a drug abuse assistance or rehabilitation program if such is available in the employee's community, by an employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify the following: (Check one and sign in the space provided.)

_____This firm complies fully with the above requirements.

_____This firm does not have a drug free workplace program at this time.\

Name of BIDDER's Firm: _____

Authorized Signature: _____

Printed Name: _____

Title: _____ Date: _____

CERTIFICATION REGARDING DEBARMENT, SUSPENSION,

INELIGIBILITY AND VOLUNTARY EXCLUSION

Contractor Covered Transactions

1. The prospective BIDDER of the Recipient,_____, certifies, by submission of this document, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the Recipient's contractor is unable to certify to the above statement, the prospective BIDDER shall attach an explanation to this form.

Name of BIDDER: _____

Authorized Signature: _____

Printed Name: _____

Title: _____ Date: _____

By: City of Parker

Signature:_____

Name and Title Recipient's Name: _____

44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each BID or offer exceeding $100,000)

The undersigned [BIDDER] certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the Award Documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. Section 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The BIDDER,_____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the contractor understands and agrees that the provisions of 31 U.S.C. Section 3801 *et seq*., apply to this certification and disclosure, if any.

_____
Signature of BIDDER's Authorized Official

_____
Name and Title of BIDDER's Authorized Official Date

CERTIFICATION REGARDING SCRUTINIZED COMPANIES LIST

BIDDER Name: _____

BIDDER FEIN: _____

BIDDER'S AUTHORIZED REPRESENTATIVE NAME AND TIME:

_____

BIDDER'S ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE NUMBER: E-MAIL:

Section 287.135, Florida Statutes prohibits agencies from contracting with companies, for goods or services over $1,000,000, that are participating in a boycott of Israel, are on the Scrutinized Companies that Boycott Israel list, the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or has been engaged in business operations in Cuba or Syria. Both lists are created pursuant to Section 215.473, Florida Statutes.

As the person authorized to sign on behalf of Bidder, I hereby certify that the company identified above in the sector entitled "Respondent Bidder's Name" is not participating in a boycott of Israel, is not listed on the Scrutinized Companies that Boycott Israel List, the Scrutinized Companies with Activities in Sudan List, or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List and has not been engaged in business operations in Cuba or Syria. I understand that pursuant to Section 287.135, Florida Statutes, the submission of false certification may subject company to civil penalties, attorney's fees, and/or costs.

CERTIFIED BY: _____

PRINT NAME AND TITLE: _____

DATE: _____

SUB-CONTRACTORS LIST

As the bidder, I submit a listing of the Sub-Contractors which I shall use to accomplish the Work. Sub-Contractors are listed by name, address, amount of work and item of work. If none, please state so.

Subcontractor Name: _____

Subcontractor Address: _____

Work To Be Performed And $ Amount:_____

Subcontractor Name: _____

Subcontractor Address: _____

Work To Be Performed And $ Amount:_____

Subcontractor Name: _____

Subcontractor Address: _____

Work To Be Performed And $ Amount:_____

Subcontractor Name: _____

Subcontractor Address: _____

Work To Be Performed And $ Amount:_____

Name of BIDDER: _____

Authorized Signature: _____

Printed Name: _____

Title: _____

Date:_____

CERTIFICATE OF COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT

BIDDER acknowledges sole responsibility for complying with the Florida Trench Safety Act (Act). Section 553.60, Florida Statutes. Bidder further acknowledges that included in the various items of its BID and in its Total Lump Sum Bid are costs for complying with the Florida Trench Safety Act. The Bidder further identifies the costs to be summarized below:

Trench Safety Method

Item No.	Trench Safety Method (Description)	Units of Measure (LF, SY)	Quantity	Unit Cost	Extended Cost	Unit Extended
A.						
B.						
C.						
D.						
					Total	**$**

Failure to complete the above may result in your BID being declared nonresponsive. The costs indicated above are provided to comply with the Act and shall not constitute grounds for any additional compensation to that listed for the separate line items of the Bid Form.

Bidder: _____

By: _____

Its: _____

Date: _____

Authorized Signature:

_____



ATTACHMENT 2

CONDITIONS AND REQUIREMENTS

GENERAL TERMS AND CONDITIONS

1. Enough detail is given in the BID to describe the item being BID, although not written, full manufacturer's specifications are implied. Manufacturer's specifications take precedent over information within this BID if any discrepancy exists.

2. Contractor shall use FDOT Road and Bridge Specifications, latest edition, for any roadway, driveway, or sidewalk work detailed in the Construction Drawings.

3. Plans, Drawings, Specifications, Special Provisions, and other documents shall be considered a part of the BID Form whether attached or not.

4. Prospective BIDDERs must be able to show that they can perform each of the various items of Work upon which they BID and that the equipment necessary for the completion of Work is available. The BIDDER shall be licensed as a CONTRACTOR when required by state law. Such license shall be in effect prior to the date and time specified for receipt of BIDs by the OWNER.

5. Should the BIDDER to whom the award of contract was made, fail to execute any of the required and acceptable bonds, the award of contract shall be annulled, and the BID Bond posted by the BIDDER shall be retained by the OWNER, not as penalty, but as liquidated damages. Award will then be given to the next BIDDER selected by the OWNER with a qualified BID.

6. The Work

a. Intent is for the CONTRACTOR to provide for construction, completion in every detail of the Work, furnishing all labor, materials, equipment, tools, transportation, and supplies required to complete the Work in accordance with the Contract Documents.

b. The OWNER's Designated Representative shall have the right to make alterations in the drawings or specifications as considered necessary or desirable during the progress of the Work for satisfactory completion of the Work. No alterations shall be made which will result in a substantial change in the general plan, character, or basic scope of the Work.

c. Upon completion of the Work, before acceptance by the Engineer or Architect of Record and before final payment, the CONTRACTOR shall remove all equipment, surplus, discarded materials, rubbish and temporary structures and shall restore, in an acceptable manner, all property, both public and private, damaged during the performance of the Work.

7. Control of the Work

a. At project completion, the CONTRACTOR shall furnish, on sheets not larger than 24-inches by 36-inches, as-built drawings of utility lines, stormwater pipes, and structures showing any deviation from the plans and specifications that exceed 0.1 feet in vertical elevation and 1 foot in horizontal location and any change to the type of construction material and size. The as-built drawings shall be signed and sealed by a Florida-licensed professional land surveyor or professional engineer.

b. The CONTRACTOR shall take no advantage of any apparent error or omission which he might discover in the drawings or specifications. In the event that an error or omission is discovered by the CONTRACTOR, he shall, within 24 hours of such discovery, notify the OWNER's Designated Representative who shall then make such corrections and interpretations deemed necessary for reflecting the actual spirit, intent, and scope of the drawings and specifications.

c. The OWNER shall have the final say on all questions, difficulties, and disputes, of whatever nature, which may arise relative to the interpretation of the drawings and specifications.

d. The CONTRACTOR shall furnish and set slopes stakes, rough grade stakes and all other stakes necessary for construction of the project.

e. Failure to remove or refusal by the CONTRACTOR to remove defective materials or Work or make necessary repairs to damaged Work shall be cause for the OWNER's Designated Representative to make the necessary corrections at the expense of the CONTRACTOR with such monies being deducted from the contract amount or charged against the bonds.

f. The CONTRACTOR shall notify the OWNER's Designated Representative when the project is substantially complete. If the OWNER's Designated Representative determines the project is substantially complete, a "Certificate of Substantial Completion" will be issued by the OWNER.

g. The CONTRACTOR shall maintain all Work in first-class condition until it has been completed as a whole and accepted by the OWNER's Designated Representative. The CONTRACTOR shall be responsible for the security

and protection of all materials used in the project until a "Notice of Completion" is issued by the OWNERs.

h. Any written claim for compensation due to delays, additional, or extra Work shall include the following:

1) For delay claims, provide a critical path schedule showing the delay is due to a controlling item of Work as well as the early start, late start, early finish, late finish, and the critical paths.

2) A detailed factual statement providing dates, locations, and items of Work affected in each claim.

3) The date on which actions or conditions resulting in the claim became evident.

4) All pertinent documents and substance of any material oral communications relating to the claim and the name of the persons making the oral communications.

5) The written claim shall identify the provisions of the Agreement which support the claim along with a detailed explanation as to why these provisions support the claim.

6) A detailed breakdown of compensation sought for labor expenses, additional material, and supplies, listing of each piece of equipment and cost, any direct and indirect damages, and all documentation in support thereof.

7) Equipment rental rates that are based on Blue Book Rental rates.

i. The OWNER will not compensate the CONTRACTOR for any delays for any reason unless 5 days (excluding Saturdays, Sundays, and holidays) have elapsed from the start of Work stoppage. The first day of any claims shall be on day six of the Work stoppage. This shall apply to each Work stoppage.

j. The OWNER expects the CONTRACTOR to use forces and equipment on any item of Work that can be completed during the delay. The CONTRACTOR's claim must show the delay is due to the controlling item of Work as shown on the critical path method schedule. After 5 workdays if the OWNER deems the delay claim to be valid, the CONTRACTOR's claim

shall only be for labor, equipment and materials that are delayed due to the controlling Work item.

If the OWNER's Representative Engineer determines the CONTRACTOR forces and equipment can be used on other Work items during the delay, no compensation will be given for these forces and equipment.

k. Unless otherwise stated in the plans or specifications, the term "install" shown in the plans and specifications shall be interpreted by the CONTRACTOR to mean the same as "furnish and install", which means the CONTRACTOR shall provide all materials, equipment, and labor to completely install the item shown in the plans or specifications.

8. Material Control

a. Only materials conforming to the requirements and intent of the drawings and spe5cifications will be used and all such materials not specifically identified in the plans and specifications will be approved by the Engineer or Architect of Record prior to use to perform the Work. Reference in the contract documents to a proprietary device, product, material, or fixture to establish a quality standard is not intended to limit competition. The CONTRACTOR may use any proprietary device, product, material, or fixture that in the Engineer of Record's judgment is equal, for the purpose intended.

b. The CONTRACTOR shall ensure that OWNER personnel have entry at all times to the construction site in order to inspect and evaluate any or all materials used for performing the Work. The OWNER's Designated Representative shall have the right to sample and test any or all materials used in performing the Work. Copies of any tests accomplished by the OWNER's Designated Representative will be provided to the CONTRACTOR.

c. Materials shall be stored as specified in the Contract Documents or as per the material manufacturer's recommendations. The protection of stored materials shall be the responsibility of the CONTRACTOR and the OWNER shall not be liable for any loss, theft, or damage to stored materials.

d. Any materials found to be defective by the CONTRACTOR or the OWNER's Designated Representative shall be removed from the Work or place of storage at the CONTRACTOR's expense and replaced at the CONTRACTOR's expense.

