City of North Port



Request for Bid No. 2019-43
BRIDGE WATER MAIN REPLACEMENT - S.
SALFORD BOULEVARD



City of North Port FINANCE DEPARTMENT/PURCHASING DIVISION 4970 CITY HALL BLVD NORTH PORT, FL 34286



Office: 941.429.7170 Fax: 941.429.7173

Email: purchasing@cityofnorthport.com

NOTICE OF AVAILABILITY OF BID SPECIFICATIONS REQUEST FOR BID NO. 2019-43 BRIDGE WATER MAIN REPLACEMENT - S. SALFORD BOULEVARD

The City of North Port is requesting sealed bids to secure the services of an experienced, professional, licensed, and qualified Contractor capable of providing construction services in accordance with the specification and drawings to construct the subaqueous water main replacement including a water body crossing of approximately 350 linear feet of 12-inch HDPE SDR-11 water main via HDD. The work also includes 10-inch PVC DR 18 water main and necessary fittings to perform the HDPE connections to the existing main. Once the new main is in service, the existing water main mounted on the side of the bridge will be removed while the buried portions of the existing water main between the tie-ins will be capped, grouted and abandoned in place. This project is funded, in part, by a grant through the Environmental Protection Agency (EPA).

NON MANDATORY PRE-BID MEETING: December 17, 2018, AT 10:00 AM 4970 CITY HALL BOULEVARD, ROOM 302, NORTH PORT, FLORIDA 34286

BID OPENING: January 18, 2019 AT 2:00 PM 4970 CITY HALL BOULEVARD, ROOM 302, NORTH PORT, FLORIDA 34286

ALL BIDS ARE DATE AND TIME STAMPED IN THE FINANCE DEPARTMENT, SUITE 337 FIRST AND THEN ARE OPENED IN SUITE 302

Information regarding this project may be viewed and downloaded from Demandstar's website at www.demandstar.com. Links to DemandStar are also available from the city website at www.cityofnorthport.com. Bid specifications are posted on the City FTP site at https://apps.cityofnorthport.com/ftpinfo/dnld_form.aspx (go to the drop down box, select Purchasing and scroll to Project RFB No. 2019-43 however, the only place to obtain addenda are on www.demandstar.com. If you have any questions, concerns, or problems accessing the bid package using the link, please contact Keith Raney, CPPB, CPPO Contract Administrator II, at 941.429.7103. Requests for additional information or clarification regarding the specifications must be sent via facsimile to 941.429.7173 or via email to purchasing@cityofnorthport.com. No verbal requests will be honored. All questions and clarifications must be submitted via e-mail of facsimile by January 11, 2019 at 2:00 PM.

The City of North Port does not discriminate on the basis of race, color, national origin, sex, age, disability, family or religious status in administration of its programs, activities or services.

PUBLISH DATES: December 7, 2018

Herald Tribune

PUBLISH DATES: December 7, 2018

www.cityofnorthport.com & www.demandstar.com

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"THIS IS A 'SAMPLE CONTRACT' ISSUED FOR INFORMATIONAL PURPOSES ONLY AND AS SUCH IS SUBJECT TO CHANGE"

ATTACHMENTS:

- A. Construction Technical Specifications (148 pages)
- **B.** Construction Plans (7 pages)
- **C.** Department of Health Permit (6 pages)
- D. Geotechnical Report (6 pages)
- **E.** Florida Department of Environmental Protection (FDEP) Notice of Intent to Use an Environmental Resource General Permit (Pending)
- **F.** United States Environmental Protection Agency Region 4 Supplemental General Conditions for Federally Assisted Construction Contracts (50 pages)
- **G.** Bid Schedule in Excel Format (1 page)

STATEMENT OF NON-SUBMITTAL

If you **do not** intend to submit a bid on this service, please return this form (see information below) immediately.

We, the undersigned, have declined to submit a bid on the requested Request for Bid **2019-43 BRIDGE WATER MAIN REPLACEMENT – S. SALFORD BOULEVEARD**

	Insufficient time to respond to the Request for Bid.			
	We do not offer this product/service.			
	Our schedule would not permit us to perform.			
	Unable to meet bond/insurance requirements.			
	Specifications are unclear (explain below).			
	OTHER (please specify below).			
COMPANY NAME: ADDRESS:				
	STATE:ZIP CODE:			
TELE	HONE: FAX:			
E-MAIL ADDRESS:				
SIGN	ATURE: DATE:			

Note: "Statement of No Bid" may be faxed or e-mailed to the Purchasing Division at purchasing@cityofnorthport.com or faxed to 941.429.7173.

SECTION I. INSTRUCTIONS TO BIDDERS

THESE CONDITIONS ARE STANDARD FOR ALL BIDS FOR COMMODITIES/SERVICES ISSUED BY THE CITY OF NORTH PORT. THE CITY OF NORTH PORT MAY DELETE, SUPERSEDE OR MODIFY ANY OF THESE GENERAL CONDITIONS FOR A PARTICULAR CONTRACT BY INDICATING SUCH CHANGE IN SPECIAL CONDITIONS TO BIDDERS OR IN THE BID SHEETS. ANY AND ALL SPECIAL CONDITIONS THAT MAY VARY FROM THE GENERAL CONDITIONS SHALL HAVE PRECEDENCE. BIDDER AGREES THAT THE PROVISIONS INCLUDED WITH THIS REQUEST FOR BID SHALL PREVAIL OVER ANY CONFLICTING PROVISIONS WITHIN ANY STANDARD FORM CONTRACT OF THE BIDDER REGARDLESS OF ANY LANGUAGE IN BIDDER'S CONTRACT TO THE CONTRARY.

DEFINITIONS: Terms used in these Instructions to Bidders are defined and have the meanings assigned to them.

- Addenda: a written change to a solicitation
- <u>Bid:</u> any offer submitted in response to this request for Bid.
- Bidder: One that submits a bid in response to this Request for Bid.
- <u>Bid Documents</u>: Includes the General Terms and Conditions; Special Conditions; Technical Specifications, the Bid Form; Non-Collusive Affidavit; Public Entity Crime Form; Certificate(s) of Insurance, if required; Payment and Performance Bonds, if required; Corporate Resolution; Bid Bond, if required; Local Business Affidavit, Scrutinized Company Affidavit and Certification and all Addendums issued prior to receipt of bids.
- <u>City:</u> Shall refer to City of North Port, a municipal corporation of the State of Florida.
- <u>Contract</u>: The agreement to perform the services set forth in this solicitation. The Contract will be comprised of the Bid documents signed by both parties including any addenda and other attachments specifically incorporated.
- Responsible: Refers to a bidder that has the capacity and capability to perform the work required under a Request for Bid and is otherwise eligible for award.
- <u>Responsive:</u> Refers to a bid that contains no exceptions or deviations from the terms, conditions, and specifications set forth in the Request for Bid.
- <u>Request for Bid (RFB):</u> Shall mean this solicitation document, including any and all addenda. A RFB contains well-defined terms, conditions, and specifications, and is awarded to the lowest priced responsive and responsible bidder.
- Solicitation: The written document requesting either bids or proposals from the marketplace.
- <u>Successful Bidder</u>: The lowest responsive, responsible Bidder to whom City (on basis of City's evaluation) makes an award.
- <u>Vendor or Contractor:</u> A general reference to any entity responding to this solicitation or performing under any resulting Contract.

The City has established for purposes of this Request for Bid (RFB) that the words "shall," "must," or "will" are equivalent and indicate a mandatory requirement or condition, the material deviation from which shall not be waived by the City. A deviation is material if, in the City's sole discretion, the deficient response does not substantially satisfy this RFB's mandatory requirements. The words "should" or "may" are equivalent in this RFB and indicate very desirable conditions, or requirements that are permissive in nature.

1. INSTRUCTIONS TO BIDDERS

A. QUALIFICATIONS OF BIDDER: It is intent to the City to award this Contract to the lowest responsible bidder, qualified by experience and solvency, with proven reliability and the ability to provide the services or items required under this Contract within a reasonable time frame acceptable to the City. Bidder may be required to supply information in writing at the request and discretion of the City prior to award of bids, in order to verify above requirements.

B. EXAMINATION OF BID DOCUMENTS: Prior to submission of a bid form, bidders shall carefully examine the General Terms and Conditions, Special Conditions, Technical Specifications, and all other related bid documents, including all modifications thereof, incorporated in the bid package, plus fully informing themselves as to all existing conditions and limitations that effect the work to be performed under this contract.

Discrepancies, omissions, or questions about the intent of the documents should be submitted to the Purchasing Division in written form as a request for interpretation no later than five business (5) days prior to bid opening (or shall be verbally addressed at the pre-bid conference, if applicable).

It shall be the responsibility of the bidder, prior to submitting their response, to either visit www.demandstar.com to view the solicitation and download all issued addenda or contact Purchasing to determine if addenda were issued.

Examination of site: Prior to submitting a bid form, each bidder may examine the site and all conditions thereon. All bid forms shall be presumed to include all such existing conditions as may affect any work to be done on this project. Failure to familiarize himself with such conditions will in no way relieve the successful bidder from the necessity of furnishing any materials or performing any work that may be required to complete the work in accordance with the drawings and Specifications.

C. CLARIFICATION AND ADDITIONAL INFORMATION: Discrepancies, omissions, or questions about the intent of the documents will be submitted to the City of North Port Purchasing Manager, or his/her designee in written form as a request for interpretation no later than five (5) business days prior to the bid opening (or may be verbally addressed at the pre-bid meeting, if applicable).

Interpretations made will be in the form of an addendum to the documents, which will be forwarded to all bidders. Receipt by each bidder must be acknowledged on the bid form, indicating the addendum number and date of issue, therein becoming part of the Contract. No oral explanations shall be binding. The City will attempt to notify all prospective bidders of addenda issued to the bid documents; however, it shall be the responsibility of the bidder, prior to submitting their bid, to contact the Purchasing Manager, or his/her designee, to determine if addenda were issued, acknowledging and incorporating it into their bid.

D. MODIFICATION OR WITHDRAWAL OF BIDS: Bid modifications will be accepted from a bidder only if received in writing, properly signed by an officer of the bidder, and received prior to the opening of bids. Bid modifications must be identified as such and will be opened with the bidder's bid form.

Bids may be withdrawn by request of the bidder prior to the time fixed for opening. Error or negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after it has been opened.

- **E. NO BID:** A respondent who is on the bid notification list and decides not to submit a response is requested to complete the Statement of Non-Submittal Form and return it to the City.
- **F. CONFLICTS WITHIN SOLICITATION:** Where there appears to be a conflict between the General Terms and Conditions, Special Conditions, the Technical Specifications, the Bid Form, or any addendum issued, the order of precedence shall be: the last addendum issued, the Bid Form, the Technical Specifications, the Special Conditions, and then the General Terms and Conditions. It is incumbent upon the vendor to identify such conflicts to the designated purchasing representative prior to the bid or proposal response date.
- **G. PROMPT PAYMENT:** It is the policy of the City that payment for all purchases by the City shall be made in a timely manner and that interest payments will be made on late payments in accordance with Part VII, Chapter 218, Florida Statutes, known as the Local Government Prompt Payment Act. The bidder may offer cash discounts for prompt payments; however, such discounts will not be considered in determining the lowest price during bid evaluation.

2. PREPARATION AND SUBMISSION OF BID FORM

- <u>Bid Form</u>: Bids shall be made on forms supplied by the City, or as otherwise specified. Each bid must state the name of the bidder, the bidder's full business address and state the type of business entity, followed by the original signature and designation of the officer or other person authorized to bind the corporation. Any erasures or other corrections in the bid form must be explained or noted over the signature of the bidder. Bid forms containing any conditions, omissions, unexplained erasures, alterations, or irregularities of any kind may be rejected by the City.
- <u>Bid Bond</u>: Each bid must be accompanied by a bidder's bond or Cashier's check with their bid in the amount of NOT LESS THAN 5% of their total amount of the bid. This security shall ensure that the Bidder does not revoke the bid after bid opening or fails to execute any necessary additional documents. Cashier's checks will be returned to all bidders after award of bid.
- <u>Bid Documents</u>: Bid documents and forms shall be submitted sealed to the City of North Port, Purchasing, 4970 City Hall Boulevard, Suite 337, North Port, Florida 34286. The envelope/package shall be clearly marked with the Bid Number, Name and Business Address of the bidder. All interested firms are required to submit one (1) original and one (1) copy of their completed bid offer.

Submission of a response constitutes a binding offer and shall be subject to all terms and conditions specified in the solicitation.

For your bid to be acceptable, *all blank spaces* must be completely annotated where and when requested. All bids must contain a <u>manual signature</u> of the authorized representative of the bidder in the space provided on the Bid Certification Form.

Responsibility for getting this bid to the City on or before the specified date and time is solely and strictly the responsibility of the bidder. The City will not be responsible for any delay, for any reason whatsoever. Bids must be received and stamped with the date and time on the outside of the envelope and must be in the City Purchasing Office by the date and time specified for opening.

Bids postmarked prior to said date and time but not received shall not be considered and will be returned to bidder unopened.