Failure or refusal by the CONTRACTOR to accomplish the removal and replacement of defective materials from the Work or place of storage shall be grounds for the OWNER's Designated Representative to do same at the expense of the CONTRACTOR and such expense deducted from the contract amount or from the bond.

e. The CONTRACTOR shall, at all times during construction, provide and maintain proper equipment and facilities to promptly remove and properly dispose of all water entering excavations and keep such excavations dry so as to obtain a satisfactory undisturbed sub-grade foundation condition until the fill, structure, or pipes to be built thereon have been completed to such extent that they will not be floated or otherwise damaged by allowing water levels to return to natural elevations.

f. The CONTRACTOR shall furnish all materials and equipment and perform all Work required to install and maintain the drainage systems for handling groundwater and surface water encountered during construction of structures, pipelines, and compacted fills. The CONTRACTOR shall obtain Florida Department of Environmental Protection (FDEP) and Northwest Florida Water Management District (NWFWMD) permits for all dewatering operations. During dewatering operations all engines shall be equipped in a manner to keep pump noise to a minimum. If dewatering is required after 10:00 p.m. near residences and businesses, pump noise shall not create a nuisance to the property owners. The CONTRACTOR is solely responsible for any damages to private or public property caused by CONTRACTOR's dewatering operations. During dewatering operations, the CONTRACTOR shall notify all businesses and residences within a minimum of 300 feet of the dewatering operations to turn off all irrigation pumps. The 300-foot limit is a minimum, and the CONTRACTOR is responsible for any damage to private property, to include, but not limited to loss of plants, burned out pumps, building, pavement, sidewalk, or any other structural settlement, etc. that can be attributed to the dewatering operations. The OWNER will assume no liability nor pay for any claims, arising from the CONTRACTOR's dewatering operation.

9. CONTRACTOR Responsibilities

a. The CONTRACTOR shall relieve the OWNER from any and all claims arising from claims by holders of trademarks, patents or copyrights used or incurred by the CONTRACTOR in performing the Work.

b. The CONTRACTOR shall not permit his equipment to interfere with traffic while such equipment is on or traversing an existing road without coordination with and approval of appropriate officials of the State, County, or City.

c. The CONTRACTOR shall be responsible for all damages arising out of his use of explosives when deemed necessary in the performance of the Work.

d. The CONTRACTOR shall preserve from damage all public and private property along the line of construction and adjacent to the Work. If the CONTRACTOR fails to restore such property, the OWNER's Designated Representative, upon written notification, as deemed necessary, may proceed to repair the damaged property and the cost deducted from the contract sum.

e. Arrangements for utilities to the site shall be accomplished by the CONTRACTOR and in doing same he shall coordinate with the appropriate utilities for the just and proper utilization of any space where construction shall entail the joint use of area under this Work and the utility construction.

f. Final acceptance will not be given, nor will bond be released unless any and all claims against the CONTRACTOR are paid or the CONTRACTOR has otherwise been relieved of the claim.

g. Until acceptance of the Work by the OWNER's Designated Representative, the Work shall be under charge and custody of the CONTRACTOR, and he shall take every precaution against injury or damage to the Work by the action of the elements or from other causes.

10. Prosecution and Progress

a. The CONTRACTOR shall not sublet, sell, transfer, assign or otherwise dispose of the contract or subsequent agreements of the contract without written consent of the OWNER.

b. The CONTRACTOR shall commence Work on or after the Notice to Proceed date and shall provide sufficient resources to ensure completion of the Work within the time limit set forth. Should the CONTRACTOR fail to provide sufficient resources to assure timely progress and if he fails to perform the Work within the specified time, the OWNER shall have ground to claim default.

c. The CONTRACTOR shall schedule his operations to minimize any inconvenience to adjacent businesses or residences. The CONTRACTOR shall take special precautions to restrict his major operations in performing the Work to what is commonly understood to be “normal” or “standard” working hours. Work performed at other periods requires preapproval from the OWNER’s Designated Representative.

d. The CONTRACTOR shall maintain reasonable access at all times to all businesses and private residences and properties adjacent to the construction area or impacted by the construction.

e. The OWNER’s Designated Representative shall make provision for and shall schedule a pre-construction conference with the CONTRACTOR and all concerned parties in attendance.

f. The CONTRACTOR shall provide a detailed schedule to the OWNER within 5 working days after the date of the preconstruction conference. Adherence to the CONTRACTOR’s construction schedule is critical to the residences and businesses impacted by the project. The CONTRACTOR shall give the OWNER 48 hours’ notice of schedule changes and shall submit a new and complete changed schedule. The OWNER will not allow any lane closure or paving operations without 48 hours’ notice. The CONTRACTOR shall give the City Inspector 48 hours’ notice of commencement of all major Work items.

g. The CONTRACTOR shall assure that all supervisory personnel employed by him/her are fully qualified and competent to properly perform the Work in coordination with other trades at the Work and can perform the Work within the specified periods of time.

h. The CONTRACTOR shall maintain a competent superintendent at the site at all times while Work is in progress to act as the CONTRACTOR’s agent. The superintendent shall be capable of properly interpreting the Contract Documents and shall be thoroughly experienced in the type of Work being performed. The superintendent shall have full authority to receive instructions from the OWNER’s Designated Representative and to execute the orders or directions of the OWNER’s Designated Representative, including promptly supplying any materials, tools, equipment, labor, and incidentals that may be required. This superintendent must be at the project site to supervise subcontractors. The superintendent must speak and understand English.

i. The CONTRACTOR shall designate a responsible person who speaks and understands English, and who is available at or reasonably near the worksite on a 24-hour basis, 7 days a week who is the point of contact during emergencies.

j. The OWNER's Designated Representative shall have the authority to suspend the Work, wholly, or in part, for such periods as may be deemed necessary due to unsuitable weather or other conditions considered unfavorable for performance of the Work.

k. The CONTRACTOR may be declared in default for non-progress, by the OWNER's Designated Representative, when the percentage value of dollar Work completed with respect to the total amount of contract is not within 20 percent of the time elapsed versus the total performance period.

l. The CONTRACTOR may subcontract for Work identified in this solicitation. The CONTRACTOR will be the prime service provider and shall be responsible for all Work performed and contract deliverables. The CONTRACTOR's workforce shall be responsible for at least 51 percent of the Work performed and provide an on-site, full-time job supervisor to manage the day-to-day job site operations and subcontractors. Proposed use of subcontractors should be included in the response to this solicitation.

m. All goods and services furnished by the CONTRACTOR, relating to the work described within these Specifications, will be warranted to meet or exceed the specifications contained herein for a minimum for 1 year or as indicated in the Contract Documents, whichever is longer. In the event of a breach, the CONTRACTOR will take all necessary action, at CONTRACTOR's expense, to correct such breach in the most expeditious manner possible.

11. Payments and Acceptance

a. Payment will not be made until the Work invoiced is completed in full. If material or equipment acceptance testing is required, payment will not be made until satisfactory test results as certified by the OWNER's Designated Representative are delivered to the OWNER.

b. The CONTRACTOR shall accept the compensation as provided in the contract as full payment for furnishing all materials and for performing all Work planned under the contract.

c. The contract price shall include all labor, equipment, material, tools, and incidentals required for completing the Work.

d. Subsoil conditions, if presented, must be interpreted within the limits of investigation and the anticipated normal field variances. Claims for unusual conditions or excessive amounts of fill or excavation over original estimates of the Engineer-of-Record or CONTRACTOR shall not be grounds for extra Work clauses or request.

e. To be paid for all quantities paid by the ton, a City Inspector must verify the delivery and receive a load ticket identifying the truck number, material and quantity of material delivered. The CONTRACTOR shall not haul such materials unless the inspector is on-site. If there has been a change in schedule, the OWNER requires 48 hours' notice to schedule inspectors.

f. To be paid for all quantities paid by the truckload, the OWNER must have a truck chart for each truck prior to the truck being used for hauling operations. The CONTRACTOR must provide the truck chart to the City Inspector in sufficient time to allow the OWNER to verify all dimensions and volumes shown on the truck chart. A City Inspector must verify the delivery and receive (if available) a load ticket identifying the truck number, material and quantity of material hauled. The CONTRACTOR shall not haul such materials unless the Inspector is on-site. If there has been a change in schedule, the OWNER requires 48 hours' notice to schedule inspectors.

g. The OWNER's Designated Representative retains the right to cancel portions or expand the scope of Work after a fair and just adjustment is agreed to with the CONTRACTOR.

h. The CONTRACTOR will receive partial payment based upon the amount of Work completed as determined by the OWNER's Designated Representative, to include stored material. The OWNER will withhold retainage in the amount of 10 percent of the total Work completed at the date of the CONTRACTOR's invoice. The CONTRACTOR may reduce the retainage amount as allowed by Florida Statutes.

i. Any partial payments will be subject to withholding by the OWNER's Designated Representative pending any unsatisfied claims brought against the CONTRACTOR for labor or materials.

j. Any partial payments will be subject to withholding by the OWNER's Designated Representative pending any unsatisfied completion or restoration of any assertion for defective or damaged Work or materials.

k. In the event of dispute regarding amounts due to the CONTRACTOR, the OWNER reserves the right, at any time prior to final payment on the Contract, to audit, or cause to be audited, the CONTRACTOR's original records pertaining to the Work.

l. Whenever the Work provided for under the Contract has been completely performed by the CONTRACTOR, and the final inspection and final acceptance has been made, and it is proven to the OWNER's Designated Representative that all claims are satisfied, the final payment, being the difference between the contract amount and summation of all previous payment less any penalties assessed, shall be paid to the CONTRACTOR. Upon final payment the CONTRACTOR shall provide the OWNER's Designated Representative a statement that he has been paid all monies due and that the Work was performed in accordance with the Contract Documents.

m. The payments of subcontractors, material, men, and suppliers shall comply with Section 255.071 of Florida Statutes.

n. Within 5 Working days following each payment to the CONTRACTOR, the CONTRACTOR shall pay respective amounts allowed by the OWNER for all materials, all equipment installed in the Work, all Work performed by subcontractors to the extent of each subcontractor's interest in the CONTRACTOR's amount of payment.

o. On monthly invoices subsequent to the first invoice submitted there shall be a signed "Waiver of Right to Claim Against the Payment Bond (Progress Payment)" indicating that invoices for equipment and material supplied and sub-CONTRACTORs have been paid by the CONTRACTOR.

p. On the final invoice submitted there shall be a signed "Waiver of Right to Claim Against the Payment Bond (Final Payment)" indicating that invoices for equipment and material supplied and subcontractors have been paid by the CONTRACTOR.

q. Date of final payment shall be the commencement of all warranties and guarantees. If the OWNER reasonably determines that the CONTRACTOR or Vendor has breached any of the warranties provided herein, then the CONTRACTOR or Vendor shall perform the necessary Work to comply with its warranties and shall pay to the OWNER its reasonable costs to investigate and then identify the breach of warranty claim.