- <u>Bid Guarantee</u>: The bid form shall be signed where indicated constituting an agreement that the bidder will not withdraw his/her bid for a period of ninety (90) days after the opening of the bids.
- <u>Source of Supply and Subcontractors:</u> Bidders are to complete the attached Source of Supply and Subcontractors form. This form must be completed and included with the bid form. If bidder does not have a source of supply or subcontractor, insert "to be determined". When source or subcontractor is determined, selection will be subject to City approval.
- <u>Bid Opening:</u> All bids received by the date and time so specified shall be opened and **the name of each bidder and total bid price of each bidder** read aloud within the designated room at City Hall, at the bid opening. The opening and reading shall be in the presence of the City Clerk and the Purchasing Manager or their designees. Bidders and the general public are not required to be present but are invited and encouraged to attend.
- <u>Late Bids</u>: Bids received after the date and time of bid opening will not be considered and will not be opened. It will be the bidder's responsibility to make arrangements for the return of the bid package at their expense.
- **3. CITY RIGHTS:** The City of North Port reserves the right to accept or reject any and/or all bids in whole or in part, to waive irregularities and technicalities, and to request resubmission with or without cause and/or to accept the bid

that, in its judgment, will be in the best interest of the City. Also, the City reserves the right to accept all or any part of the bid and to increase or decrease quantities to meet additional or reduced requirement of the City. In the event the city receives only one response; the bid may be either accepted or rejected by the City depending on available competition and the timely needs of the City.

4. AWARD OF BID: The award shall be let to the lowest responsive, responsible bidder who fulfills all criteria and specifications with consideration to favorable references and local preference and whose evaluation by the City indicates that the award will be in the best interest of the City.

<u>Errors:</u> For the purpose of the initial evaluation of bids, the following will be utilized in resolving arithmetic discrepancies found on the face of the bidding schedule as submitted by bidders:

Obviously misplaced decimal points will be corrected.

In case of discrepancy between unit price and extended price, the unit price will govern. Apparent errors in extension will be corrected.

Apparent errors in addition of lump sum and extended prices will be corrected.

For the purpose of bid evaluation, the City will proceed on the assumption that the bidder intends his/her bid be evaluated on the basis of the unit prices, extensions, and totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the tabulation of bids.

- **5. BID TABULATIONS:** Pursuant to Florida Statute §119.071(1)(b), all bid tabulations shall be posted in the City Hall, 4970 City Hall Boulevard, North Port, Florida and on DemandStar's website at www.demandstar.com within thirty (30) days after bid opening or at such time as the agency provides notice of a decision or intended decision, whichever is earlier.
- **6. WARRANTY:** All warranties express and implied, shall be made available to the City for goods and services covered by this solicitation. All goods furnished shall be fully guaranteed by the vendor against factory and workmanship defects. At no expense to the City, the vendor shall correct any and all apparent and latent defects that may occur within the manufacturer's standard warranty period. The special conditions of the solicitation may supersede the manufacturer's standard warranty.
- 7. DESCRIPTIVE INFORMATION: Unless otherwise specifically provided in the Technical specifications, all equipment, materials and articles incorporated in the work covered by this Contract are to be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in the Technical specifications, reference to any equipment, material, article or patented process, by trade name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. If the bidder wishes to make a substitution to the specifications, the bidder shall furnish the City the name of the manufacturer, the model number and other identifying data and information necessary to aid in the City in evaluating the substitution. Such substitution shall be subject to City approval. Substitutions shall be approved only if determined by the City to be equivalent to the specifications. A bid containing substitution is subject to disqualification if the City does not approve the substitution.
- **8. TAXES/FREIGHT:** The bid shall include any freight, handling, delivery, surcharges or other incidental charges. Unless otherwise specified in the solicitation, prices quoted shall be F.O.B. Destination. The City is exempt from the payment of Federal and State taxes, including sales tax. The bid offer shall not include sales tax to be collected from the City. The City's sales tax exemption is not available to vendor for items vendor purchases, regardless of whether these items will be transferred to the City.

In the event the project is declared a sales tax recovery project by the City, the following procedure shall apply:

(a) The City representative shall make a recommendation to the Division of Procurement Services regarding the materials to be purchased;

- (b) When those materials are purchased by the City, all purchase orders shall be issued directly from Purchasing;
- (c) The City shall take title to those materials directly from the manufacturer/supplier and shall bear the risk of loss or damage to the materials which are delivered directly from the manufacturer/supplier;
- (d) The City shall be invoiced directly for the materials from the manufacturer/supplier and shall pay the invoices directly to the manufacturer/supplier, presenting its sales tax exemption certificate at the time of payment.

The cost of any materials purchased through the sales tax recovery program shall be deducted from the Contract amount and the vendor shall no longer be responsible for providing those materials. A written change order shall be executed.

9. CONTINUATION OF WORK: Any work that commences prior to and will extend beyond the expiration date of the current Contract period shall, unless terminated by mutual written agreement between the City and the vendor, continue until completion without change to the then current prices, terms and conditions.

10. TERMINATION OF CONTRACT:

- <u>Funding in Subsequent Fiscal Years:</u> It is expressly understood by the City and the vendor that funding for any successive fiscal years of the Contract is contingent upon appropriation of monies by the City Commissioners. In the event that funds are not available or appropriated, the City reserves the right to terminate the Contract. The City will be responsible for payment of any outstanding invoices and work completed by the vendor prior to such termination.
- <u>Termination With or Without Cause:</u> The City shall have the right to unilaterally cancel, terminate or suspend this Contract, in whole or in part, by providing the Contractor thirty (30) days written notice by certified mail.
 - The City reserves the right to terminate this Contract, in part or in whole, in the event the vendor fails to perform in accordance with the terms and conditions stated herein. The vendor will be notified by letter of the City's intent to terminate. In the event of termination for default, the City may procure the required goods and/or services from any source and use any method deemed in its best interest. All re-procurement cost shall be borne by the vendor.
- <u>Termination by Vendor:</u> Vendor shall have the right to terminate services only in the event of the City failing to pay Vendor's properly documented and submitted invoice within ninety (90) calendar days of the approval by the City's Administrative Agent, or if the project is suspended by the City for a period greater than ninety (90) calendar days.
- 11. PROPRIETARY OR CONFIDENTIAL INFORMATION: Bidders are hereby notified that all information submitted as part of, or in support of bid submittals will be available for public inspection after opening of bids in compliance with Chapter 119 of the Florida Statutes, the Public Record Act. The bidder should not submit any information in response to this solicitation which the bidder considers proprietary or confidential. The submission of any information to the City in connection with this solicitation shall be deemed conclusively to be a waiver of any protection from release of the submitted information unless such information is exempt from disclosure under the Public Records Act, and such information is marked as exempt. Failure to mark a trade secret as exempt waives the exemption.
- **12. RULES, REGULATIONS AND LICENSES:** The vendor shall comply with all federal, state, and local laws and regulations applicable to provision of the goods and/or services specified in this solicitation.

It shall be the responsibility of the Contractor to assure compliance with OSHA, EPA and/or other local, federal, or State of Florida rules, regulations or other requirements, as each may apply.

When applicable and as required by law, the bidder will provide a material safety data sheet with each delivery of a toxic substance.

The vendor shall maintain books, records, documents, and other evidence directly pertaining to or connected with the services under this Agreement which shall be available and accessible at the vendor's offices for the purpose of inspection, audit, and copying during normal business hours by the CITY, or any of its authorized representatives. Such records shall be retained for a minimum of five (5) years after completion of the services.

- **13. CODE OF ETHICS:** With respect to this bid, if any bidder violates or is a party to a violation of the Florida Statutes, Chapter 112, Part III, Code of Ethics for Public Officers and Employees, such bidder may be disqualified from furnishing the goods or services for which the bid is submitted and shall be further disqualified from submitting any future bids for goods or services for the City.
- **14. COLLUSION:** By offering a submission to this RFB, the bidder certifies that the bidder has not divulged to, discussed or compared his/her bid with other bidders and has not colluded with any other bidder or parties to this bid whatsoever. Also, bidder certifies, and in the case of a joint bid each party thereto certifies as to his/her own organization, that in connection with this bid: any prices and/or cost data submitted have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices and or cost data, with any other bidder or with any competitor; any prices and/or data quoted for this bid have not been knowingly disclosed by the bidder and will not knowingly be closed by the bidder prior to the scheduled opening directly or indirectly to any other bidder or to any competitor; no attempt has been made or will be made by the bidder to induce any other person or firm to person or persons interested in this bid, principal or principals is/are named therein and that no person other than therein mentioned has any interest in this bid or in the Contract to be entered into; and no person or agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee excepting bona fide employees of the bidder.
- **15. PUBLIC ENTITY CRIMES:** In accordance with Florida Statutes Sec. 287.133(2)(a), "A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a Contract to provide any goods/services to public entity, may not submit a bid on a Contract with a public entity for construction or repair of 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 in excess of the threshold amount provided in Sections 287.017, for Category Two, for a period of 36 months from the date of being placed on the convicted vendor list." By submitting a bid, vendor certifies that vendor is not currently prohibited from transacting business with the City due to the above statute. The vendor shall comply with the terms of this statute both before and during the term of this Contract.
- **16. DRUG FREE WORKPLACE:** The City has adopted a policy in observation of the Drug Free Workplace Act of 1988. Therefore, it is unlawful to manufacture, distribute, dispense, possess, or use any controlled substance in the City workplace.

The City requests that the attached Drug Free Workplace Affidavit accompany the bid response. This form has been adopted by the City in accordance with the Drug Free Workplace Act. The City will not disqualify any bidder who does not sign the affidavit. The Drug Free Workplace Affidavit is primarily used as a tie breaker when two or more separate entities have submitted bids at the same price, terms and conditions, with preference given to the bidder who has signed the affidavit.

17. EQUAL EMPLOYMENT OPPORTUNITY: The City of North Port, Florida, in accordance with the provisions of Title VII of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Department of Commerce (15 CFR, Part 8) issued pursuant to such Act, hereby notifies all bidders that it will ensure that in any Contract entered into pursuant

to this advertisement, minority business enterprises will be afforded full opportunity to submit replies in response to this advertisement and will not be discriminated against on the ground of race, color or national origin in consideration for an award.

- **18. NON-DISCRIMINATION:** The City of North Port does not discriminate on the basis of race, color, national origin, sex, age, disability, family or religious status in administration of its programs, activities or services. Pursuant to F.S §287.134(2)(a), an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies 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.
- 19. DECLARATION OF EXEMPTION FROM PUBLIC RECORD: Pursuant to Florida Statute §119.07(1)(b)(2), all bid documents are exempt from public record until such time as the City provides notice of an intended decision or until 30 days after opening the bids, whichever is earlier.

In accordance with Florida Statutes 119.0701, Contractor shall comply with all public records laws, and shall specifically:

- 1. Keep and maintain public records required by the City to perform the service.
 - a. The timeframes and classifications for records retention requirements must be in accordance with the General Records Schedule GS1-SL for State and Local Government Agencies.
 (See http://dos.dos.state.fl.us/library-archives/records-management/general-records-schedules/).
 - b. "Public records" means and includes those items specified in Florida Statutes 119.011(12), as amended from time to time, and currently defined as: All documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form, characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business with the City. Contractor's records under this Contract include but are not limited to, supplier/subcontractor invoices and contracts, project documents, meeting notes, e-mails and all other documentation generated during this Contract.
- 2. Upon request from the City's custodian of public records, provide the City, at no cost, 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 for by law. All records kept electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.
- 3. Ensure that project 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, if the Contractor does not transfer the records to City following completion of the contract, for the time period specified in General Records Schedule GS1-SL for State and Local Government Agencies.
- 4. Upon completion of the contract, transfer, at no cost, to the City all public records in Contractor's possession or keep and maintain public records required by the City to perform the service. If the

Contractor transfers all public records to the City 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 the completion of the contract, the Contractor shall meet all applicable requirements for retaining public records.

- 5. IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT CUSTODIAN OF PUBLIC RECORDS, 4970 CITY HALL BOULEVARD, NORTH PORT, FLORIDA 34286, 941.429.7063 OR HOTLINE 941.429.7270; E-MAIL: keto@cityofnorthport.com.
- 6. Failure of the Contractor to comply with these requirements shall be a material breach of this Contract. Further, Contractor may be subject to penalties under Florida Statutes 119.10.
- **20. FORCE MAJEURE:** The parties will exercise every reasonable effort to meet their respective obligations hereunder, but shall not be liable for delays resulting from force majeure or other causes beyond their reasonable control, including, but not limited to, compliance with any Government law or regulation, acts of nature, acts or omissions of the other party, Government acts or omissions, fires, strikes, national disasters, wars, riots, transportation problems and/or any other cause whatsoever beyond the reasonable control of the parties. Any such cause will extend the performance of the delayed obligation to the extent of the delay so incurred.
- **21. GOVERNING LAWS:** The interpretation, effect, and validity of any Contract resulting from this RFB shall be governed by the laws and regulations of the State of Florida. Exclusive venue of any court action shall be in Sarasota County, Florida.
- **22. SUBCONTRACTING:** Unless otherwise specified in this solicitation, the vendor shall not subcontract any portion of the work without the prior written consent of the City. The ability to subcontract may be further limited by the Special Conditions. Subcontracting without the prior consent of the City may result in termination of the Contract for default.
- **23. MODIFICATION OF CONTRACT:** Any Contract resulting from this solicitation may be modified by mutual consent of duly authorized parties, in writing through the issuance of a modification to the Contract and/or change order as appropriate. This presumes the modification itself is in compliance with all applicable City procedures.
- **24. SUCCESSORS AND ASSIGNS**: The vendor shall not assign any interest in any Contract resulting from this solicitation and shall not transfer any interest in same (whether by assignment or novation) without prior written consent of the City, except that claims for the money due or to become due to the vendor from the City under any Contract may be assigned to a financial institution or to a trustee in bankruptcy without such approval from the City. Notice of such transfer or assignment due to bankruptcy shall be promptly given to the City.
- **25. CONTRACTING WITH CITY EMPLOYEES OR BOARD MEMBERS:** Any City employee, Board member or member of his or her immediate family seeking to Contract with the City shall seek a conflict of interest opinion from the purchasing manager or their designated representative prior to submittal of a response or application of any type to Contract with the City. The affected employee or Board member shall disclose his or her assigned function within the City and interest or the interest of his or her immediate family in the proposed Contract and the nature of the intended Contract.