SUPPLEMENTAL CONDITIONS

FEDERAL REGULATIONS CONTRACT REQUIREMENTS

FEDERAL EMERGENCY MANAGEMENT AGENCY

The supplemental conditions contained in this section are intended to cooperate with, to supplement, and to modify the general conditions and other specifications. In cases of disagreement with any other section of this contract, the Supplemental Conditions shall govern.

Contractor means an entity that receives a contract.

1. GENERAL REQUIREMENTS

The services performed by the awarded CONTRACTOR shall be in compliance with all applicable grantor regulations/requirements, and additional requirements specified in this document. It shall be the awarded CONTRACTOR's responsibility to acquire and utilize the necessary manuals and guidelines that apply to the work required to complete this project.

In general:

a. The CONTRACTOR (including all subcontractors) must insert these contract provisions in each lower tier contracts (e.g., subcontract or sub-agreement).

b. The CONTRACTOR (or subcontractor) must incorporate the applicable requirements of these contract provisions by reference for work done under any purchase orders, rental agreements and other agreements for supplies or services.

c. The prime CONTRACTOR is responsible for compliance with these contract provisions by any subcontractor, lower-tier subcontractor, or service provider.

2. FEDERAL CONTRACT PROVISIONS

a. Conflict of Interest

1) This Contract/Work Order is subject to chapter 112, F.S.

2) The vendor shall disclose the name of any officer, director, employee, or other agent who is also an employee of the State. Grantee shall also disclose the name of any State employee who owns, directly or indirectly, more than a 5 percent interest in the CONTRACTOR's company or its affiliates.

b. **Discriminatory Vendors**

1) No person, on the grounds of race, creed, color, religion, national origin, age, gender, or disability, shall be excluded from participation in; be denied the proceeds or benefits of; or be otherwise subjected to discrimination in performance during the term of the contract.

2) The CONTRACTOR shall disclose if they appear on the discriminatory vendor list. An entity or affiliate placed on the discriminatory vendor list pursuant to section 287.134, F.S. may not:

a) Submit a BID on an agreement to provide any goods or services to a public entity.

b) Submit a BID on an agreement with a public entity for the construction or repair of a public building or public work.

c) Submit BIDs on leases of real property to a public entity.

d) Be awarded or perform work as a consultant under an agreement with any public entity; or transact business with any public entity.

c. **Lobbying:**

1) No funds received pursuant to this Agreement may be expended for lobbying the Federal or State Legislature, the judicial branch, or a federal or state agency.

2) The BIDDER or offeror certifies by signing and submitting this BID, to the best of his or her knowledge and belief, that:

a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the BIDDER or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee

of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

c) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

d) This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure

d. **Record Retention:**

1) The CONTRACTOR shall maintain and retain sufficient records demonstrating its compliance with the terms of the Agreement for a period of at least 5 years after final payment is made and shall allow the OWNER, the State, or its authorized representatives access to

such records for audit purposes upon request.

2) In the event of litigation or settlement of claims arising from the performance of this contract, in which case CONTRACTOR agrees to maintain same until the OWNER, the FEMA Administrator, the Comptroller General of the United States, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related to the litigation or settlement of claims

e. **Diversity:**

1) All contracting and subcontracting opportunities afforded by this solicitation/contract enthusiastically embraces diversity. The award of subcontracts should reflect the full diversity of the citizens of the State of Florida. Firms qualifying under this solicitation are encouraged to submit BIDs. Award of this contract will be conditioned upon satisfying the requirements of this BID specification. These requirements apply to all BIDDERs, including those who qualify as a Minority Business vendor. A list of minority-owned firms that could be offered subcontracting opportunities may be obtained by contacting the Office of Supplier Diversity at (850) 487-0915.

f. **Applicable Laws:**

1) The CONTRACTOR shall comply with all applicable federal, state, and local rules and regulations in providing services to the Consortium.

2) The CONTRACTOR acknowledges that this requirement includes, but is not limited to, compliance with all applicable federal, state, and local health and safety rules and regulations and that FEMA financial assistance may be used to fund the contract. As such, the CONTRACTOR will comply will all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

g. **Administrative, Contractual, or Legal Remedies:**

Unless otherwise provided in this contract, all claims, counterclaims, disputes, and other matters in question between the local government and

the CONTRACTOR, arising out of or relating to this contract, or the breach of it, will be decided by arbitration, if the parties mutually agree, or in a Florida court of competent jurisdiction.

h. **Patents and Data:**

1) No reports, maps, or other documents produced in whole or in part under this contract shall be the subject of an application for copyright by or on behalf of the CONTRACTOR.

2) The grantor agency and the grantee shall possess all rights to invention or discovery, as well as rights in data which may arise as a result of the CONTRACTOR's services.

i. **Clean Air Act and Federal Water Pollution Control Act:**

1) The CONTRACTOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 *et seq*.

2) The CONTRACTOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 *et seq*.

3) The CONTRACTOR agrees to report each violation to the Consortium member and understands and agrees that the OWNER will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency (FEMA), and the appropriate Environmental Protection Agency Regional Office.

4) The CONTRACTOR agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FEMA.

j. **Suspension and Debarment:**

1) This contract is a covered transaction for purposes of 2 C.F.R.pt. 180 and 2 C.F.R. pt. 3000.

2) As such the CONTRACTOR is required to verify that none of the CONTRACTOR, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

3) The CONTRACTOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, Subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

4) This certification is a material representation of fact relied upon by the OWNER.

5) If it is later determined that the CONTRACTOR did not comply with 2 C.F.R. pt. 180, Subpart C and 2 C.F.R. pt. 3000, Subpart C, in addition to remedies available to the Florida Department of Emergency Management, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

6) The BIDDER or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, Subpart C and 2 C.F.R. pt. 3000, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer.

7) The BIDDER or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

8) The CONTRACTOR's debarment and suspension status will be validated by the OWNER at the System for Award Management at www.sam.gov and the State of Florida at: https://www.dms.myflorida.com/business_operations/state_purchasing/vendor_information/convicted_suspended_discriminatory_complaints_vendor_lists

k. **Reporting:**

1) The CONTRACTOR will provide any information required to comply with the grantor agency requirements and regulations pertaining to reporting.

2) It is important that the CONTRACTOR is aware of the reporting requirements of the OWNER, as the Federal or State granting agency may require the CONTRACTOR to provide certain information, documentation, and other reporting in order to satisfy reporting requirements to the granting agency.

l. **Access to Records:**

1) The CONTRACTOR agrees to provide the OWNER, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the CONTRACTOR which are directly pertinent to this Contract for the purposes of making audits, examinations, excerpts, and transcriptions.

2) The CONTRACTOR agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

3) The CONTRACTOR agrees to provide the FEMA Administrator or his authorized representatives' access to construction or other work sites pertaining to the work being completed under the contract.

4) Pursuant to Section 20.055(5), F.S., the CONTRACTOR will cooperate with the State of Florida's Inspector General in any investigation, audit, inspection, review, or hearing.

m. **Energy Efficiency Standards:**

The CONTRACTOR agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

n. **DHS Seal, Logo, and Flags:**

The CONTRACTOR shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre- approval.

o. **No Obligation by Federal Government:**

The Federal Government is not a party to this Contract and is not subject to any obligations or liabilities to the non-Federal entity, CONTRACTOR, or any other party pertaining to any matter resulting from the contract.

p. **Program Fraud and False or Fraudulent Statements or Related Acts:**

The CONTRACTOR acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the CONTRACTOR's actions pertaining to this Contract.

q. **Recovered Materials:**

1) In the performance of this Contract, the CONTRACTOR shall make maximum use of products containing recovered materials that are Environmental Protection Agency (EPA) designated items unless the product cannot be acquired

   a) Competitively within a timeframe providing for compliance with the contract performance schedule.

   b) Meeting contract performance requirements.

   c) At a reasonable price.

2) Information about this requirement is available at EPA's Comprehensive Procurement Guidelines website, http://www.epa.gov/cpg/. The list of EPA-designate items is available at http://www.epa.gov/cpg/products.htm.

r. **Discriminatory Vendors List**:

In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a BID on a Contract to provide any goods or services to a public entity, may not submit a BID on a Contract with a public entity for the construction or repair of a public building or public work, may not submit BIDs on leases of real property to a public entity, may not be awarded or perform work as a CONTRACTOR, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity.

s. **Inspector General Cooperation**:

The Parties agree to comply with Section 20.055(5), Florida Statutes, for the inspector general to have access to any records, data and other information deemed necessary to carry out his or her duties and incorporate into all subcontracts the obligation to comply with Section 20.055(5), Florida Statutes.

t. Contracting with Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms:

1) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

a) Affirmative steps must include:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists.

(2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources.

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises.

(4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises.