Florida Statute §112.313(12) Standards Of Conduct For Public Officers, Employees Of Agencies, And Local

Government Attorneys controls contracting with City employees or board members, and provides as follows:

- (12) EXEMPTION.--The requirements of subsections (3) and (7) as they pertain to persons serving on advisory boards may be waived in a particular instance by the body which appointed the person to the advisory board, upon a full disclosure of the transaction or relationship to the appointing body prior to the waiver and an affirmative vote in favor of waiver by two-thirds vote of that body. In instances in which appointment to the advisory board is made by an individual, waiver may be effected, after public hearing, by a determination by the appointing person and full disclosure of the transaction or relationship by the appointee to the appointing person. In addition, no person shall be held in violation of subsection (3) or subsection (7) if:
- (b) The business is awarded under a system of sealed, competitive bidding to the lowest or best bidder and:
- 1. The official or the official's spouse or child has in no way participated in the determination of the bid specifications or the determination of the lowest or best bidder;
- 2. The official or the official's spouse or child has in no way used or attempted to use the official's influence to persuade the agency or any personnel thereof to enter such a contract other than by the mere submission of the bid; and
- 3. The official, prior to or at the time of the submission of the bid, has filed a statement with the Commission on Ethics, if the official is a state officer or employee, or with the supervisor of elections of the county in which the agency has its principal office, if the official is an officer or employee of a political subdivision, disclosing the official's interest, or the interest of the official's spouse or child, and the nature of the intended business.
- **26. TRUTH-IN-NEGOTIATIONS CERTIFICATE:** If applicable, execution and signature by the vendor of the Bid Form shall act as the execution of a truth-in-negotiation certificate certifying that the wage rates and costs used to determine the compensation provided for in this Contract are accurate, complete, and current as of the date of the Contract.

For professional service Contracts, the original Contract price and any additions thereto will be adjusted to exclude any significant sums by which the City determines the Contract price was increased due to inaccurate, incomplete, or noncurrent wage rates and other factual unit costs. The City shall exercise its rights under this "Certificate" within one (1) year following payment.

- **27. GRANT FUNDING:** In the event any part of the Contract is to be funded by federal, state, or other local agency monies, the vendor hereby agrees to comply with all requirements of the funding entity applicable to the use of the monies, including full application of requirements involving the use of minority firms, women's business enterprises, and labor surplus area firms. Vendors are advised that payments under the Contract may be withheld pending completion and submission of all required forms and documents required of the vendor pursuant to the grant funding requirements. A copy of the requirements shall be supplied to the vendor by the City upon request.
- 28. PERFORMANCE/PAYMENT BOND: The successful bidder shall provide the required performance and payment bond or other acceptable security to the City within ten (10) business days of being awarded the bid. Failure by the successful bidder to provide the bond within ten (10) business days shall be considered a default under Sec. 2-404 of the City of North Port Administrative Code. Such default shall only be curable at the option of the City. In addition, the Contractor shall be responsible and bear all costs associated to record Performance and Payment Bond with Sarasota County Clerk's Office. Receipt of said recording and certified copy of the bond shall be furnished to the Purchasing Department at the time of the pre-construction meeting. Such default shall only be curable at the option of the City.

In addition, the Contractor shall be responsible and bear all costs associated to record Performance and Payment Bond with Sarasota County Clerk's Office. Receipt of said recording and certified copy of the bond shall be furnished to the Purchasing Department at the time of the pre-construction meeting. Such default shall only be curable at the option of the City.

Upon such default the City may immediately award the bid to the next lowest responsive and responsible bidder and recover from the original successful bidder the difference in cost between the original winning bid and the next lowest responsive and responsible bidder.

PERFORMANCE/PAYMENT BOND REQUIREMENTS:

The Contractor shall provide a Performance Bond and a Payment Bond, in the form prescribed in Section 3, Contract Documents, each in the amount of 100% of the Contract amount, the costs of which are to be paid by the Contractor. The bonds will be acceptable to the City only if the following minimum conditions are met:

- a. is licensed to do business in the State of Florida;
- b. holds a certificate of authority authorizing it to write surety bonds in this state;
- c. has twice the minimum surplus and capital required by the Florida Insurance Code at the time the invitation to bid is issued;
- d. is otherwise in compliance with the provisions of the Florida Insurance Code; and
- e. holds a currently valid certificate of authority issued by the United States Department of Treasury under 31 U.S.C. §§ 9304-9308.
- f. The Surety Company must have a current rating of at least Excellent (A or A-) as reported in the most current Best Key Rating Guide, published by A.M. Best Company, Inc., of 75 Fulton Street, New York, New York 10038, with an underwriting limitation of at least two times the dollar amount of the contract.

If the Surety Company for any Bond furnished by the Contractor files for bankruptcy, has a receiver appointed, is declared bankrupt, becomes insolvent, has an assignment made for the benefit of creditors, has its right to do business terminated in the State of Florida, or ceases to meet the requirements imposed by the Contract Documents, the Contractor shall, within five (5) calendar days thereafter, substitute another Bond and Surety Company, both of which shall be subject to the City's approval.

By execution of these bonds, the Surety Company acknowledges that it has read the surety qualifications and surety obligations imposed by the Contract documents and hereby satisfies those conditions.

- **29. STATE REGISTRATION REQUIREMENTS:** Any bidder required by Florida law to register to do business in this state shall either be registered or have applied for registration with the Florida Department of State in accordance with the provisions of Chapter 607, 608, 617, or 621, Florida Statutes, unless they are exempt. A copy of the registration/application may be required prior to award of a contract. Any partnership submitting a bid in response to this RFB shall have complied with the applicable provisions of Chapter 620, Florida Statutes.
- **30. NOTICE TO PROCEED/DELIVERY:** After award of bid, a Notice to Proceed shall be issued bearing the terms of delivery. Upon receipt of Notice to Proceed, successful bidder shall acknowledge receipt of same by either fax or mail and shall commence prosecution of the order so that the agreed upon delivery date will be satisfied.
- **31. PERFORMANCE EVALUATION:** At the end of the Contract, the receiving department may evaluate the successful bidder's performance. This evaluation will become public record.
- **32. PURCHASING AGREEMENTS WITH OTHER GOVERNMENTAL AGENCIES:** All bidders submitting a response to this RFB agree that such response also constitutes a bid in accordance with the terms of the RFB to all political

subdivisions of Sarasota County and the State of Florida, under the same conditions, for the same prices as this bid, unless otherwise stipulated by the bidder.

- **33. NONEXCLUSIVE CONTRACT**: Award of this Contract shall not require the City to use the Vendor for all work of this type, which may develop during the Contract term. This Contract is non-exclusive. The city reserves the right to concurrently Contract with other entities for similar work if it deems such action to be in the best interests of the City.
- **34. AUDIT:** City shall have the right to audit vendor's records that relate to this Contract. Records shall be maintained for a period of three (3) years from the date of final payment.
- **35. UNAUTHORIZED ALIEN WORKERS:** The City will not intentionally award publicly-funded contracts to any Contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions contained in U.S.C. Section 1324a(e) [Section 274A(e) of the Immigration and Nationality Act ("INA")]. The City shall consider employment by any Contractor of unauthorized aliens a violation of Section 274A(e) of the INA. Such violation by the Contractor of the employment provisions contained in Section 274A(e) of the INA shall be grounds for termination of this Agreement by the City.
- **36. E- VERIFY:** The Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Contractor during the term of the Contract and shall expressly require any subcontractors performing work or providing services pursuant to the Contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the Contract term.

It is the awarded Bidder's responsibility to ensure that all its employees and subcontractors comply with the employment regulations required by the US Department of Homeland Security. The City shall have no responsibility to check or verify the legal immigration status of any employee of the awarded Bidder.

- **37. EMPLOYEE BACKGROUND CHECK:** If an owner, except a stockholder in a publicly traded corporation, or an employee of the Contractor has been convicted of any offenses requiring registration as a sexual offender or sexual predator, regardless of the location of conviction, the Contractor shall ensure that the offender's or predator's work on the project is consistent with the terms of his probation and registry requirements.
- 38. PAYMENT: Two (2) original requests for payment must be submitted to the City of North Port on a form approved by the City. In lieu of the hard copies of the pay request submittal, scanned signed digital files of the requests for paymentsmay be submitted as an attachment to an e-mail. Each pay request must be accompanied by written consent of the surety, when applicable, and an updated work schedule to reflect progress of work. Payment shall be subject to the approval and direction of the surety in accordance with F.S. §255.05(11). Price shall be net and all invoices payable according to the Florida Local Government Prompt Payment Act (F.S. ch. 218). Upon certification and approval by the City or its dulyauthorized agent, progress payments may be made to the Contractor upon his/her application for all services or workcompleted or materials furnished in accordance with the Contract. Prior to fifty percent (50%) completion, the Contractor will be paid monthly the total value of the work completed and accepted during the preceding month, less ten percent (10%) retainage. After fifty percent (50%) completion of the construction services purchased pursuantto the Contract, the City must reduce to five percent (5%) the amount of retainage withheld from each subsequent progress payment made to the Contractor upon request of the Contractor. For purposes of this subsection, the term "fifty percent (50%) completion" is the point at which the City has expended fifty percent (50%) of the total cost of the construction services purchased as identified in the Contract together with all costs associated with existing change orders and other additions or modifications to the construction services provided for in the Contract. The City shall inform the Contractor's Surety of any reduction in retainage. The Contractor must update each new pay request in accordance with any changes made to the previous submittal. The City or its duly authorized

administrative agent, shall approve final payment for all work, materials and services furnished under this Contract.

Retainage may be reduced upon issuance of the Certificate of Substantial Completion by the City if, in the sole opinion of the City, sufficient progress on the schedule has been accomplished, the surety does not object, and the City has retained adequate coverage for the project through the achievement of Final Completion.

- **39. MBE:** Contractors awarded construction contracts who intend to subcontract material or service requirements of the project are encouraged to subcontract to certified minority business/women business enterprises firms or show good faith effort.
- **40. DBE Contract Assurance (IF APPLICABLE):** The contractor, sub-recipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.
- **41. SWORN STATEMENT, COMPLIANCE WITH FLORIDA TRENCH ACT:** Bidder shall be solely responsible for complying with the Florida Trench Safety Act (553.60-553.64 Florida Statutes) and Occupational Safety and Health Administration excavation safety standards, 29 CFR 1926.650 (subpart P) as amended. All costs associated with complying with these requirements shall be included in the separate line items of the bid and shall be as detailed in the Sworn Statement of Compliance with the Florida Trench Safety Act. Bidder shall submit the Statement of Compliance with the Florida Trench Safety Act form provided herein with his bid or with each work assignment.
- **42. INSURANCE REQUIREMENTS:** The successful Bidder shall be required to supply, at their cost, insurance coverage in form and amount as required by the City, as outlined in the bid specifications.
- **43. CONTACT PROHIBITION:** All prospective Bidders are hereby instructed **NOT** to contact any member of the City of North Port Commission, the City Manager, or City of North Port staff member other than the Authorized Contact Persons identified in this Solicitation regarding this solicitation package, Bidder's submittal package, City's Intent to Award, or City's Intent to Reject (if applicable) at any time prior to the FORMAL AWARD for this project. Any such contact shall be cause for rejection of your submittal.
- **44. SCRUTINIZED COMPANIES:** A. As required by section 287.135(5), Florida Statutes, for contracts of \$1,000,000.00 or less, when submitting a bid or proposal, and prior to entering into a contract with the City, ever person or entity shall certify on a form provide by the City, that it is not on the Scrutinized Companies that Boycott Israel List, created pursuant to section 215.4725, Florida Statutes, and that it is not engaged in a boycott of Israel.
 - B. As required by section 287.135(5), Florida Statutes, for contracts of \$1,000,000.00 or more, when submitting a bid or proposal, and prior to entering into a contract with the City, ever person or entity shall certify on a form provided by the City, that all of the following are true:
 - 1. It is not on the Scrutinized Companies that Boycott Israel List, created pursuant to section 215.4725, Florida Statutes, and that it is not engaged in a boycott of Israel; and
 - It is not on the Scrutinized Companies with Activities in Sudan list or the Scrutinized Companies with Activities in Iran Petroleum Energy Sector list, created pursuant to section 215.473, Florida Statutes; and
 - 3. It is not engaged in business operations in Cuba or Syria.