(5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and

(6) Requiring the prime CONTRACTOR, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (1) through (5) of this section.

u. Equal Opportunity Clauses:

1) Compliance with Regulations:

The CONTRACTOR shall comply with the Acts and the Regulations relative to Nondiscrimination in federally assisted programs, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2) During the performance of any awarded "federally assisted contracts" the CONTRACTOR agrees as follows:

   a) The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin.

   b) The CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin.

   c) Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment, or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

   d) The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

3) The CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

4) The CONTRACTOR will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the CONTRACTOR's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

5) The CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

6) The CONTRACTOR will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

7) In the event of the CONTRACTOR's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

8) The CONTRACTOR will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor.

9) The CONTRACTOR will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: *Provided, however,* that in the event the CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

v. **Contract Work Hours and Safety Standards Act 40 U.S.C. 3702 and 3704, as Supplemented by Department of Labor Regulations (29 CFR Part 5):**

Compliance with the Contract Work Hours and Safety Standards Act.

1) Overtime requirements.

No CONTRACTOR or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-halftimes the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

2) Violation; liability for unpaid wages; liquidated damages:

a) In the event of any violation of the clause set forth in Paragraph 1 of this section the CONTRACTOR and any subcontractor responsible therefor shall be liable for the unpaid wages.

b) In addition, such CONTRACTOR and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages.

c) Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in Paragraph 1 of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in Paragraph 1 of this section.

3) Withholding for unpaid wages and liquidated damages:

The OWNER shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the CONTRACTOR or subcontractor under any such contract or any other Federal contract with the same prime CONTRACTOR, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime CONTRACTOR, such sums as may be determined to be necessary to satisfy any liabilities of such CONTRACTOR or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in Paragraph 2 of this section.

w. Rights to Inventions Made Under a Contract or Agreement:

If the Federal award meets the definition of ‘‘funding agreement’’ under 37 CFR § 401.2 and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that ‘‘funding agreement,’’ the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, ‘‘Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,’’ and any implementing regulations issued by the awarding agency.

x. Byrd Anti-Lobbying Amendment 31 U.S.C. § 1352 (As Amended):

1) Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended). CONTRACTORs who apply or BID for an award of $100,000 or more shall file the required certification.

2) Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352.

3) Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

INSURANCE REQUIREMENTS

LOSS CONTROL/SAFETY

1. Precaution shall be exercised at all times by the CONTRACTOR for the protection of all persons, including employees, and property. The CONTRACTOR shall be expected to comply with all laws, regulations or ordinances related to safety and health, shall make special effort to detect hazardous conditions and shall take prompt action where loss control/safety measures should reasonably be expected.

2. The OWNER may order work to be stopped if conditions exist that present immediate danger to persons or property. The CONTRACTOR acknowledges that such stoppage will not shift responsibility for any damages from the CONTRACTOR to the OWNER.

DRUG FREE WORKPLACE REQUIREMENTS

All contracts with individuals or organizations that wish to do business with the OWNER, a stipulation will be made in the contract or purchase order that requires CONTRACTORs, subcontractors, vendors, or consultants to have a substance abuse policy. The employees of such CONTRACTORs, subcontractors, vendors, or consultants will be subject to the same rules of conduct and tests as the employees of the City of Parker. In the event of an employee of a supplier of goods or services is found to have violated the Substance Abuse Policy, that employee will be denied access to the OWNER's premises and job sites. In addition, if the violation(s) is/are considered flagrant, or the OWNER is not satisfied with the actions of the CONTRACTOR, subcontractor, vendor, or consultant, the OWNER can exercise its right to bar all of the CONTRACTOR’s, subcontractor's, vendor's, or consultants’ employees from its premises or decline to do business with the CONTRACTOR, subcontractor, vendor, or consultant in the future. All expenses and penalties incurred by a CONTRACTOR, subcontractor, vendor, or consultant as a result of a violation of the OWNER's Substance Abuse Policy shall be borne by the CONTRACTOR, subcontractor, vendor, or consultant.

INSURANCE - BASIC COVERAGES REQUIRED

1. The CONTRACTOR shall procure and maintain the following described insurance, except for coverages specifically waived by the OWNER, on policies and with insurers acceptable to the OWNER.

2. These insurance requirements shall not limit the liability of the CONTRACTOR. All subcontractors are subject to the same coverages and limits as the CONTRACTOR.

3. The OWNER does not represent these types or amounts of insurance to be sufficient or adequate to protect the CONTRACTOR's interests or liabilities but are merely minimums.

4. Except for Workers' Compensation and Professional Liability, the CONTRACTOR's insurance policies shall be endorsed to name the OWNER as an additional insured to the extent of the OWNER's interests arising from this Agreement or Contract or lease.

5. Except for Workers' Compensation, the CONTRACTOR waives its right of recovery against the OWNER, to the extent permitted by its insurance policies.

6. The CONTRACTOR's deductibles/self-insured retentions shall be disclosed to the OWNER and may be disapproved by the OWNER. They shall be reduced or eliminated at the option of the OWNER. The CONTRACTOR is responsible for the amount of any deductible or self-insured retention.

7. Insurance required of the CONTRACTOR or any other insurance of the CONTRACTOR shall be considered primary, and insurance of the OWNER shall be considered excess, as may be applicable to claims which arise out of the Hold Harmless, Payment on Behalf of the OWNER, Insurance, Certificates of Insurance and any Additional Insurance provisions of this Agreement or Contract or lease.

8. WORKERS' COMPENSATION COVERAGE

   The CONTRACTOR shall purchase and maintain Workers' Compensation insurance for all Workers' Compensation obligations imposed by state law and employer's liability limits of at least **$500,000 each accident and $500,000 each employee/$500,000 policy limit for disease**. The CONTRACTOR shall also purchase any other coverages required by law for the benefit of employees. The CONTRACTOR shall provide to the OWNER an Affidavit stating that he/she meets all the requirements of Florida Statute 440.02(14)(d).

9. GENERAL, AUTOMOBILE & EXCESS OR UMBRELLA LIABILITY COVERAGE

   The CONTRACTOR shall purchase and maintain coverage on forms no more restrictive than the latest editions of the Commercial or Comprehensive General Liability and Business Auto policies of the Insurance Services Office. **Minimum limits of $1,000,000 per occurrence** for all liability must be provided, with excess or umbrella insurance making up the difference, if any, between the policy limits of underlying policies (including employers liability required in the Workers'

Compensation Coverage section) and the amount of coverage required.

10. GENERAL LIABILITY COVERAGE Commercial General Liability - Occurrence Form Required

    Coverage A shall include bodily injury and property damage liability for premises, operations, products and completed operations, independent contractors, contractual liability covering this Agreement or Contract or lease, and broad form property damage, and property damage resulting from explosion, collapse or underground (x,c,u) exposures. Coverage B shall include personal injury. Coverage C, medical payments, is not required.

11. PRODUCTS/COMPLETED OPERATIONS

    The CONTRACTOR is required to continue to purchase products and completed operations coverage, at least to satisfy this agreement, contract, or lease, for a minimum of three years beyond the OWNER's acceptance of renovation or construction projects.

12. BUSINESS AUTO LIABILITY COVERAGE

    Business Auto Liability coverage is to include bodily injury and property damage arising out of ownership, maintenance or use of any auto, including owned, non-owned and hired automobiles and employee non-ownership use.

13. EXCESS OR UMBRELLA LIABILITY COVERAGE

    Umbrella Liability insurance is preferred, but an Excess Liability equivalent may be allowed.

    Whichever type of coverage is provided, it shall not be more restrictive than the underlying insurance policy coverages.

14. CERTIFICATES OF INSURANCE

    a. Required insurance shall be documented in Certificates of Insurance which provide that the OWNER shall be notified at least 30 days in advance of cancellation, nonrenewal or adverse change. The Certificate Holder will be addressed as the City of Parker, 1001 Park Street, Florida 32404. All certificates, cancellation, nonrenewal or adverse change notices should be mailed to this address. Each Certificate will address the service being rendered to the OWNER by the CONTRACTOR.

The OWNER shall be named as an Additional Insured, Primary and Non-Contributory for both General Liability and Business Auto Liability with Waiver of subrogation included with respects to both General Liability and Business Auto.

b. New Certificates of Insurance are to be provided to the OWNER at least 15 days after coverage renewals.

c. If requested by the OWNER, the CONTRACTOR shall furnish complete copies of insurance policies, forms, and endorsements.

d. For the Commercial General Liability coverage, the CONTRACTOR shall, at the option of the OWNER, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of the liability coverage.

15. RECEIPT OF INSUFFICIENT CERTIFICATES

Receipt of certificates or other documentation of insurance or policies or copies of policies by the OWNER, or by any of its representatives, which indicate less coverage than required does not constitute a waiver of the CONTRACTOR's obligation to fulfill the insurance requirements herein.

16. ADDITIONAL INSURANCE

If checked below, the OWNER requires the following additional types of insurance.

☒ **Professional Liability/Malpractice/Errors or Omissions Coverage**

The CONTRACTOR shall purchase and maintain professional liability or malpractice or errors or omissions insurance with minimum limits of per occurrence. If a claim is made form of coverage is provided, the retroactive date of coverage shall be no later than _____.

The inception date of claims made coverage unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great duration as available, and with no less coverage and with reinstated aggregate limits, or by requiring that any new policy provide a retroactive date no later than the inception date of claims made coverage.

☐ **Property Coverage for Leases**

The CONTRACTOR shall procure and maintain for the life of the lease, all risk/special perils (including sinkhole) property insurance (or its equivalent) to cover loss resulting from damage to or destruction of the building and personal property/contents. The policy shall cover 100% replacement cost and shall include an agreed value endorsement to waive coinsurance.

☒ **Commercial General Liability Increased General Aggregate Limit (or separate aggregate)**

Because the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit of N/A is required by the OWNER for this Agreement or Contract.

☐ **Liquor Liability**

In anticipation of alcohol being served, the CONTRACTOR shall provide evidence of coverage for liquor liability in an amount equal to the general/umbrella/excess liability coverage. If the general liability insurance covers liquor liability (e.g., host or other coverage), the CONTRACTOR's agent or insurer should provide written documentation to confirm that coverage already applies to this agreement, contract, or lease. If needed coverage is not included in the general/umbrella excess liability policy(ies), the policy(ies) must be endorsed to extend coverage for liquor liability, or a separate policy must be purchased to provide liquor liability coverage in the amount required.