C. PENALTY:

- 1. If a false certification is submitted or the person or entity has been placed on one of the above-noted Lists of Scrutinized Companies or has engaged in business operations in Cuba or Syria, the person or entity will be in breach of the Contract terms and the City may terminate the Contract.
- 2. A person or entity that has been found to have provided a false certification may be subject to a civil penalty equal to the greater of \$2 million or twice the amount of the Contract, plus all reasonable attorney's fees and costs, including any costs for investigations that led to the finding of the false certification; and
- 3. A person or entity that has been found to have provided a false certification shall be ineligible to bid on any contract with the City for three (3) years after the date the City determined that a false certification has been submitted.
- 45. LOCAL PREFERENCE: NOT APPLICABLE FOR THIS SOLICITATION

END OF SECTION I

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SECTION II. GENERAL PROVISIONS

1. SCOPE OF WORK

1.1 *Intent of Contract:* Bid forms shall set forth firm bid unit prices for furnishing all necessary materials and completing all work, including but not limited to labor, transportation, supervision, electricity, water, equipment, startup, testing, training and all other work needed for a complete and operational system, as described in the Technical Specifications and/or shown on the Contract Drawings attached herewith. The City reserves the right to establish the exact limits of work in the field and to add or delete from the Project, as it deems necessary.

The intent of the Technical Specifications and Contract Drawings is to describe a complete project to be constructed in accordance with the Contract Documents. The Contract Documents comprise the entire Agreement between the City and the Contractor. They may be altered only by addendum or change order approved by the City.

1.2 Definitions:

- **1.2.1** The successful bidder for this Contract will be referred to as the **CONTRACTOR**; Department Director or his/her representative, acting personally or through an assistant duly authorized for such act by the City will be referred to as City. For the purposes of this Contract, the word "Project" shall mean the services limits of **CONTRACTOR**.
- **1.2.2** The Contract documents consist of the Request for Bids, Instructions to Bidders, Bid Forms, Technical Specifications, Construction Drawings, General Provisions, Special Provisions, Insurance Requirements, and all other related documents, including all modifications thereof incorporated in the documents before their execution. These form the Contract.
- **1.2.3** Written notice shall be deemed to have been duly served three days after date of postmark, and upon receipt, if delivered to the individual or member of the firm or an officer of the corporation for whom it is intended.
- **1.2.4** Subcontractor(s), as employed herein, includes only those having a direct Contract with the Contractor and it includes one who furnishes material worked to a special design according to the plans and specifications of this work, but does not include one who merely furnishes material not so worked.
- **1.2.5** The term "work" of the Contractor includes labor or materials or both, equipment, transportation, or other facilities necessary to complete the Contract.
- **1.2.6** All time limits stated in the Contract documents are of essence to the Contract.
- **1.2.7** The words "furnish," furnish and install," "install," and "provide" or words with similar meaning shall be interpreted, unless otherwise specifically stated, to mean "furnish and install complete in place and ready for service."
- **1.3** *Time of Completion:* The Contractor shall complete the work within the time set forth in the Contract. The Contractor shall complete each portion of the work within such time as set forth in the Contract for such portion. The time of completion of the Contract shall be expressed in calendar days.

All work for this project shall be performed during regular business hours. A regular workday shall be considered to be a maximum of ten (10) hours duration. The cost for inspection time for work performed on weekends, holidays, or in excess of ten (10) hours may be billed to the Contractor at the prevailing wage plus overhead costs for those persons involved.

A working day is any day within the period between the start of the Contract time and the date provided in the Contract for completion or upon field acceptance by the City of all work provided for in the Contract, or as stipulated in the Technical Specifications, or whichever comes first, other than: Saturday, Sunday, any day designated as a holiday by the City, any day the Contractor is prevented from working during the first five (5) hours of the work day, with at least sixty percent (60%) of the normal work force, due to inclement weather.

Request for planned overtime by the Contractor must be submitted in writing to the City, forty-eight (48) hours in advance, and may not proceed without the City's approval.

1.4. Quality of Work: The Contractor agrees to do the work covered under this Contract to the best of his/her ability and conforming to this Contract and specifications and of a quality acceptable to the trades. The Contractor further agrees to follow proper and appropriate instructions by the City.

2. PROSECUTION AND PROGRESS

- **2.1** Subletting or Assigning of Contracts: The Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or his right, title, or interest therein, without written consent of the City.
- **2.2 Performance and Payment Bond:** The awarded Contractor shall furnish a certified recorded copy from Sarasota County Clerk's Office of the Performance and Payment Bond in the amount of 100% of the total project price within ten (10) calendar days after notification of award to the Purchasing Department. The undersigned shall be responsible and bear all costs associated to record Performance and Payment Bond with Sarasota County Clerk's Office. Receipt of said recording and a certified copy of the Bond shall be furnished to the Purchasing Department at the time of the pre-construction meeting.
- **2.3** Submission of Work Schedule/Order of Completion: At the preconstruction meeting, the successful bidder shall have on hand a working schedule for the Project, showing in detail the order in which the Contractor proposes to perform the work. He/she shall indicate the dates on which major equipment will be delivered and various major items of work will start and the estimated completion dates of the major items. Construction Schedule provides additional information for ongoing scheduling requirements associated with this Contract.
- **2.4** Submission of Schedule of Values: A Schedule of Values to reflect value of equipment, materials and work performed per unit price, with totals shall be submitted at preconstruction meeting. Both parties are to agree on proposed schedule of values prior to any work being performed.
- **2.5** *Provisions for Convenience of Public:* The Contractor shall schedule his/her operations so as minimize any inconvenience to adjacent businesses for residences. Where necessary, the City may require the Contractor to construct first the work in any areas along the Project where restrictions caused by construction operations would represent a more serious handicap, before beginning construction in the less affected areas.

3. CONTROL OF THE WORK AND MATERIALS

- 3.1 Control of Work:
 - 3.1.1 Plans and Contract Documents: If required for the project, the Contractor will be furnished a

universal serial bus flash drive and four (4) signed and sealed building permit 11"x17" copies of the Plans, Technical Specifications, General and Special Provisions. Additional signed & sealed copies, if needed to obtain permits for the Work associated with this Contract, will be submitted upon written request. Other copies that may be needed by the Contractor shall be produced by the Contractor at his own expense; or, the Contractor may request additional full-size hardcopy of the plans for a cost of \$50.00 for each set of plans. Check shall be written out to North Port Utilities (NPU) and brought to Utilities' Field Office in exchange for plans.

- **3.1.2** *Detail Drawings and Instructions:* The City may furnish, with reasonable promptness, additional instructions by means of drawings or otherwise, necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the Contract documents, true developments thereof, and reasonably inferable there from.
- **3.1.3** *Order of Precedence:* These documents are integral parts of the Contract, and a requirement occurring on one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In cases of discrepancy, the governing order of documents shall be as follows:
 - **3.1.3.1** Permits from Agencies as required by law
 - **3.1.3.2** Change Orders
 - **3.1.3.3** Contract Documents, General Provisions and Special Provisions in that order
 - **3.1.3.4** Technical Specifications
 - 3.1.3.5 Construction Plans
 - **3.1.3.5.1** Dimensions given in figures govern scaled dimensions.
 - **3.1.3.5.2** Detail drawings govern over general drawings.
 - **3.1.3.5.3** Addenda/Change order drawings govern over Contract documents.
 - **3.1.3.6** FDOT Roadway and Traffic Design Standards, January, latest edition (if applicable).
 - **3.1.3.7** FDOT Standard Specifications, for Road & Bridge Construction, latest edition (if applicable).
 - **3.1.3.8** North Port Utilities Standard Details and Specifications
- **3.1.4** *Conformity of Work with Plans:* All work performed and all materials furnished shall be in reasonably close conformity with lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown on the Plans or indicated in the Technical Specifications or Special Provisions.
- **3.1.5** Authority of the City: All work shall be done under the supervision of the City or the City's representative and performed to its satisfaction. It is agreed by the parties hereto that the City shall decide all questions and disputes which may arise relative to the interpretation of the plans, construction, prosecution, and fulfillment of the Contract, and as to the character, quality, amount, and value of any work done, and material furnished, under or by reason of the Contract.
- **3.1.6** *City's Status:* The City and/or the City's Representative shall examine and inspect the work to assure compliance with the requirements of these Contract Documents. The City and/or the City's Representative shall determine the quality and acceptability of materials and workmanship relative to the requirements of the Plans and Technical Specifications.

The City has the authority to:

3.1.6.1 Stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract.

- **3.1.6.2** Reject all work that does not conform to the Contract.
- **3.1.6.3** Resolve questions that arise in the execution of the work.

The City's Representative has the authority to:

- **3.1.6.4** Reject all work that does not conform to the Contract.
- **3.1.6.5** Resolve questions that arise in the execution of the work.
- **3.1.7 Suspension of Work:** The City may at any time suspend work by giving ten (10) calendar days notice to the Contractor in writing. The City shall reimburse the Contractor for expenses incurred by the Contractor in connection with work under the Contract as a result of such suspension, unless such suspension was caused by actions of the Contractor. However, if the work or any part thereof shall be stopped by a notice in writing aforesaid, and if the City does not give written notice to the Contractor to resume work within thirty (30) calendar days of the date fixed in the written notice to suspend, then the Contractor will be entitled to the estimates and payment for all work done, unless such suspension was caused by actions of the Contractor.
- **3.1.8** The City's Right to do Work: If the Contractor should neglect to prosecute the work properly or fail to perform in accordance with the provisions of this Contract, the City, after three days written notice, may without prejudice to any other remedy it may have, make good any deficiencies and deduct from the payment due the Contractor.
- **3.1.9** The City's Right to Terminate Contract: If the Contractor refuses or fails to complete the work within the time specified for this Contract, or any extension thereof, the City may terminate the Contractor's right to proceed. In such event, the City may take over the work and prosecute the same to completion by the Contract or otherwise and the Contractor will be liable for any excess cost occasioned by the City. The City may take possession of and utilize in completing the work such materials and equipment as may be on the site of the work and necessary therefore.

If the Contractor should be adjudged bankrupt, or should make a general assignment for the benefit of his/her creditors, or if a receiver should be appointed due to insolvency, or if he/she should refuse or fail, except in cases which a time extension is provided to supply enough workmen, or if he/she should fail to make payment to subcontractors for labor and/or material, or disregard laws, ordinances or the instructions of the City, or be guilty of a violation of a provision of the Contract, then the City may, without prejudice to any other right or remedy and after giving seven (7) calendar days' notice, terminate employment of the Contractor and possess materials, tools, and appliances thereon and finish work by methods it may deem expedient. Expenses incurred by the City and the damage incurred through the Contractor's default shall be borne by the Contractor.

In any circumstance, the City shall have the right to unilaterally cancel, terminate or suspend this Contract, in whole or in part, by providing the Contractor thirty (30) calendar days written notice by certified mail.

In the event of termination, the Contractor shall be entitled to compensation for services rendered and costs incurred through the effective date of termination. All finished or unfinished documents, material, or work shall become the property of the City and shall be delivered to the City without reservation.

3.1.10 City May Stop the Work: If the Work is defective, or the Contractor fails to supply sufficient skilled supervisory personnel or workmen or suitable materials or equipment or the work area is deemed unsafe, the City may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the City to stop the Work shall not give rise to any duty on the part of

the City to exercise this right for the benefit of the Contractor or any other party. The City will not award any increase in Contract Price or Contract Time if the Work is stopped due to the circumstances described herein.

- **3.1.11** *City's Decision:* The City shall, within a reasonable time after their presentation, make decisions in writing on claims by the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the Contract Documents.
- **3.1.12** Authority and Duties of City's Inspectors: The City's Inspectors shall be authorized to inspect all work done and all materials furnished. They shall be authorized to call to the attention of the Contractor any failure of the work or materials to conform to the Technical Specifications and Contract. The presence of the Inspector shall in no way lessen the responsibility of the Contractor.
- **3.1.13** *Inspection of Work:* The City and its representative shall at all times have access to the work wherever it is in preparation or progress and the Contractor shall provide proper facilities for such access and inspection. If the Specifications/Conditions, the City's instruction, laws, ordinances or any public authority require any work to be specially tested or approved, the Contractor shall give to the City timely notice of its readiness for inspection and, if the inspection is by an authority other than the City, the date fixed for such inspection. Inspections by the City shall be promptly made and, where practicable, at the source of supply. If any work should be covered up without approval or consent of the City, it must, if required by the City, be uncovered for examination at the Contractor's expense. Re-examination of questioned work may be ordered and the work must be uncovered by the Contractor.
- **3.1.14** *Contractor's Supervision and Employees:* The Contractor shall supervise, inspect, and direct the work completely and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract Documents. The Contractor shall be solely responsible for the means, methods, techniques, sequence and procedures necessary for the orderly progress of the work, and to maintain all safety precautions and programs incidental thereto. The Contractor shall at all times enforce strict discipline and good order among his/her employees and shall not employ any unfit person or anyone unskilled in the work assigned to him/her. The Contractor shall be responsible to see that the completed work complies fully with the Contract Documents.

The Contractor will employ and maintain on the Work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor.