☐ **Owners Protective Liability Coverage**

For renovation or construction contracts, the CONTRACTOR shall provide for the OWNER an OWNER’s protective liability insurance policy (preferably through the CONTRACTOR's insurer) in the name of the OWNER. This is redundant coverage if the OWNER is named as an additional insured in the CONTRACTOR's Commercial General Liability insurance policy. However, this separate policy may be the only source of coverage if the CONTRACTOR's liability coverage limit is used up by other claims.

☒ **Builders Risk Coverage**

Builders Risk insurance is to be purchased to cover subject property for all risks of loss (including theft and sinkhole), subject to a waiver of coinsurance, and covering off- site storage, transit and installation risks as indicated in the Installation Floater and Motor Truck Cargo insurance described hereafter, if such coverages are not separately provided. If flood and/or earthquake risks exist, flood and earthquake insurance are to be purchased.

If there is loss of income, extra expense and/or expediting expense exposure, such coverage is to be purchased. If boiler and machinery risks are involved, boiler and machinery insurance, including coverage for testing, is to be purchased.

The Builders Risk insurance is to be endorsed to cover the interests of all parties, including the OWNER and all contractors and subcontractors. The insurance is to be endorsed to grant permission to occupy.

☐ **Installation Floater Coverage**

Installation Floater insurance is to be purchased when Builder's Risk insurance is inappropriate, or when Builder's Risk insurance will not respond, to cover damage or destruction to renovations, repairs or equipment being installed or otherwise being handled or stored by the CONTRACTOR, including off-site storage, transit, and installation. The amount of coverage should be adequate to provide full replacement value of the property, repairs, additions, or equipment being installed, otherwise being handled, or stored on or off premises. All risks coverage is preferred.

☐ **Motor Truck Cargo Coverage**

If the Installation Floater insurance does not provide transportation coverage, separate Motor Truck Cargo or Transportation insurance is to be provided for materials or equipment transported in the CONTRACTOR's vehicles from place of receipt to building sites or other storage sites. All risks coverage is preferred.

☐ **Contractor's Equipment Coverage**

CONTRACTOR's Equipment insurance is to be purchased to cover loss of equipment and machinery utilized in the performance of work by the contractor. All risks coverage is preferred. The Contract may declare self-insurance for CONTRACTOR equipment.

☐ **Fidelity/Dishonesty/Liability Coverage – Third Party**

Fidelity/Dishonesty/Liability insurance is to be purchased or extended to cover dishonest acts of the Other Party's employees resulting in a loss to decedent, i.e., theft of valuables.

☐ **Fidelity/Dishonesty Coverage for Employer (Contractor)**

Fidelity/Dishonesty insurance is to be purchased to cover dishonest acts of the CONTRACTOR's employees, including but not limited to theft of vehicles, materials, supplies, equipment, tools, etc., especially property necessary to work performed.

☐ **Fidelity/Dishonesty/Liability Coverage for OWNER**

Fidelity/Dishonesty/Liability insurance is to be purchased or extended to cover dishonest acts of the contractor's employees resulting in loss to the OWNER.

☐ **Electronic Data Liability Insurance**

The Other Party shall purchase Electronic Data Liability with limits of

☐ **Garage Liability Coverage**

Garage Liability insurance is to be purchased to cover the CONTRACTOR and its employees for its garage and related operations while in the care, custody, and control of the OWNER's vehicles.

☐ **Garage Keepers' Coverage (Legal Liability Form)**

Garage Keepers' Liability insurance is to be purchased to cover damage or other loss, including comprehensive and collision risks, to the OWNER's vehicles while in the care, custody, and control of the CONTRACTOR. This form of coverage responds on a legal liability basis, and without regard to

legal liability on an excess basis over any other collectible insurance.

☐ **Damage to Premises Rented/Leased to you- (Legal Liability Form)**

Provide property coverage for leased premises due to liability incurred because the insured's negligence results in fire or explosion. Specified limit of liability required.

☐ **Watercraft Liability Coverage**

Because the CONTRACTOR's provision of services involves utilization of watercraft, watercraft liability coverage must be provided to include bodily injury and property damage arising out of ownership, maintenance or use of any watercraft, including owned, non-owned and hired.

Coverage may be provided in the form of an endorsement to the general liability policy, or in the form of a separate policy coverage Watercraft Liability or Protection and Indemnity.

☐ **Aircraft Liability Coverage**

Because the CONTRACTOR's provision of services involves utilization of aircraft, aircraft liability coverage must be provided to include bodily injury and property damage arising out of ownership, maintenance or use of any aircraft, including owned, non-owned and hired.

The minimum limits of coverage shall be per occurrence, Combined Single Limits for Bodily Injury (including passenger liability) and Property Damage.

☐ **Pollution Legal Liability Coverage**

Pollution legal liability insurance is to be purchased to cover pollution and/or environmental legal liability which may arise from this Agreement or Contract.

☐ **United States Longshoremen and Harbor Workers Act Coverage**

The Workers' Compensation policy is to be endorsed to include United States Longshoremen and Harbor Workers' Act Coverage for exposures which may arise from this Agreement or Contract.

☐ **Jones Act Coverage**

The Workers' Compensation policy is to be endorsed to include Jones Act Coverage for exposures which may arise from this Agreement or Contract.



ATTACHMENT 3

CONTRACT FORMS

PUBLIC CONSTRUCTION BOND

Bond No._____(enter bond number)

BY THIS BOND, We_____, as Principal and_____a corporation, as Surety, are bound to the City of Parker, Florida, herein called OWNER, in the sum of $_____ for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the Contract dated _____ between Principal and OWNER for **ITB 2023-02: CITY OF PARKER - WATER SYSTEM IMPROVEMENTS CONSTRUCTION BID NO. DW030721**, the Contract being made a part of this Bond by reference, at the times and in the manner prescribed in the Contract; and
2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the Work provided for in the contract; and
3. Pays OWNER all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that OWNER sustains because of a default by Principal under the contract; and,
4. Performs the guarantee of all Work and materials furnished under the Contract for the time specified in the Contract, then this Bond is void; otherwise, it remains in full force.

Any action instituted by a claimant under this Bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

Any changes in or under the Contract Documents and compliance or noncompliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this bond.

DATED ON_____,

_____
(Name of Principal)

_____
By (As Attorney in Fact) (Name of Surety)

NOTICE OF AWARD

TO: _____

_____

_____

_____

PROJECT DESCRIPTION:

The OWNER has considered the BIDs submitted in response to its advertised **ITB 2023-02: CITY OF PARKER - WATER SYSTEM IMPROVEMENTS CONSTRUCTION BID NO. DW030721**.

All interested parties are hereby notified that the BID submitted by

_____ for the **CITY OF PARKER - WATER SYSTEM IMPROVEMENTS CONSTRUCTION BID NO. DW030721 (ITB 2023-02)** has been accepted for the Work described in the Bid Documents in the amounts of

$_____

As required by the Instruction to Bidders, please execute the Agreement and furnish the required CONTRACTOR's Certificates of Insurance and Construction Bonds within 15 calendar days from the date of this notice.

You are further required to return an acknowledged copy of this Notice of Award to the OWNER with the executed Agreement and required Certificates of Insurance and Bonds within the 10 calendar days.

If you have any questions, please contact Mandy O'Regan, Anchor CEI (OWNER's Representative), moregan@anchorcei.com; (850) 215-1285.

Dated this_____day of_____, 20_____.

City of Parker

By: _____

Name: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged:

By _____

This the_____day of_____, 20___.

Name: _____

Title: _____

NOTICE TO PROCEED

DATE: _____

TO: _____

_____

_____

PROJECT: **CITY OF PARKER ITB 2023-02**
WATER SYSTEM IMPROVEMENTS
CONSTRUCTION BID NO. DW030721

You are hereby notified to commence Work in accordance with the Agreement dated___ _____, 20___, on or before _____, 20___ and you are to complete the Work within ***180*** calendar days. The date of completion of all Work is therefore _____, 20__.

You are required to return an acknowledged copy of this Notice to Proceed to the City of Parker.

BY: **CITY OF PARKER**

_____

Mayor Kelly Date

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged.

_____

CONTRACTOR's Name

This the_____day of_____, 20___.

_____

Signature

By: _____

Type or Print Name

Title: _____

AGREEMENT

This Agreement, dated _____ is between the City of Parker, located at 1001 West Park Avenue, Parker, Florida 32404 ("OWNER") and _____, doing business as a _____ (an individual), or (a partnership), or (a corporation), having a business address of _____ (hereinafter called "CONTRACTOR"). It should be noted that the term CONTRACTOR in this Agreement will apply to the CONTRACTOR awarded each of the individual projects from **ITB 2023-02: CITY OF PARKER - WATER SYSTEM IMPROVEMENTS CONSTRUCTION BID NO. DW030721.**

1. Scope of Work

The OWNER desires to hire CONTRACTOR to provide all necessary labor, supervision, equipment, and supplies for the performance of the work in connection with the construction of **ITB 2023-02: CITY OF PARKER - WATER SYSTEM IMPROVEMENTS CONSTRUCTION BID NO. DW030721** ("Project"), to be located within Parker, in accordance with the Drawings and Specifications prepared by Anchor CEI, Inc. and all other Contract Documents hereafter specified.

The CONTRACTOR shall furnish, at its sole expense, all supervision, labor, equipment, tools, material, and supplies to properly and efficiently perform all of the Work required under the Contract Documents, as defined herein, and shall be solely responsible for the payment of all taxes, permits and license fees, labor fringe benefits, insurance and bond premiums, and all other expenses and costs required to complete such work in accordance with this Agreement (collectively, the "Work").

The OWNER shall award the **CITY OF PARKER - WATER SYSTEM IMPROVEMENTS CONSTRUCTION BID NO. DW030721** project as detailed in the Construction Drawings and as summarized below:

A. Remove and replace ±1,030 linear feet of 4-inch polyvinyl chloride (PVC) pipe and appurtenances.

B. Remove and replace ±5,910 linear feet of 6-inch PVC piping and appurtenances.

C. Remove and replace±25,130 linear feet of 8-inch PVC piping and appurtenances.

D. Remove and replace ±1,100 linear feet of 8-inch fusible PVC directional bore and appurtenances crossing East Highway 98 and for driveways for some properties along East Highway 98.

E. Remove and replace 58 fire hydrants assemblies and appurtenances

F. Perform other site improvements throughout the City of Parker detailed on the Contract Drawings to include, but not be limited to:

1) Removal and replacement of concrete sidewalks.