As the work progresses, the Contractor shall keep on the job at all times an English-speaking Supervisor, Superintendent or designee, technically qualified, who is an employee of the Contractor and who shall not be replaced without written notice and approval of the City. The Superintendent or his/her qualified designee shall be present at the job site and direct the work of subcontractors, as well as employees of the Contractor. This supervisor will be equipped with a communication device enabling him/her to contact suppliers, subcontractors or his/her office who in turn can convey necessary communications to others. The Contractor shall issue all communications to the City or his/her representative.

The Contractor's Superintendent shall be present on the job site <u>at all times</u> while work is in progress and shall be available by phone for emergencies twenty-four hours per day, seven days per week. Failure to observe this requirement shall be considered suspension of the work by the Contractor until such time as such Superintendent is again present on the job.

If the Contractor, in the course of the work, finds any discrepancy between the drawing and the physical conditions of the site, or any errors or omissions in drawing, or in the construction layout points and instructions, he/she shall immediately inform the City, in writing, and the City shall promptly verify same. Any work done after such discovery will be done at the Contractor's risk.

Neither party shall employ or hire any employee of the other party without the concurrence of each party.

- **3.1.15** *Contractor's Understanding:* It is understood and agreed that the Contractor has, by careful examination, satisfied himself/herself as to the nature and locations of the work, the conformation of the ground, the character, quality, and quantity of materials to be encountered, the character of equipment and facilities needed prior to and during prosecution of the work under this Contract. No verbal agreement or conversation with any officer, agent, or employee of the City, either before or after execution of this Contract, shall affect or modify the terms or obligations herein contained.
- **3.1.16** *Permits and Regulations:* Permits and licenses necessary for the prosecution of the work shall be secured by the Contractor and paid for by the City, unless otherwise specified. The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the specifications and drawings are at variance therewith, he shall promptly notify the City in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the City, he/she shall bear all costs arising there from.
- **3.1.17** *Protection of Work and Property:* The Contractor shall continuously maintain protection of all his/her work from damage and shall protect the City's property from injury or loss arising in connection with this Contract. He/she shall adequately protect adjacent property as provided by law and the Contract Documents. He/she shall provide and maintain all passageways, guard fences, lights, and other facilities for protection required by public authority or local conditions. In an emergency affecting the safety of life or of the work, or of adjoining property, the Contractor, without special instruction or authorization from the City, is hereby permitted to act, at his discretion, to prevent such threatened loss or injury, and he/she shall so act, without appeal, if so instructed or authorized. Any compensation claimed by the Contractor on account of emergency work shall be determined by agreement between the Contractor and the City.

The Contractor shall not occupy private land outside of any easements or rights of way unless a written authorization has been signed by the property owner. It shall be the Contractor's responsibility to obtain and provide these agreements prior to construction, if required. Prior to the use of private lands, the Contractor shall submit a copy of the agreement(s) to the City. In the event the Contractor uses private property for any purpose without first having obtained the necessary approvals from the property owner and provided the necessary agreements to the City, the City will direct the Contractor in writing to immediately cease using such property.

Prior to application for final payment, the Contractor shall provide documentation from the owner of each piece of private property for which an agreement for use was provided, or for which the City has issued written notification to the Contractor, that each owner is satisfied with the manner in which the Contractor has restored the property. Final payment or reduction in retainage shall not be paid until such documentation is received by the City.

3.1.18 *Changes in the Work:* The City, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the work, the Contract sum being adjusted accordingly. Such work shall be executed under the conditions of the original Contract. The change and amount of compensation must be agreed upon in writing in a document of equal dignity herewith prior to any deviation from the terms of this Contract.

In giving instructions, the City shall have authority to make minor changes in the work, not involving extra cost, and not inconsistent with the purposes of the work. Except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the City; and no claim for an addition to the Contract sum shall be valid, unless ordered. Value of any such extra work or change shall be determined in one or more of the following ways:

- **3.1.18.1** By estimate and acceptance in a lump sum.
- **3.1.18.2** By unit prices named in the Contract or subsequently agreed upon.
- **3.1.18.3** By cost and percentage or by cost and a fixed fee.

If none of the previous methods are agreed upon, the Contractor, provided he/she receives an order as above, shall proceed with the work. In such case and also under case, he/she shall keep amendment in such form as the City may direct, a correct amount of the net cost of labor and materials, together with vouchers. The City shall certify to the amount, including reasonable allowance for overhead and profit, due to the Contractor. Pending final determination of value, no payment on changes shall be made. When requiring a change in the scope of services the Contractor shall notify the City by written notice that a change order is requested within five (5) days of any occurrence.

- **3.1.19 Deductions for Uncorrected Work:** If the City deems it inexpedient to correct work injured or done not in accordance with the Contract, some equitable deductions from the Contract price shall be made thereof.
- **3.1.20 Delays and Extension of Time:** If the Contractor should be delayed at any time in the progress of work by any act of negligence by the City or its employees or by any other Contractor employed by the City, or by changes ordered in the work, or by such causes beyond the Contractor's control, or by delay authorized by the City, or by any cause which the City shall decide to justify the delay, then the time of completion shall be extended for such reasonable time as the City may decide. However, no time delay shall be allowed if judged by the City to be caused by the Contractor's negligence.

No such extension shall be made for delay occurring more than seven (7) calendar days before claim therefore is made in writing to the City. In the case of a continuing cause of delay only one (1) claim is necessary. This article does not exclude the recovery of damages for delay by either party under other provisions in the Contract Documents.

3.1.21 Correction of Work Before Final Payment: All work, materials, whether incorporated in the work or not, all processes of manufacturer, and all methods of construction shall be at all times and places subject to the inspection of the City who shall be the final judge of quality and suitability of the work, materials, processes of manufacture, and methods of construction for the purposes for which they are used. Should they fail to meet City's approval; they shall be forthwith reconstructed, made good, replaced, and/or corrected, as the case may be, by the Contractor at his/her own expense. Rejected material shall be immediately removed from the site. If, in the opinion of the City, any portion of the work injured or not

performed in accordance with the Contract Documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as the City, in its judgement, finds to be equitable.

- **3.1.22** Contractor Right to Stop Work or Cancel Contract: If the work should be stopped under an order of any court or other public authority for a period of three (3) months through no act or fault of the Contractor or of anyone employed by him, or if the City fails to pay the Contractor within thirty (30) calendar days of maturity and presentation of any sum certified by the City, then the Contractor may, upon seven (7) calendar days written notice to the City, stop work and terminate this Contract.
- **3.1.23** *Removal of Equipment:* In the case of annulment of this Contract before completion from any cause whatever, the Contractor, if notified to do so by the City, shall promptly remove any part or all of his equipment and supplies from property of the City and/or site of work, failing which the City has the right to remove such equipment and supplies at the Contractor's expense.
- **3.1.24** *Use of Completed Portions:* The City has the right to take possession of and use any completed or partially completed portions of the work, notwithstanding the time for completing the entire work of such portions may not have expired, but taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the work, the Contractor shall be compensated as the City may determine and the City approves.
- **3.1.25** *Payments Withheld:* The City may withhold payment to the Contractor from loss on account of:
 - **3.1.25.1** Defective Work not remedied.
 - **3.1.25.2** Claims filed or evidence indicating probable filing of claims.
 - **3.1.25.3** Failure of the Contractor to make payment properly to Subcontractors or for material/labor.
 - **3.1.25.4** A reasonable doubt that the Contract can be completed for the balance then unpaid.
 - **3.1.25.5** Damage to another Contractor
 - **3.1.25.6** When the above grounds are removed, payment shall be made for amounts withheld because of them.
- **3.1.26** *Damages:* Any claim for damage arising under this Contract shall be made in writing to the party liable within a reasonable time of the first observance of such damage and not later than the time of final payment, except as expressly stipulated otherwise in the case of faulty work, and shall be adjusted by agreement.
- **3.1.27** Assignment: Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any monies due or to become due to him/her hereunder without the previous written consent of the City.
- **3.1.28** *Right of Various Interests:* Before work being done by the City's forces or by other Contractor's forces, contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the City before such commencement, to secure the completion of the various portions of the work in general harmony.
- **3.1.29 Separate Contracts:** The City reserves the right to let other Contracts in connection with this work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and execution of the work, and shall properly connect and coordinate his/her work with

theirs. If any part of the Contractor's work depends on proper execution or results upon the work of any other Contractor, the Contractor shall inspect and promptly report to the City any defects in such work that render it unsuitable for such proper execution and results. His/her failure to so inspect and report shall constitute an acceptance of the other Contractors work as fit and proper for the reception of his work, except as to defects, which may develop on the other Contractor's, work after execution of his work.

3.1.30 *Subcontractors:* The Contractor shall provide a list of Subcontractors with his/her proposal for approval. The Contractor shall be fully responsible for all acts and omissions of his Subcontractors and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between City or City's Engineer of Record and any Subcontractor or other person or organization having a direct contract with Contractor, nor shall it create any obligation on the part of City or City's Engineer of Record to pay or to see to the payment of any moneys due any Subcontractor or other person or organization, except as may otherwise be required by law. City or City's Engineer of Record may furnish to any Subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to Contractor on account of specific Work done in accordance with the schedule of values.

Substitutions must be submitted in writing and shall be subject to the approval by the City. To insure proper execution of his/her subsequent work, the Contractor shall measure work already in place and shall at once report to the City any discrepancy between the executed work and the drawings.

Acceptance of any such Subcontractor, person or organization shall not constitute a waiver of any right of the City, City's Representative, or Engineer to reject defective Work, material or equipment; or, Work, material or equipment not in conformance with the requirements of the Contract Documents.

The divisions and sections of the Specifications and the identifications of any Drawings shall not control the Contractor in dividing the Work among Subcontractors or delineating the Work to be performed by any specific trade.

The Contractor agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the City.

All Work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate agreement between the Contractor and the Subcontractor.

The Contractor shall be responsible for the coordination of the trades, Subcontractors and materialmen engaged upon his Work.

- The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind Subcontractors to the Contractor by the terms of these General Conditions and other Contract Documents insofar as applicable to the Work of Subcontractors, and to give the Contractor the same power in regard to terminating any subcontract that the City may exercise over the Contractor under any provisions of the Contract Documents.
- The City, City's Representative, or Engineer will not undertake to settle any differences between the Contractor and his Subcontractors or between Subcontractors.
- If in the opinion of the City, City's Representative, or Engineer, any Subcontractor on the Project proves to be incompetent or otherwise unsatisfactory, he shall be replaced if and when directed in writing.

- **3.1.31** Horizontal and Vertical Control: Unless noted otherwise in the Contract documents, the Contractor shall be responsible for the layout of all Contract work. The Contractor shall employ or retain any/all professional services that are required by the Contract to complete the work. The Contractor shall carefully preserve benchmarks, reference points and stakes, and, in case of willful or careless destruction, be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.
- **3.1.32** Lands for Work: The City shall provide the lands upon which the work under this Contract is to be done, except that the Contractors shall provide land required for the erection of temporary construction facilities and storage of material, together with the right of access to same.
- **3.1.33** Cleaning Up: The Contractor shall, at such times as may be required by the City, remove from the City's property and from all public and private property, at his/her own expense, all temporary structures, used materials and equipment, rubbish and waste materials resulting from his/her operations. All damaged areas will be restored by the Contractor to their original conditions and approved by the City. By submission of a bid, the Contractor assumes full responsibility for the associated expenses. There shall not be an increase in time or price associated with such removal, and payment to Contractor may be withheld until such work is completed.
- **3.1.34** *Guarantee:* The Contractor shall warrant all equipment furnished and work performed by him/her for a period of one (1) year from the date of written acceptance of the work, final completion by the City or as may be otherwise specified. Any faulty work or equipment will be fully corrected at no cost to the City and restored work will be warranted for one year from the date of acceptance, or as may be otherwise specified. This will not release additional warranties required by other sections or provided by individual suppliers.

The making and acceptance of final payment shall not waive any claim for faulty work appearing after final payment or for failure to adhere strictly to the Contract documents. If any part of the project is guaranteed for a longer period, such longer period shall prevail. Except as otherwise specified, all work shall be guaranteed by the Contractor against defects resulting from use of inferior materials, equipment or workmanship for one (1) year from the date of completion or written acceptance by the City, whichever is later.

- **3.1.35** Responsibility Regarding Existing Utilities and Structures: The existence and location of underground utilities indicated on the plans are not guaranteed and shall be investigated and verified in the field by the Contractor before submitting a bid. Excavation in the vicinity of existing structures and utilities shall be done by hand. The Contractor shall be responsible for any damage to, and for maintenance and protection of, existing utilities and structures from any damage resulting from said excavation. The Contractor is to include within his line item bid prices the costs to protect, support, relocate, or move (whether shown or not shown on the proposed project set of plans) all underground utilities, which may be in conflict with the construction of the proposed project.
- **3.1.36** Accidents: The Contractor shall provide equipment and medical facilities as necessary to supply first aid to anyone who is injured in connection with the work. The Contractor must promptly report in writing to the City accidents arising out of, or in conjunction with the performance of the work, whether in, or adjacent to, the site, which causes death, personal injury, or property damages, giving full details and statements of witnesses. If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the City. If a claim is made by anyone against the Contractor or

Subcontractor on account of an accident, the Contractor shall promptly report the facts in writing to the City, giving full details of the claim.