2) Removal and replacement of concrete driveways.

3) Removal and replacement of gravel driveways.

4) Removal and replacement of asphalt driveways/roads.

5) Restore sites back to pre-construction condition and other and site improvements.

6) Other Site Improvements will also include the material required where piping was replaced by saw-cuts such as asphalt, roadway base and subbase materials as well as seeding or sodding in areas where construction disturbed landscape, in accordance with the contract documents.

2. Contract Documents

The term “Contract Documents” shall have the generally accepted meaning, including but not limited to:

A. **ITB 2023-02: CITY OF PARKER - WATER SYSTEM IMPROVEMENTS CONSTRUCTION BID NO. DW030721**, including but not limited to:

1) Plans and Specifications Package.

2) Bid Form.

3) Bid Bond.

4) Anti-Collusion Clause.

5) Conflict of Interest Disclosure Form.

6) Identical Tie Bids/Drug Free Workplace.

7) Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion.

8) Certification Regarding Lobbying.

9) Certification Regarding Scrutinized Companies List

10) Sub-Contractors List

11) E-Verify Documentation

12) Public Construction Bond (Payment and Performance Bond) and related bond documents.

13) Contractor's response to the ITB.

14) Insurance Requirements.

15) Notice of Award.

16) Notice to Proceed.

17) Agreement.

18) Notice of Contest of Claim Against Payment Bond (if required).

19) Waiver of Right to Claim Against the Payment Bond (Progress Payment).

20) Waiver of Right to Claim Against the Payment Bond (Final Payment).

21) Contract Change Orders.

22) Addenda:

No. __, dated_____, 2023.

No. __, dated_____, 2023.

The Contract Documents also include any written amendments to any of the above signed by the party to be bound by such amendment. The Contract Documents are sometimes referred to herein as the "Agreement."

In the case of any conflict between the provisions of this Agreement and another Contract Document, the following priority for interpretation of those document provisions shall be followed:

a. The provisions of this Agreement shall first prevail.

b. The bid form and accompanying bidder submittals shall be next.

c. The RFP and attachments shall be the final priority.

In the event of a conflict within or between any other document or documents comprising the Contract Documents, the OWNER alone shall be entitled to select the provision which shall apply.

3. Term

This Contract shall commence within 10 calendar days after the date of receipt of the "Notice to Proceed" to CONTRACTOR(s). The CONTRACTOR(s) for each project listed in Item 1 above shall achieve Final Completion of the Work within **180** calendar days of the required commencement date, except to the extent the period for Final Completion is extended pursuant to the terms of the Contract Documents ("Contract Time"). Final Completion of the Work for each project shall be achieved by CONTRACTOR within the time period set forth in the executed Notice to Proceed. The CONTRACTOR agrees to pay the OWNER, liquidated damages, in the sum of $100.00 for each calendar day that expires after the Contract Time for Final Completion.

4. Contract Price

The CONTRACTOR agrees to perform all of the Work described in the Contract Documents and comply with the terms therein for the sum of $_____ as shown in the bid schedule included within the Bid Form, as said amount may be hereafter adjusted pursuant to the terms of the Contract Documents ("Contract Price").

5. Payments

A. Notwithstanding anything contained herein to the contrary, all payments shall be made in accordance with the Florida Prompt Payment Act of the Florida Statute, Chapter 218.70, et seq.

B. CONTRACTOR shall use **AIA G702 – Application for Payment Form** for all pay requests to the OWNER.

C. CONTRACTOR shall submit with the first Application for Payment to the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.), a schedule of values allocated to the various portions of the Work as directly outlined in the CONTRACTOR's Bid Form, prepared in such form, and supported by such data to substantiate its accuracy as the OWNER shall require from time to time. This schedule of values, unless objected to by the OWNER, shall be used as a basis for reviewing the CONTRACTOR's Applications for Payment.

D. CONTRACTOR shall submit an Application for Payment to the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) on or before the 25th of each month, filled out and signed by the CONTRACTOR covering the Work performed since the previous month's Application for Payment. Invoices received after the 25th day of each month shall be considered for payment as part of the next month's Application for Payment.

E. CONTRACTOR's Application for Payment shall be in such form and contain such detail and backup as the OWNER reasonably may require.

F. Payment by the OWNER to the CONTRACTOR of the statement amount shall be made within 25 days after the OWNER's designated representative has certified the Application for Payment and submits to the OWNER.

G. Ten percent (10%) retainage shall be held at the discretion of the OWNER; the 10% retainage shall be paid at the completion of the Work. Provided, however, nothing in this Section shall preclude or limit the OWNER's right to withhold payment as otherwise permitted by the terms of the Contract Documents or as permitted by law. Payments of these monthly invoices shall in no way imply approval or acceptance of the Work.

H. The retainage, at the discretion of the OWNER, may be reduced to 5% once 50% of the work is completed by the CONTRACTOR.

I. Each Application for Payment shall be accompanied by a **"Waiver of Right to Claim Against the Payment Bond (Progress Payment)"** in a form identified in the Contract Documents for all materials, labor, equipment, services, and other bills associated with that portion of the Work payment is being requested in that Application for Payment.

J. Further, each Application for Payment request shall be accompanied by a claim release and waiver in the form approved by the OWNER from all Subcontractors and suppliers evidencing their payment in full through the previous month's Application for Payment.

K. Also, each payment request shall be accompanied by an updated Construction Schedule, a list inventorying all stored materials, a monthly progress status report, and any other document reasonably requested by the OWNER. The OWNER shall not be required to make payment until and unless such releases, documents and information are furnished by the CONTRACTOR.

L. Further, if the CONTRACTOR is withholding any portion of a payment to any Subcontractor or supplier for any labor, services, or materials for which the OWNER has paid CONTRACTOR, the CONTRACTOR agrees to refund such money to the OWNER upon demand by the OWNER.

M. The OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) shall review each Application for Payment submitted by the CONTRACTOR and shall make recommendations to the OWNER as to the proper amounts, if any, which may be owed to the CONTRACTOR thereunder. The OWNER shall have the right to refuse to approve payment amounts, or portions thereof, requested by the CONTRACTOR in an Application for Payment, or rescind any amount previously approved, and the OWNER may withhold any payments otherwise due to the CONTRACTOR under this Agreement or any other agreement between the OWNER and CONTRACTOR, to the extent it is reasonably necessary, to protect the OWNER from any expense, cost, or loss attributable to:

1) Defective or deficient Work not properly remedied in accordance with the terms of the Contract Documents.

2) The filing or reasonable evidence indicating the probable filing of third-party claims against the OWNER attributable to the fault or neglect of CONTRACTOR.

3) The CONTRACTOR's failure to make timely and proper payments to all Subcontractors and suppliers.

4) Reasonable evidence that the remaining Work cannot be completed for the unpaid Contract Price balance.

5) Reasonable evidence indicating that the remaining Work cannot be completed within the remaining Contract Time.

6) The CONTRACTOR's failure to satisfactorily prosecute the Work in accordance with the requirements of the Contract Documents.

7) Any other material breach of the requirements of the Contract Documents by CONTRACTOR.

N. The OWNER shall have the right, but not the obligation, to take any corrective action the OWNER deems appropriate to cure any of the above noted items, at the CONTRACTOR's expense, if such items are not cured by the CONTRACTOR to the OWNER's reasonable satisfaction within 3 days after CONTRACTOR's receipt of written notice from the City.

O. In the event that there is a dispute in the amount of the Application for Payment, then only the disputed amount shall be held until resolved and the undisputed amount shall be paid within the time limits as stated within Section 4 – Payment of this Agreement and the progress of the project shall not be interrupted. Both parties agree that best efforts be made to resolve the disputed amount.

P. The OWNER may reject a payment request, in whole or in part, submitted by the CONTRACTOR if such payment request is not submitted in strict accordance with the requirements of Section 4 – Payments of this Agreement. In such event, the OWNER shall notify the CONTRACTOR in writing within 20 business days after receipt of such Application for Payment that such request for payment, or portion thereof, has been rejected and the reasons for such rejection. If CONTRACTOR resubmits a revised Application for Payment correcting, in the OWNER's unfettered determination, the deficiency specified in the rejection notice, then the OWNER shall pay the CONTRACTOR the corrected portion of the payment request within 10 business days after the date the revised Application for Payment is received and approved by the OWNER.

Q. Prior to Final Completion, the OWNER may use any completed or substantially completed portions of the Work. Such use shall not constitute an acceptance of such portions of the Work.

R. Final Payment - Upon completion and acceptance of the Work, the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) shall issue a certificate attached to the final Application for Payment that states the Work has been fully performed in accordance with the requirements of the Contract Documents and that the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) recommends final payment in the amount reflected in the attached final Application for Payment. The OWNER shall make final payment to CONTRACTOR within 30 days after the Work is finally accepted by the OWNER, provided that CONTRACTOR first, and as an explicit condition precedent to the accrual of CONTRACTOR's right to final payment, shall have furnished the OWNER with a properly executed and notarized final release in the form reasonably required by the OWNER, as well as a duly-executed copy of the surety's consent of release of the Public Construction Bond for final payment and such other documentation that may be required by the Contract Documents, the City.

S. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a full release and waiver of any and all claims by CONTRACTOR against the OWNER arising out of this Agreement or otherwise relating to **one the individual Projects,** except those identified in writing by the CONTRACTOR as unsettled in its final Application for Payment. Any payment, however, final, or otherwise shall not release the CONTRACTOR or its sureties from any obligations under the Contract Documents. Neither the acceptance of the Work nor payment by the OWNER shall be deemed to be a waiver of the OWNER's right to enforce any obligations of the CONTRACTOR hereunder or to the recovery of damages for defective Work not discovered by the City at the time of final inspection.

T. No error or oversight in the making of payment or completion certificates shall relieve the CONTRACTOR from its obligation to do and complete the Work in accordance with the requirements of the Contract Documents.