- **3.1.37 Stage Plans:** Stage plans of structural alterations, cofferdams, dredging, furnished or approved by the City, shall be adhered to unless objected to in writing by the Contractor, but the submission or approval of stage plans by the City shall not relieve the Contractor of full responsibility for the work.
- **3.1.38** *Measurement of Quantities:* The quantities of work performed will be computed by the City on the basis of measurement taken by the City or its assistants, and these measurements shall be final and binding. All work computed under the Contract shall be measured by the City according to the United States Standard Measurement and Weights. The City does not assume any responsibility that the final quantities will remain in accord with estimated quantities, nor shall the Contractor claim misunderstanding or deception because of such estimate of quantities.

The estimated quantities of work to be done and material to be provided may be increased, decreased, or omitted, as provided herein. Any increase in quantities shall be approved by the City prior to any work.

- **3.1.39** *Reference to Other Specifications:* Where reference is made to specifications such as ASTM, AWWA or AASHTO, the latest edition shall be used.
- **3.1.40** *Sanitary Facilities:* The Contractor shall provide and maintain, in a sanitary condition, facilities for his/her employees as are required by local and state boards of health.
- **3.1.41 Quality of Equipment and Materials:** To establish standards of quality, the City may, in the specifications, refer to products by name and/or catalog number. This procedure is not to be construed as eliminating from competition other products of equal quality by other manufacturers where fully suitable in design.
 - **3.1.41.1** The Contractor shall furnish a complete list of proposed desired substitutions prior to signing of the Contract together with such engineering and catalog data as the City may require.
 - **3.1.41.2** The Contractor shall abide by the City's judgment when proposed substitute items of equipment are judged unacceptable and shall furnish the specified item of equipment in such case. All proposals for substitutions shall be submitted in writing by the General Contractor. The City will approve or disapprove proposed substitutions in writing within a reasonable time.
- **3.1.42** *Codes and Laws:* The successful bidder shall comply with all Federal, State, Local Laws and Ordinances that affect the Contract in any way.
- **3.1.43** *Traffic Control:* The Contractor shall comply with the National Committee on Uniform Traffic Control and Devices (NCUTCD) standards established by the Federal Highway Commission and the 2016 (or most current) FDOT Standards for Traffic Control Through Work Zones and maintain safe conditions at all times.
- **3.1.44** Exploration and Reports: If reference is made to identification of reports of explorations and tests of subsurface, or other project specific, conditions at the site that have been used in preparing the Contract documents, it should be understood that these reports are not part of the Contract documents. The Contractor shall have full responsibility with respect to subsurface, or other project specific, conditions at the

site. Technical data, made available only at the Contractor's request, may not be sufficient for construction purposes. Additional investigations may be necessary for the purposes of carrying out the construction project. If the Contractor desires additional subsurface, or other applicable project specific, investigation, it will be done at his/her expense, prior to bidding. Limited Subsurface, or other project specific, reports for this project are available through NPU.

If the Contractor has elected not to make subsurface, or other project specific, investigation prior to bidding, he/she shall not be entitled to any extra compensation or Contract change orders due to conditions encountered.

- **3.1.45** Existing Structures: Drawing of physical conditions in or relating to existing surface and subsurface structures which are at or contiguous to the site that have been utilized by the consultant and/or the City in preparation of the Contract documents. The Contractor may rely upon the accuracy of the technical data contained in such drawing but not for the completeness thereof for the purpose of preparing or submitting a bid. Except as previously indicated, the Contractor shall have full responsibility with respect to physical conditions in or relating to such structures.
- **3.1.46 Report of Differing Conditions:** If the Contractor believes that any technical data on which he/she relies is inaccurate, or if any physical conditions uncovered or revealed at the site differ materially from that indicated, reflected, or referred to in the Contract documents, the Contractor shall promptly, after becoming aware and before performing any work in connection therewith (except in emergency situations), notify the City in writing about the inaccuracy of difference. The City will promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto and advise the City in writing (with a copy to the Contractor) of the City's findings and conclusion. Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly.

No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required; provided, however, the time prescribed therefore may be extended by the City.

No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this Contract.

- **3.1.47 Not Shown or Indicated:** If an underground facility is uncovered or revealed at or contiguous to the site, which was not shown or indicated and of which the Contractor could not reasonably have been expected to be aware, the Contractor shall promptly, before performing any work (except in emergencies), identify the owner of such underground facility and give written notice thereof to that owner and to the City. The Contractor will review the underground facility to determine the extent to which the documents should be modified to reflect and substantiate the consequences of the existence of the underground facility. With City approval, the Contract documents will be amended or supplemented to the extent necessary. During such time, the Contractor shall be responsible for the safety and protection of such underground facility. The Contractor shall be allowed an increase or an extension of time, or both, to the extent that they are attributable.
- **3.1.48** *Progress Meeting:* Progress meetings will be conducted bi-weekly or as required if requested by Contractor or the City.

- **3.2.1** Contractor shall, at its expense, receive, unload, store in a secure place, and deliver from storage to the construction site all materials and equipment required for the performance of the Contract.
- **3.2.2** Contractor is not entitled to payment for same except for those materials which in City's discretion are properly stored and are going to be installed or incorporated into the construction of the Project within thirty (30) days of delivery to the construction site.
- **3.2.3** The storage facilities and methods of storing shall meet City's approval and shall be in accordance with manufacturer's recommendations, or City will not be obligated to pay for same.
- **3.2.4** Materials and equipment subject to degradation by outside exposure shall be stored in a weather tight enclosure provided by Contractor at its expense.
- **3.2.5** City may at its discretion require material to be stored in an air-conditioned location.
- **3.2.6** Provided the above conditions are met, the stored materials may be included in a subsequent Application for Payment if the Contractor also complies with the following:
 - **3.2.6.1** An applicable purchase order is provided listing the materials in detail and identifying the Contract Documents, by name, with verification that the total value of the purchase order amount reconciles with the corresponding application for payment stored materials line item value.
 - **3.2.6.2** Evidence that proper storage security is provided.
 - **3.2.6.3** The City is provided legal title (free of liens or encumbrances of any kind) to the material that is stored or stockpiled.
 - **3.2.6.4** The Contractor and/or its Subcontractor have provided insurance for the Stored Materials against loss, damage (from whatever source), or disappearance, including loss or theft prior to incorporation into the Work. By execution of the Contract, Contractor releases City from any responsibility for Stored Materials and assumes all liability for and risk of loss or damage, by whatever means, including City's alleged negligence, regardless of whether the City has paid for said Stored Materials.
- **3.2.7** Once any Stored Material is paid for by City, it shall not be removed from the designated storage area except for incorporation into the Work or upon subsequent written approval by City.
- **3.2.8** No Applications for Payment shall be submitted nor payments made based on the value of materials stored at locations other than the Project, unless otherwise approved in writing by the City.
- **3.2.9** It is further agreed between the parties that the transfer of title and the City's payment for any Stored Material pursuant to the Contract Documents shall in no way relieve the Contractor of the responsibility for providing and installing such material in accordance with the requirements of the Contract Documents.
- **3.2.10** The Contractor warrants that title to all of the Work or Stored Materials covered by the Application for Payment will pass to the City either by incorporation in the Project or upon receipt of payment by the Contractor, whichever occurs first, free and clear of all liens, claims, security, interest or encumbrance;

and that none of the Work and none of the Stored Materials covered by the Application for Payments will have been acquired by the Contractor, or by any other person performing the Work at the site or providing materials and equipment to the Project, subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such person.

3.2.11 In the event stored materials which City is paying for in advance of their being installed or incorporated into the Project pursuant to this Paragraph are not installed or incorporated into the Project within thirty (30) days of when they are delivered to the site, Contractor shall not be entitled to payment for any future stored materials on this Project and the amounts previously approved for payment for said materials shall be deducted from the Contractor's next application for payment.

END OF SECTION II

SECTION III. SPECIAL PROVISIONS

SP-01 INTENT: The purpose of this project is to obtain a competent, experienced and responsible Contractor to construct the project in accordance with the plans and specifications, in an expeditious manner that reasonably protects the public and adjacent property from the construction of the project.

The Contract Documents comprise the entire agreement between City and Contractor concerning the work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the project. The work specified herein shall consist of furnishing all supervision, labor, equipment, material and any incidentals required for the successful completion of all work as specified herein. All work shall conform within the limits as specified and shown and be in conformance with the appropriate Technical Specifications contained herein.

The plans, technical specifications, and other documents provided are intended to provide the Contractor with known conditions of the existing site and proposed work area. The Contractor is responsible to conduct any and all investigation, survey, or other activities required to fully understand the existing site and conditions that will be encountered during the project, and on which their bid will be based. Additional investigations may be necessary for the purposes of carrying out the construction project. The City of North Port will not consider or approve any claim for additional time or monetary compensation submitted by the Contractor caused by unknown site conditions or a failure by the Contractor to fully investigate and understand the full extent and nature of the work. This includes, but is not limited to, existing utilities as well as subsurface conditions.

SP-02 EQUIPMENT: The Contractor shall only use equipment, machines, or combination of machines that are in good and safe working condition. The equipment shall produce results that meet or exceed the Technical Specifications stated herein.

Equipment incapable of providing this will not be acceptable for use on this Project. The Contractor shall not use equipment which is unsafe or in need of repair. Work completed with equipment, which is not properly functioning, shall be deemed unacceptable.

SP-03 CONSTRUCTION SCHEDULE: The date for **Final Completion** of the Project shall be established as **120 calendar days after** Notice to Proceed.

The Contractor shall furnish copies of the Construction Schedule to the City at each *bi-weekly Progress* Meeting and with each month's Pay Request regardless whether Contractor is proposing significant changes in the Construction Schedule ornot.

SP-04 PRE-CONSTRUCTION CONFERENCE: A Pre-Construction Conference will be held, at which time the Contractor shall submit the following for the City's approval or acceptance:

A telephone list specifying the name, address, office phone number and cell phone numbers of all subcontractors or suppliers to be used on this project. If the Contractor proposes to subcontract any survey work that may be required, the Contractor shall include the registration number of the surveyor. The telephone list shall also include emergency telephone numbers. The Contractor shall include a 24-hour emergency telephone for the City's use, which the Contractor shall update as necessary throughout the

project. The Contractor shall request, in writing, any changes in subcontractors or suppliers.

No change in subcontractors or suppliers shall be made without written consent from the City.

- In addition to the telephone and facsimile numbers, the Contractor shall provide an e-mail address where emails can be sent. The e-mail address must be monitored at least daily and capable of transferring electronic files.
- The Contractor shall submit to the City a list of equipment the Contractor proposes to utilize on this project.
- The Contractor shall submit for City approval a paper copy and electronic copy of a Construction Schedule prepared using City approved software, and a Schedule of Progress Payment Requests.
- The Contractor shall also submit all other materials or mix designs, which will be used by the Contractor for this Contract.

Mobilization may not start until all submittals have been accepted by the City and/or City's Representative. Once approved, no changes will be allowed without the written approval of the City and/or the City's Representative.

The Contractor shall also provide, on a monthly basis, an update to the Construction Schedule reflecting changes made as a result of such reasons as weather, breakdowns, and unanticipated delays, as a means of better monitoring the project.

SP-05 PROGRESS MEETING: For this project, progress meetings shall be bi-weekly. The Contractor shall designate a representative to attend Progress Meetings held at the North Port Utilities Field Office, 6644 West Price Boulevard, North Port, Florida. The Contractor shall submit, at each meeting, up-to-date schedule information, a written projected schedule for the next two weeks, written claims for additional compensation, written claims for weather days to extend the Contract, results of all testing and Value Engineering Proposals. The City will use the updated schedule information to monitor the Contractor's production rate. Upon written notice from the City, the Contractor shall dedicate additional resources to increase the production rate such that the Contractor will be back on schedule. Failure to comply with the approved Construction Schedule shall result in the Contractor being considered in default and subject to suspension of this Contract. Contractor may request progress meetings be on a different schedule than bi-weekly provided the City can confirm work is proceeding expeditiously. City may require a return to bi-weekly progress meetings at any time.

SP-06 COOPERATION WITH UTILITIES: The Contractor shall notify all utility owner(s) affected by the construction prior to beginning work. Any expense of utility repair or other damage due to Contractor's operations shall be borne by the Contractor. Protection of utilities shall be the responsibility of the Contractor, who shall provide adequate protection to maintain proper service.

NOTE: The Contractor is to include within his bid prices, the costs to protect, and/or support, all above ground, overhead and underground utilities, which may be in conflict with the construction of this proposed project.

Attention is called to the Florida Underground Facility Damage Prevention and Safety Act defined in Florida Statute. This act provides for a "One Call Toll Free" telephone number to be used by all parties doing excavation, demolition or other underground construction.

SP-07 CONTRACT TIME: The Contractor specifically agrees that it will commence operations within a mutually agreed upon time following notification by the City to commence work and that all work to be performed under the provisions of this Contract shall be completed not more than **120 calendar days after** Notice to Proceed; subject only to delays caused through no fault of the Contractor or acts of God. Time is of the essence in the performance of this Contract. The contract time includes up to fourteen (14) calendar days for City and/or City's Engineer of Record

review of each submittal and resubmittal. There shall be no extension of time provided for modification and corrections or re-submittals to address deficiencies therein identified during the review by the City and/or City's Engineer of Record.