U. Payments to Subcontractors - The CONTRACTOR shall promptly, but not later than 15 days after receipt of payment from the OWNER, pay all the amount due subcontractors less a retainage of 10 percent (10%). If there

should remain items to be completed, the CONTRACTOR and the OWNER shall list those items required for completion and the CONTRACTOR shall require the retainage of a sum equal to 150% of the estimated cost of completing any unfinished items, provided that said unfinished items are separately listed and the estimated cost of completing any unfinished items likewise separately listed. Thereafter, the CONTRACTOR shall pay to the Subcontractors, monthly the amount retained for each incomplete item after each of said items is completed. Before issuance of final payment without any retainage, the Subcontractor shall submit satisfactory evidence that all payrolls, material bills and other indebtedness connected with each individual Project has been paid or otherwise satisfied, warranty information is complete, as-built markups have been submitted and instruction for the CITY's operating and maintenance personnel is complete. Final payment may be made to certain select Subcontractors whose Work is satisfactorily completed prior to the total completion of the Project but only upon approval of the CITY.

V. Delayed Payments by CITY - If the CITY shall fail to pay the CONTRACTOR within 20 days after the receipt of an approved payment request from the CONTRACTOR, then the CONTRACTOR may, upon 14 additional days advance written notice to the CITY and the OWNER'S designated representative (Anchor Consulting Engineering and Inspection, Inc.) stop the Project until payment of the amount owing has been received, provided that the payment request has been submitted in sufficient detail to comply with the guidelines of the Office of the Clerk of the Circuit Court for Bay County. In the event that there is a dispute in the amount of the pay request, then only the disputed amount shall be held until resolved and the undisputed amount shall be paid within the time limits as stated within this paragraph. If undisputed amounts are timely paid, then the CONTRACTOR shall not stop the Project in any fashion and the progress of the project shall not be interrupted. Both parties agree that best efforts be made to resolve the disputed amount.

W. Payment for Materials and Equipment - Payments will be made for material and equipment not incorporated in the work but delivered and suitably stored at the site (or another location, subject to prior approval and acceptance by the County on each occasion).

6. Independent CONTRACTOR

The CONTRACTOR shall at all times, relevant to this Agreement, be an independent CONTRACTOR and maintain control over and have sole responsibility for CONTRACTOR's employees and other personnel. In no event shall the CONTRACTOR, nor any employees or sub-contractors under it, be considered to be employees, servants, or agents of the City of Parker.

7. Contractor's Personnel

CONTRACTOR's employees and personnel shall be qualified and experienced to perform the portions of the Work to which they have been assigned. CONTRACTOR has the exclusive right to hire and terminate its employees and may transfer or reassign any of its employees to other work of the CONTRACTOR. The direction of the work of CONTRACTOR's employees shall be under the exclusive control of CONTRACTOR. If the OWNER objects to the presence or performance of any employee of CONTRACTOR, CONTRACTOR shall remove such employee from OWNER premises.

8. Cooperation

The CONTRACTOR agrees to perform each phase of the Work at the scheduled time and in the scheduled sequence. The CONTRACTOR will cooperate with the City as requested and specifically allow the City to inspect the performance of the Work of this Agreement.

9. Materials, Supplies, Etc.

CONTRACTOR shall furnish and supply all tools, materials, consumable supplies and equipment, safety devices and equipment, and any special clothing that are required to perform the work of this Agreement and consistent with the requirements of the ITB

10. Direct Purchasing

This Agreement does not include direct purchasing requirements.

11. Records / Audits

The OWNER is a public agency subject to Chapter 119, Florida Statutes. The CONTRACTOR shall comply with Florida's Public Records Law. Specifically, the CONTRACTOR shall:

A. Keep and maintain public records required by the OWNER in order to perform the service.

B. Upon request from the OWNER's custodian of public records, provide the OWNER 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, F.S. 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 Agreement if the CONTRACTOR does not transfer the records to the OWNER.

D. Upon completion of the Agreement, transfer, at no cost to the OWNER, all public records in possession of the CONTRACTOR, or keep and maintain public records required by the OWNER to perform the service. If the CONTRACTOR transfers all public records to the OWNER 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.

E. All records electronically stored must be provided to the OWNER, upon request from the OWNER's custodian of public records in a format that is compatible with the information technology systems of the OWNER.

F. During the term of the Agreement, the CONTRACTOR shall maintain all books, reports, and records in accordance with generally accepted accounting practices and standards for records directly related to this Agreement. The form of all records and reports shall be subject to the approval of the City's Auditor. The CONTRACTOR agrees to make available to the City's Auditor, during normal business hours and in the City, all books of account, reports and records relating to this contract.

12. <u>Public Records Custodian</u>

If the CONTRACTOR has questions regarding the application of Chapter 119, Florida Statues, to the CONTRACTOR's duty to provide public records relating to this contract, contact the City of Parker at 1001 West Park Avenue, Parker, Florida 32404, via phone at (850) 871-4101 or e-mail at tjeffreys@cityofparker.com.

13. Inspector General

The parties agree to comply with s.20.055(5), Florida Statutes, and to incorporate in all subcontracts the obligation to comply with s. 20.055(5), Florida Statutes. "(5) It is the duty of every state officer, employee, agency, special district, board, commission, contractor, and subcontractor to cooperate with the inspector general in any investigation, audit, inspection, review, or hearing pursuant to this section."

14. OWNER Representative

The OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) or another designee assigned by the OWNER has authority to designate the work to be done by CONTRACTOR, to inspect such work, and to resolve questions which arise between the parties. The CONTRACTOR or the CONTRACTOR's designee will deal with the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) on matters relating to the performance of the work. The OWNER and the OWNER's designated representative (Anchor Consulting Engineering and Inspection, Inc.) shall have the authority to stop the work whenever it deems such action necessary to secure the safe and proper performance of the work assignment.

15. Laws, Rules, and Regulations

A. General Laws:

1) CONTRACTOR agrees to comply, at its own expense, with all Federal, State, and local laws, codes, statutes, ordinances, rules, administrative orders, regulations, and requirements applicable to the Project, including but not limited to those dealing with safety (including, but not limited to, the Trench Safety Act, Chapter 553, Florida Statutes).

2) If CONTRACTOR observes that the Contract Documents are at variance therewith, it shall promptly notify the OWNER in writing.

3) The CONTRACTOR shall give all notices required of it by law and shall comply with all Federal, State, and local laws, ordinances, rules, and regulations governing CONTRACTOR's performance of this Agreement and the preservation of public health and safety.

4) Upon request by the OWNER, CONTRACTOR shall provide proof of such compliance to the OWNER.

B. Illegal Alien Labor:

1) The CONTRACTOR shall comply with all provisions State and Federal law regarding the hiring and continued employment of aliens not authorized to work in the United States. CONTRACTOR shall not knowingly employ or contract with an illegal alien to perform Work under this Agreement or enter into an Agreement with a subcontractor that fails to certify to the CONTRACTOR that the subcontractor is in compliance with such laws.

2) The CONTRACTOR agrees that it shall confirm the employment eligibility of all employees through participation in E-Verify or an employment eligibility program approved by the Social Security Administration and will require the same of any subcontractors.

3) The CONTRACTOR shall pay all cost incurred to initiate and sustain the verification programs.

C. Termination for Cause:

Failure of the CONTRACTOR to comply with the provision of this section shall constitute grounds for the OWNER to immediately terminate this Agreement for cause and declare the CONTRACTOR to be non-responsible for bidding or proposing on future contracts for 1 year from the date the City notifies the CONTRACTOR of such non-compliance.

16. Public Entity Crimes Statement

A. A person or affiliate who has been placed on the convicted contractor list following a conviction for a public entity crime may not submit a BID on a contract to provide any goods or services to a public entity, may not submit a BID on a contract with a public entity for the construction or repair of a public building or public work, may not submit BIDs on leases of real property to a public entity, may not be awarded or perform work as a contractor, contractor, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida Statutes, Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted contractor list.

B. By submission of a proposal in response to this document, the BIDDER certifies compliance with the above requirements as stated in Section 287.133, Florida Statutes.

17. <u>E-Verify</u>

A. As a condition precedent to entering into this agreement, and in compliance with Section 448.095, Florida Statute, CONTRACTOR and its subcontractors shall, register with and use the E-Verify system to verify work authorization status of all employees

B. CONTRACTOR shall require each of its subcontractors to provide CONTRACTOR with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. CONTRACTOR shall maintain a copy of the subcontractor's affidavit as part of and pursuant to the records retention requirements of this agreement.

C. The OWNER, CONTRACTOR, or any subcontractor who has a good faith belief that a person or entity with which it is contracting has knowingly violated Section 448.09(1), Fla. Stat. or the provisions of this section shall terminate the contract with the person or entity.

D. A contract terminated under the provisions of this section is not a breach of contract and may not be considered such. Any contract termination under the provisions of this section may be challenged pursuant to Section 448.095(2)(d), Florida Statute. CONTRACTOR acknowledges that upon termination of this agreement by the OWNER for a violation of this section by CONTRACTOR, CONTRACTOR may not be awarded a public contract for at least 1 year. CONTRACTOR further acknowledges that CONTRACTOR is liable for any additional costs incurred by the OWNER as a result of termination of any contract for a violation of this section.

E. Subcontracts. CONTRACTOR or subcontractor shall insert in any subcontracts the clauses set forth in this section, including this subsection, requiring the subcontractors to include these clauses in any lower tier subcontracts. CONTRACTOR shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this section.

18. Scrutinized Companies

A. The CONTRACTOR must certify that the company is not participating in a boycott of Israel.

B. The CONTRACTOR must also certify that CONTRACTOR is not on the Scrutinized Companies that Boycott Israel list, not on the Scrutinized Companies with Activities in Sudan List, and not on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or has been engaged in business operations in Cuba or Syria. Subject to limited exceptions provided in state law, the OWNER will not contract for the provision of goods or services with any scrutinized company referred to above.

C. The CONTRACTOR must submit the certification attached to this Agreement. Submitting a false certification shall be deemed a material breach of contract.

D. The OWENR shall provide notice, in writing, to the CONTRACTOR of the OWNER's determination concerning the false certification.

E. The CONTRACTOR shall have 5 days from receipt of notice to refute the false certification allegation. If such false certification is discovered during the active contract term, the CONTRACTOR shall have 90 days following receipt of the notice to respond in writing and demonstrate that the determination of false certification was made in error.

F. If the CONTRACTOR does not demonstrate that the OWNER's determination of false certification was made in error then the OWNER shall have the right to terminate the contract and seek civil remedies pursuant to Section 287.135, Florida Statutes, as amended from time to time.