The work will be substantially complete within 90 calendar days; with final completion within **30 calendar days** after attaining Substantial Completion as established by the City. City shall provide the Contractor with a listing of items to be corrected or completed (punch list) after Substantial Completion is issued. The punch list will identify the remaining items that must be addressed to the satisfaction of the City by the Contractor to meet his/her obligations under the Contract. The Contractor shall complete all items on the punch lists to the satisfaction of the City prior to submittal of the application for final payment.

All extensions to the Contract time for permitted delays shall be by Change Order and signed by the City.

SP-08 PROJECT COMPLETION: Project final completion shall be defined as "the stage in the progress of the Work where the Work is complete in accordance with the Contract Documents so that the City can begin to utilize the Work for its intended use, all punch list items are complete, and the Contractor has completely demobilized from the project area." Project final completion shall not be more than **120 calendar days.**

SP-09 LIQUIDATED DAMAGES: The work shall be completed within the contract time as required by SP-08 "PROJECT COMPLETION." The contract time shall include the preparation, submittal, review and approval of submittals, delivery of materials, and construction, assembly, adjustment and placement into service for beneficial use of all facilities covered under this Contract. The City of North Port shall issue a Notice of Completion when it has determined that the work identified in the contract has been completed per SP-08 "PROJECT COMPLETION."

The City and the Contractor hereby agree that time is of the essence on this Contract and the City will suffer damages if the work is not completed within the contract time as required by SP-07 "Contract Time". It is further recognized and agreed by the City and the Contractor that the determination of the exact value of the damages the City would suffer due to a delay in the Completion of the work would be a difficult, time consuming and costly process. It is therefore hereby agreed by the City and the Contractor that it is in their mutual interest to establish a figure of **NINE HUNDRED FIFTY-EIGHT DOLLARS (\$958.00**) as Liquidated Damages (but not as a penalty) to be paid by the Contractor to the City for each calendar day that Completion is delayed beyond the Contract Time. It is mutually agreed by the City and the Contractor that neither shall make any claim to increase or reduce the amount to be paid under Liquidated Damages as the result of any calculation of actual damages suffered by the City as the result of delay in the Completion of the work.

Applicable liquidated damages are the amounts established in the following schedule:

Original Contract Amount Daily Charge Per Calenda	ar Day
\$50,000 and under	\$763
Over \$50,000 but less than \$250,000	<mark>\$958</mark>
\$250,000 but less than \$500,000	\$1,099
\$500,000 but less than \$2,500,000	\$1,584
\$2,500,000 but less than \$5,000,000	\$2,811
\$5,000,000 but less than \$10,000,000	\$3,645
\$10,000,000 but less than \$15,000,000	\$4,217
\$15,000,000 but less than \$20,000,000	\$4,698

For all contracts, regardless of whether the contract time is stipulated in calendar days or working days, the City

will count default days in calendar days. If the Contractor or, in case of his default, the surety fails to complete the work within the time stipulated in the Contract, or within such extra time that the City may have granted the Contractor or, in case of his default, the surety shall pay to the City, not as a penalty, but as liquidated damages, in the amount of \$958.00 per calendar day in which work is not completed.

The City has the right to apply, as payment on such liquidated damages, any money the City owes the Contractor.

The City does not waive its right to liquidated damages due under the Contract by allowing the Contractor to continue and finish the work, or any part of it, after the expiration of the Contract Time including granted time extensions.

In the case of default of the Contract and the completion of the work by the City, the Contractor and his surety are liable for the liquidated damages under the Contract, but the City will not charge liquidated damages for any delay in the final completion of the City's performance of the work due to any unreasonable action or delay on the part of the City.

The City considers the Contract complete when the Contractor has completed all work and the City has accepted the work. The City will then release the Contractor from further obligation except as set forth in his bond.

SP-10 DAMAGES: Areas adjacent to the construction that are damaged shall be repaired at the Contractor's expense. Restoration of adjoining areas shall be equal to or better than original condition and to the satisfaction of the City. Protection of personal property, utilities, structures, access drives, conduits, pavement, curbs, sidewalks, trees, and shrubs shall be the responsibility of the Contractor, who shall provide adequate protection to maintain proper service.

SP-11 CONTINUOUS PROSECUTION OF WORK: The Contractor shall continuously prosecute the work in accordance with the Contract Documents. Upon written direction from the City, the Contractor shall remove any personnel for the duration of the Contract, who fails to comply with the Contract Documents.

Once commencing the project, the operation must be continuously prosecuted during normal hours to its completion. At no time, shall the Contractor suspend work, for any reason for more than seven (7) calendar days, excluding delays granted for inclement weather. Should the Contractor fail to perform any work on the project for three (3) or more work days, the Contractor shall submit a written request to the City, no less than twenty-four (24) hours in advance of the restart of work, to allow the City to schedule the required inspection personnel. No work may restart, prior to the expiration of the twenty-four (24) hour notice without the City's approval.

Correction of safety concerns will be given priority and shall be corrected as soon as practicable, but not later than 24 hours after discovery by the City and notification to the Contractor. Failure to comply with these Provisions and/or Technical Specifications shall result in the Contractor being considered in default and subject to suspension of this contract.

SP-12 SAFETY AND PROTECTION:

- **A.** Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. Contractor shall take all necessary precautions for the safety of and shall provide the necessary protection to prevent damage, injury or loss to:
 - i. All employees on the work and other persons or organizations who may be affected thereby.
 - ii. All the work and materials and equipment to be incorporated therein, whether in storage on or off the site.
- **B.** Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and underground facilities not designated for removal, relocation or

replacement in the course of construction. Contractor shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of person or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

- **C.** All personnel working within the City's right-of-way shall at all times wear City approved safety vests, including personnel who may only briefly be out of their vehicle (i.e., supervisors, truck drivers).
- **D.** No open excavations are allowed on the project. Any pipe installation shall be backfilled properly the same day of work on such pipe area to allow safe passing of pedestrians and vehicles. The Contractor shall immediately remove any personnel who fail to conform to this requirement.
- **E.** Contractor shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be the contractor's superintendent unless otherwise designated in writing by Contractor to City.

P-13 CHANGES IN THE WORK: The City, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the work, the Contract sum being adjusted accordingly. Such work will be an **amendment to the contract** and shall require approval by the City Manager prior to prosecution of the additional work. The change and amount of compensation must be agreed upon in writing in a document of equal dignity herewith prior to any deviation from the terms of this Contract. In giving instructions, the City shall have authority to make minor changes in the work, not involving extra cost, and not inconsistent with the purposes of the work. Except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the City; and no claim for an addition to the Contract sum shall be valid, unless ordered.

Contingency: An amount added to an estimate to allow for items, conditions, or events for which the state, occurrence, or effect is uncertain and that experience shows will likely result, in aggregate, in additional costs. All contingency items will require approval from the Purchasing Manager or designee, the Finance Director and City Manager prior to any work being performed.

Value of any such extra work or change shall be determined in one or more of the following ways:

- 1. By estimate and acceptance in a lump sum.
- 2. By unit prices named in the contract or subsequently agreed upon.
- 3. By cost and percentage or by cost and a fixed fee.
- 4. By Change order executed by CityManager
- 5. By Contingency Authorization (executed by City Manager).

If none of the previous methods are agreed upon, the Contractor, provided he receives an order as above, shall proceed with the work. In such case and also under case, he shall keep amendment in such form as the City may direct, a correct amount of the net cost of labor and materials, together with vouchers. The City shall certify to the amount, including reasonable allowance for overhead and profit, due to the Contractor. Pending final determination of value, no payment on changes shall be made.

SP-14 SUBCONTRACTING, SUBLETTING AND/OR ASSIGNMENT: Do not, sell, transfer, assign or otherwise dispose of the Contract or Contracts or any portion thereof, or of the right, title, or interest therein, without written consent of the City. If the Contractor chooses to sublet any portion of the Contract, the Contractor must provide a written request to sublet work to the City for approval. With the City's acceptance of the request, the Contractor may sublet a portion of the work, but shall perform with its own organization work amounting to **not less than 40%** of the total Contract amount. The request will be deemed acceptable by the City, for purposes of the City's consent, unless the City notifies the Contractor within five (5) business days of receipt of the request that the City is not consenting to the requested

subletting.

Include in the total Contract amount the cost of materials and manufactured component products, and their transportation to the project site. For the purpose of meeting this requirement the City will not consider off-site commercial production of materials and manufactured component products that the Contractor purchases, or their transportation to the project, as subcontracted work.

If the Contractor sublets a part of a Contract item, the City will use only the sublet proportional cost in determining the percentage of subcontracted normal work. Execute all agreements to sublet work in writing and include all pertinent provisions and requirements of the Contract. All other agreements must be in writing and reference all applicable Contract provisions. Upon request, furnish the City with a copy of the subcontract and agreement. The subletting of work does not relieve the Contractor or the surety of their respective liabilities under the Contract.

The City recognizes a subcontractor only in the capacity of an employee or agent of the Contractor and the Engineer may require the Contractor to remove the subcontractor as in the case of an employee.

All sublets will be in continued compliance with all Contract provisions and the Contractor will continue to perform the minimum percentage of Contract work with its own organization, as required by said Contract. It is recognized and agreed that the prime contractor remains responsible for the proper performance of all requirements of said contract and use of sublet does not relieve or release the Contractor and his surety or either of them of any liability under the contract bond. A false statement or omission made in connection with subletting is sufficient cause for suspension, revocation, or denial of qualification to bid, and a determination of non-responsibility, and may subject the person and/or entity making the false statement to any and all civil and criminal penalties available pursuant to applicable Federal and State Law.

SP-15 AVAILABILITY OF LANDS: Work is planned to occur within rights of way or existing utility easements. The Contractor will be held responsible to obtain right of way use permit(s) from the City of North Port. NPU will pay the permit fee directly to the Neighborhood Development Services Department. Any additional or repeat inspection or testing charges shall be paid by the Contractor. See Special Provision SP-17.

SP-16 COORDINATION OF THE SPECIFICATIONS: Where conflicts between the City of North Port General Provisions, Special Provisions, Technical Specifications and Construction Plans, references, should they exist, it is the responsibility of the bidding Contractor to bring those conflicts to the attention of the Purchasing Agent prior to the bid date. After bids, have been received, the contractor will be held to the most stringent requirement.

The Contractor shall take no advantage of any apparent error or omission in the plans or specifications. If the Contractor discovers such an error or omission, he shall immediately notify the City. The City will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the plans and specifications.

SP-17 CONSTRUCTION PERMITS: The City has submitted the FDEP Notice of Intent to Use an Environmental Resource General Permit application and received Department of Health Notification of Acceptance of Use of a General Permit No. 0208589-162 for the work of this Contract. Once these two permits are issued, the Contractor shall be responsible for complying with all permit requirements.

The City will pay for all permit fees determined by the Building Department and the City of North Port Public Works Department. For this project, Right of Way (ROW) permit(s) will be required. The City will make payment directly to the Neighborhood Development Services Department for any miscellaneous fees assessed for the necessary permits and related inspections. Additional or re-inspection fees shall be paid for by the Contractor. Pressure testing the

system shall be paid for by the Contractor. Permits and licenses necessary for the prosecution of the work shall be secured by the Contractor.

SP-18 NOTICE-OF-INTENT (NOI): If necessary, the Contractor for the project shall submit a Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities, along with the permit fee with the Florida Department of Environmental Protection.

SP-19 SPECIFICATIONS AND PLANS: Information regarding this project may be viewed and downloaded from DemandStar's website at www.demandstar.com. Links to DemandStar are also available from the city website at www.cityofnorthport.com. Bid documents are posted on the City FTP site at http://apps.cityofnorthport.com/ftpinfo/; however, all addendums are posted on www.demandstar.com. Bid documents (Specifications and Plans are available on disk) may be obtained by contacting the City of North Port Purchasing Department at (941)743-7172 or E-mail your request to purchasing@cityofnorthport.com.

SP-20 CONTRACTOR'S UNDERSTANDING: It is understood and agreed that the Contractor has, by careful examination, satisfied himself as to the nature and locations of the work, the conformation of the ground, the character, quality, and quantity of materials to be encountered, the character of equipment and facilities needed prior to and during prosecution of the work under this Contract. No verbal agreement or conversation with any officer, agent, or employee of the City, either before or after execution of this Contract, shall affect or modify the terms or obligations herein contained.

SP-21 ERRORS OR OMISSIONS IN PERMITS, PLANS OR SPECIFICATIONS: The Bidder shall take no advantage of any apparent error or omission, which may be discovered in the Permits, Plans or Specifications but shall forthwith notify the City Representative of such discovery, who will then make such correction and interpretations as deemed necessary for reflecting the actual spirit and intent of the Permits and Specifications.

SP-22 VALUE ENGINEERING PROPOSAL: The Contractor may offer Value Engineering Proposals (VEP) for completing the work using different means, methods, and/or equipment than specified in the contract. The City's Utilities Engineering Manager and City's Engineer of Record will review and provide written comments to the City for each VEP provided by the Contractor. The City reserves the sole right to reject or accept any such VEP. Should the VEP be accepted by the City, the Contractor receives a 50% share of actual cost savings. The Contractor shall not be compensated for the preparation of a VEP.