19. Warranty

A. The AWARDED BIDDER/CONTRACTOR shall fully warrant all workmanship and material, to meet or exceed the performance of the obligations under this Agreement and specifications, for a period of 1 year after completion of the work.

B. The warranty period begins at the date of final payment for the project. The CONTRACTOR shall expeditiously repair and remedy any defects in the

construction that are discovered within 1 year, without cost or charge to the OWNER.

C. In the event the CONTRACTOR fails, within 5 days after notice, to begin correction of the defect, or fails within a reasonable time thereafter to complete the repair or remedy, the OWNER may have the work done at the CONTRACTOR's expense or may proceed against the CONTRACTOR's Public Construction Bond.

20. Insurance

During the term of this Agreement, the CONTRACTOR will purchase and maintain insurance and comply with the OWNER's Drug Free Workplace and Insurance Requirements which are incorporated herein by reference.

21. Public Construction Bond

A. Prior to signing the Contract, the AWARDED BIDDER will secure and post a Public Construction Bond pursuant to Section 255.05 of the Florida Statutes.

B. All such bonds shall be issued by a Surety acceptable to the OWNER. The OWNER will designate to whom subject bonds shall be posted.

C. Failure or refusal to furnish adequate bonds in a satisfactory form shall subject the AWARDED BIDDER to loss of time from the allowable construction period equal to the time of delay in furnishing the required bonds.

22. Hold Harmless and Indemnification

A. To the maximum extent permitted by Florida law, the CONTRACTOR shall indemnify, defend, and hold harmless the OWNER, the State of Florida, the Florida Department of Transportation, and their officers, agents, and employees, against any actions, claims, or damages arising out of, relating to, or resulting from negligent or wrongful act(s) of the CONTRACTOR or any of its officers, agents, or employees, acting within the scope of their office or employment, in connection with the rights granted to or exercised by the CONTRACTOR hereunder, to the extent and within the limitations of Section 768.28, Florida Statutes..

B. The foregoing indemnification shall not constitute a waiver of sovereign immunity beyond the limits set forth in Florida Statutes, Section 768.28. Nor shall the same be construed to constitute agreement by the CONTRACTOR to indemnify the OWNER for the negligent acts or omissions of the OWNER, its officers, agents, or employees, or third parties. Nor shall the same be construed to constitute agreement by the CONTRACTOR to indemnify the FDOT for the negligent acts or omissions of FDOT, its officers, agents, or employees, or third parties.

C. The parties understand and agree that such indemnification by the CONTRACTOR relating to any matter which is the subject of this Agreement shall extend throughout the term of this Agreement and any statutes of limitations thereafter.

D. The CONTRACTOR's obligation shall not be limited by or in any way to any insurance coverage or by any provision in or exclusion or omission from any policy of insurance.

E. If the above indemnity or the defense provisions contained herein or any part of those provisions are limited by Florida Statutes Section 725.06(1), or any other applicable law, then with respect to the part so limited, the monetary limitation on the extent of the indemnification shall be the greater of

1) The monetary value of the Contract,

2) Coverage amount of Commercial General Liability Insurance required under the Contract, or

3) $1,000,000.00.

F. This Section survives termination or expiration of this Contract,

23. <u>Duty to Pay Defense Costs</u>

A. The CONTRACTOR agrees to reimburse and pay on behalf of the OWNER the cost of the OWNER's legal defense, through and including all appeals, and to include all attorneys' fees, costs, and expenses of any kind for any and all:

1) Claims described in the Hold Harmless and Indemnification paragraph, or
2) Other claims arising out of the CONTRACTOR's performance of the Agreement and in which the OWNER has prevailed.

B. The OWNER shall choose its legal defense team, experts, and consultants and invoice the CONTRACTOR accordingly for all fees, costs, and expenses upon the conclusion of the claim.

C. Such payment on the behalf of the OWNER shall be in addition to any and all other legal remedies available to the OWNER and shall not be considered to be the OWNER's exclusive remedy.

D. This section survives termination or expiration of this Agreement.

24. Notices

All notices required or made pursuant to this Agreement shall be in writing and, unless otherwise required by the express terms of this Agreement, may be given either:

A. by mailing same by United States mail with proper postage affixed thereto, certified, return receipt requested, or

B. by sending same by Federal Express, Express Mail, Airborne, Emery, Purolator, UPS or other expedited mail or package delivery, or

C. by hand delivery to the appropriate address as herein provided. Notices to the OWNER required hereunder shall be directed to the following address:

If to the **OWNER**:
City of Parker
1001 West Park Avenue
Parker, Florida 32404
(850) 871-4104

If to the CONTRACTOR:

_____
_____
_____
_____
_____

The CONTRACTOR shall notify the OWNER of any change to its address.

The Purchasing Department will disseminate the address change to all applicable departments and agencies including Finance. The CONTRACTOR's notification of address change is sufficient if sent by email or facsimile.

25. Assignment

The CONTRACTOR shall not assign in whole or in part any part of the Work of this Agreement except with prior written consent of the OWNER.

26. Successors and Assigns

This Agreement shall be binding on all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

27. Entire Agreement

All proposals, negotiations, and representations regarding the work of this Agreement are merged in this instrument. Any amendment or modification of this Agreement shall be in writing and signed by the duly authorized representatives of the parties.

28. No Waiver

The waiver by the OWNER of, or the OWNER's failure to demand strict performance of, any obligation of the CONTRACTOR shall not be construed to waive or limit the full and faithful performance by the CONTRACTOR of another of its obligations or of the same obligation in the future.

29. Administrative, Contractual, or Legal Remedies

Unless otherwise provided in this contract, all claims, counterclaims, disputes and other matters in question between the local government and the CONTRACTOR, arising out of or relating to this contract, or the breach of it, will be decided by arbitration, if the parties mutually agree, or in a Florida court of competent jurisdiction.

30. Termination for Cause and for Convenience

A. This Agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this contract through no fault of the terminating party, provided that no termination may be effected unless the other party is given:

1) Not less than 10 calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate; and

2) An opportunity for consultation with the terminating party prior to termination.

B. This Agreement may be terminated in whole or in part in writing by the local government for its convenience, provided that the other party is afforded the same notice and consultation opportunity specified in A.1 above. If termination for default is effected by the local government, an equitable adjustment in the price for this contract shall be made, but no amount shall be allowed for anticipated profit on unperformed services or other work, and any payment due to the CONTRACTOR at the time of termination may be adjusted to cover any additional costs to the local government because of the CONTRACTOR's default.

C. If termination for convenience is effected by the local government, the equitable adjustment shall include a reasonable profit for services or other work performed for which profit has not already been included in an invoice. For any termination, the equitable adjustment shall provide for payment to the CONTRACTOR for services rendered and expenses incurred prior to receipt of the notice of intent to terminate, in addition to termination settlement costs reasonably incurred by the CONTRACTOR relating to commitments (e.g., suppliers, subcontractors) which had become firm prior to receipt of the notice of intent to terminate.

D. Upon receipt of a termination action under Paragraphs A.1 and A.2 above, the CONTRACTOR shall promptly discontinue all affected work (unless the notice directs otherwise) and deliver or otherwise make available to the local government all data, drawings, reports specifications, summaries and other such information, as may have been accumulated by the CONTRACTOR in performing this contract, whether completed or in process.

E. Failure of the CONTRACTOR to comply with the provision of Section 14 Laws, Rules, and Regulations shall constitute grounds for the OWNER to immediately terminate this Agreement for cause and declare the CONTRACTOR to be non-responsible for bidding or proposing on future contracts for 1 year from the date the OWNER notifies the CONTRACTOR of such non-compliance.

F. This Agreement may be terminated by the OWNER if the successful bidder (CONTRACTOR) is found to have submitted a false certification as required under section 215.471 (5), Florida Statutes, been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or been engaged in business operations in Cuba or Syria.

31. Conflicts

In the case of any conflict between the provisions of this Contract and other contract documents, the following priority for interpretation of those document provisions shall be followed:

A. The provisions of this contract prevail first.

B. The bid form and attachments are next.

C. The initial bid provisions are final priority.

32. Severability

Should any provision of the Agreement be determined by a court with jurisdiction to be unenforceable, such a determination shall not affect the validity or enforceability of any other section or part thereof.

33. Governing Law & Venue

This Agreement is governed by the laws of the State of Florida. The proper venue for any action regarding this contract is in the appropriate Court in Bay County, Florida

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first written above.

Executed by:

PARKER CITY COUNCIL

By: _____
Andrew Kelly, Mayor

Approved as to form:

CONTRACTOR

By: _____
(Authorized Representative)

Its: _____

State of _____ County of _____

This Agreement was acknowledged and subscribed before me the undersigned notary this _____ day of _____, 2023, by _____, as _____ of _____ and with proper authority, and who is personally known by me or produced identification of

_____.

_____

Notary Public

_____

Notary Public

WAIVER OF RIGHT TO CLAIM AGAINST THE PAYMENT BOND

(PROGRESS PAYMENT)

The undersigned, in consideration of the sum of $_____, hereby waives its right to claim against the payment bond for labor, services, or materials furnished through _____ (insert date) to _____(insert the name of contractor) on the job of the City of Parker, for improvements to the following described project:

CITY OF PARKER
ITB 2023-02
WATER SYSTEM IMPROVEMENTS
CONSTRUCTION BID NO. DW030721

(Project Name)

This waiver does not cover any retention, or any labor, services, or materials furnished after the date specified.

CONTRACTOR: _____

By: _____

Printed Name: _____

Title: _____

Date: _____

WAIVER OF RIGHT TO CLAIM AGAINST THE PAYMENT BOND

(FINAL PAYMENT)

The undersigned, in consideration of the final payment in the amount of $_____ _____, hereby waives its right to claim against the payment bond for labor, services, or materials furnished to _____ (insert the name of contractor) on the job of the City of Parker for improvements to the following described project:

CITY OF PARKER
ITB 2023-02
WATER SYSTEM IMPROVEMENTS
CONSTRUCTION BID NO. DW030721

(Project Name)

This waiver does not cover any retention, or any labor, services, or materials furnished after the date specified.

CONTRACTOR: _____

By: _____

Printed Name: _____

Title: _____

Date: _____