SP-23 ROAD/LANE CLOSURE: No road closures are allowed. A lane closure request must be submitted in writing five (5) business days in advance of the requested lane closure. The time and length of closure(s) shall be approved by the City of North Port. The Contractor shall provide a Maintenance of Traffic (MOT) Plan for the requested lane closure(s) for review and approval by the City of North Port.

SP-24 MAINTENANCE OF TRAFFIC: The contractor shall be responsible for all maintenance of traffic and obtaining approval of a Maintenance of Traffic (MOT) Plan from the City for work within the ROW of any City Road. The Contractor shall maintain traffic at all times during construction.

SP-25 DEWATERING: The Contractor shall request approval from the City of North Port Project Manager before applying for a permit from the Southwest Florida Water Management District.

SP-26 PRIVATE PROPERTY: The Contractor shall not occupy private land outside of any easements or rights of way unless a written authorization has been signed by the property owner. It shall be the Contractor's responsibility to obtain these agreements prior to construction, if required. Prior to the use of private lands, the Contractor shall

submit a copy of the agreement(s) to the City. In the event that the Contractor uses private property for any purpose without first having obtained the necessary approvals from the property owner or provided the necessary agreement to the City, the City will direct the Contractor in writing to immediately cease using such property.

Prior to application for final payment, the Contractor shall provide documentation from the owner of each piece of private property for which an agreement for use was provided, or for which the City has issued written notification to the Contractor, that each owner is satisfied with the manner in which the Contractor has restored the property. Final payment or reduction in retainage shall not be paid until such documentation is received by the City.

Any areas, outside of the rights-of-way or easements that are impacted or damaged by the Contractor's activities shall be repaired at the Contractor's expense to the property owner's satisfaction. Restoration of impacted areas shall be equal to or better than original condition and to the satisfaction of the property owner. The Contractor shall be responsible to secure written approval of the restoration of the property from the property owner and submitting a copy to the City prior to requesting Substantial Completion. The City shall not release retainage to the Contractor until such time as the approvals are submitted by the Contractor.

SP-27 RESIDENTS CONCERNS: During the work of this Contract, residents may contact the City to question the progress of the work or express concerns regarding the work. These concerns are responded to by City's Utilities Department, but normally the Contractor will have more detailed information on the actual scheduling of the work or corrective measures required. Therefore, the Contractor will provide a telephone number and email address where City's Utilities Department can fax or email inquiries. The Contractor shall respond to these inquiries within two (2) business days detailing how the inquiry will be addressed and the time frame the Contractor will take in addressing this inquiry. City's Utilities Department will maintain a log of inquiries, which will be reviewed at each progress meeting.

SP-28 TESTING: Any and all testing requirements born out of, but not limited to contract requirements and permits, for the installation of utility piping, including but not limited to, pressure testing, will be included in the Contractor's bid price. Testing shall include all utilities installed as part of the work of these Contract Documents. Testing will be arranged in advance with an independent testing firm (also included in the bid price) for the testing of concrete and compaction. The City requests to be notified three (3) business days in advance of any test in order to have a City representative and the Engineer of Record, if required, present. Where less time for notice is specified in the specifications or plans, this special provision shall prevail.

SP-29 MISCELLANEOUS ITEMS: Miscellaneous items and accessories which are not specifically mentioned, but which are essential to produce a complete and properly operating installation, or usable structure or plant, providing the indicated function, shall be furnished and installed without change in the Contract Price. Such miscellaneous items and accessories shall be of the same quality standards, including material, style, finish, strength, class, weight and other applicable characteristics, as specified for the major component of which the miscellaneous items or accessory is an essential part, and shall be approved by the City's Engineer of Record before installation. The above requirement is not intended to include major components not covered by or inferable from the Drawings and Specifications.

SP-30 SOURCES OF WATER FOR TESTING, CLEANING, AND OTHER CONSTRUCTION PURPOSES: Reclaimed water piping pressure and flow testing and flushing may be done with reclaimed water. All Contractors' connection(s) to the City reclaimed water supply shall allow the City to meter the amount of reclaimed water used in testing, flushing, and other miscellaneous purposes during construction, etc. The Contractor is responsible for obtaining meter(s) and associated appurtenances, and paying all appropriate fees/deposits. Contractor shall not use any water until meter is installed. The actual reclaimed water used will be provided at no cost to the Contactor by Utilities. Any fees/deposits due back to the Contractor will be returned after the project is completed and the meter is removed.

If potable water is required for the Work of this Contract, all Contractors' connection(s) to the City potable water supply shall allow the City to meter the amount of water used. All potable water connections shall include a reduced pressure zone backflow preventer. The Contractor is responsible for obtaining meter(s), backflow preventers, and associated appurtenances, and paying all appropriate fees/deposits. Contractor shall not use any potable water until meter and backflow preventer are installed. The Contractor will set up an account with the City and will be billed at the City's normal rates for actual potable water used. Any fees/deposits due back to the Contractor will be returned after the project is completed and the meter is removed.

SP-31 POTABLE WATER AND WASTEWATER FORCE MAIN OVER-DEPTH AND PLACEMENT: Potable water mains and wastewater force mains shall be installed with a minimum of thirty-six (36") inches of cover over the pipe. Any required over-depth, whether shown on the plans or not, will be considered to be incidental to the main installation and no additional compensation will be made therefore.

SP-32 PRE-INSTALLATION VIDEO: No construction shall take place prior to the City's acceptance of the Pre-Installation Video. The video shall thoroughly capture the intended work area as outlined in the Contract Documents. The Pre-Installation Video will be used to protect all parties involved in the project.

SP-33 PERIODIC CLEAN UP AND RESTORATION: During construction, the Contractor shall regularly remove from site and properly dispose of all accumulated debris and surplus material of any kind that result from their operations. The Contractor shall remove unsightly mounds of earth, large stones, boulders, and debris so the site presents a neat appearance. Burial of construction debris is not permitted. Unused tools and equipment shall be stored at the Contractor's yard or base of operations for the project. When the contract work involves ROWs, private property, roadways, private driveways or access roads, easements and sidewalks, and any site work that may impede pedestrian or vehicular traffic while the installation work is in progress, the Contractor shall backfill, grade, compact, and otherwise restore the area to the basic condition which existed prior to work in order to allow vehicular and pedestrian use. All areas should be restored to their original design grade to facilitate drainage.

SP-34 CONNECTION TO EXISTING POTABLE WATER AND WASTEWATER FORCE MAIN(S): The connections to the existing potable water and wastewater force mains shall be paid at the contract bid price per each which shall include the cost of connection, satisfactory coordination of utility construction, labor, material, equipment and all other associated appurtenances required to complete the project in accordance with the Contract Documents. Tie-ins to existing main(s) shall be coordinated with City Utilities.

It shall be the express responsibility of the Contractor to connect his Work to each part of the existing work or of work previously installed as required by the Drawings and Specifications to provide a complete installation.

Connections/modifications to existing piping requires coordination with City Utilities staff. The Contractor shall not operate any existing valves.

SP-35 MAINTENANCE OF FLOW: It is the Contractor's responsibility to maintain the flow of the existing potable water, wastewater force mains, and lift stations during the construction. Maintenance of flow is considered incidental to the work and shall be done at no additional cost to the City.

SP-36 CITY RIGHT-OF-WAY RESTORATION: The ROW restoration includes all procedures to restore the ROW to a condition equal to or better than the original condition to the satisfaction of the City. The Contractor shall be responsible for restoration of items including but not limited to existing structures, stabilized roads, and ground areas damaged during construction.

During installation of new utilities, the Contractor shall maintain, an undisturbed existing buffer strip of ground cover

measuring a minimum of one foot (1') in width from the edge-of- pavement (EOP) in order to minimize potential erosion along the pavement edge. The Contractor shall be responsible for all costs to restore this buffer strip if disturbed during construction.

SP-37 HORIZONTAL DIRECTIONAL DRILL (HDD) PIPE MATERIALS: For this project, for the HDD elements of this project specified as HDPE, no alternative materials will be considered or accepted.

SP-38 LABOR, MATERIALS AND EQUIPMENT: The Contractor will provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. He will at all times maintain good discipline and order at the site.

The Contractor will furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, local telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of the Work.

All materials and equipment will be new, except as otherwise provided in the Contract Documents. When special makes or grades of material which are normally packaged by the supplier or manufacturer are specified or approved, such materials shall be delivered to the site in their original packages or container with seals unbroken and labels intact.

All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processors, except as otherwise provided in the Contract Documents.

SP-39 MATERIALS, EQUIPMENT, PRODUCTS, AND SUBSTITUTIONS: Materials, equipment and products incorporated in the Work must be approved for use before being purchased by the Contractor. The Contractor shall submit to the City a list of proposed materials, equipment or products, together with such samples as may be necessary of him to determine their acceptability and obtain his approval. No request for payment for "or equal" equipment will be approved until this list has been received and approved by the City.

Whenever a material, article or piece of equipment is identified on the Drawings or Specifications by reference to brand name or catalog number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered per 40 CFR 33.255(c) as referenced in Chapter 62-552, FAC. The Contractor may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the Contract Documents be reference to brand name or catalog number, and if, in the opinion of the City, such material, article, or piece of equipment is of equal substance and function to that specified, the City may approve its substitution and use by the Contractor. Incidental changes or extra component parts required to accommodate the substitute will be made by the Contractor without a change in the Contract Price or Contract Time.

No substitute shall be ordered or installed without the written approval of the City who shall be the judge of equality.

Delay caused by obtaining approvals for substitute materials will not be considered justifiable grounds for an extension of construction time.

Should any work or materials, equipment or products not conform with requirements of the Drawings and Specifications or become damaged during the progress of the Work, such Work or materials shall be removed and replaced, together with any work disarranged by such alteration, at any time before completion and acceptance of the Project. All such work shall be done at the expense of the Contractor.

No materials or supplies for the Work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the Seller. The Contractor warrants that he has good title to all materials and supplies used by him in the Work.

SP-40 USE OF PREMISES: The Contractor shall confine his apparatus, storage of materials, and operations of his workmen to limits indicated by law, ordinances, permits, and directions of City, and shall not unnecessarily encumber any part of the site.

Contractor shall not overload or permit any part of any structure to be loaded with such weight as will endanger its safety, nor shall he subject any part of the Work to stresses or pressures that will endanger it.

Contractor shall enforce City's instructions in connection with signs, advertisements, fires and smoking.

Contractor shall arrange and cooperate with City in routing and parking of automobiles of his employees, Subcontractors and other personnel, and in routing material delivery truck and other vehicles to the Project site.

SP-41 SURVEY: All survey monuments and benchmarks that may be disturbed during construction shall be referenced and replaced by the Contractor. All monuments and benchmarks disturbed or destroyed by the Contractor or any of his forces through accident or negligence shall be replaced by a Florida Licensed Professional Land Surveyor at the Contractor's expense.

SP-42 MANUFACTURER'S LITERATURE: Manufacturer's literature, when referenced, shall be dated and numbered and is intended to establish the minimum requirements acceptable. Whenever reference is given to codes, or standard specifications or other data published by regulating agencies or accepted organizations, including but not limited to National Electrical Code, applicable State Building Code, Federal Specifications, ASTM Specifications, various institute specifications, and the like, it shall be understood that such reference is to the latest edition including addenda in effect on the date of Bid.

SP-43 BRAND NAMES: Brand names where used in the technical specifications, are intended to denote the standard of quality and performance required of the particular material or product. The term "equal" or "equivalent", when used in connection with brand names, shall be interpreted to mean a material or product that is similar and equal in type, quality, size, capacity, composition, finish, color and other applicable characteristics to the material or product specified by trade name, and that is suitable for the same use and capable of performing the same function, in the opinion of the City's Engineer of Record, as the material or product so specified. The City's Engineer of Record must approve proposed equal items before they are purchased or incorporated in the Work.

SP-44 RECORD DRAWINGS: The Contractor will keep one record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. Record Drawings shall list all equipment removed from existing facilities. These shall be available to the City, City's Representative, City's Engineer of Record, and to the State of Florida Department of Environmental Protection (FDEP), and shall be delivered by him to the City upon completion of the Project. It shall be used for this purpose only. Final payment will not be made until receipt and approval by the City of Record Drawings.

SP-45 RECORD DRAWINGS CERTIFICATION: The certification statement shall be as follows:

"I hereby certify that the as-built location information of the water and/or wastewater facilities shown on these drawings conforms to the Minimum Technical Standards for Land Surveying in the State of Florida, chapter 5J-17.052 (Florida Administrative Code), as adopted by the Department of Agriculture and Consumer Services, Division of Consumer Services, Board of Professional Surveyors and Mappers in 2010, and that said as-builts are true and

correct to the best of my knowledge and belief as surveyed under my direction."

SP-46 COMPLETION OF THE PROJECT: The Completion of the project shall be accomplished and finalized prior to submittal of the application for final payment by the Contractor. The City shall determine the date of completion for the project when at the minimum, the following are met as well as all other conditions defined in the Contract Documents:

- All punch list items have been addressed to the satisfaction of the City;
- All testing has been completed and results are satisfactory (including but not limited to Pipe Pressure Test, Concrete, and Compaction Tests);
- Record Drawing requirements have been accepted and approved by the City and all other governmental agencies, if applicable;
- All associated equipment and facilities necessary for the reliable operation of the project are complete in accordance with contract requirements; and,
- All release of liens have been submitted and are satisfactory to the City, certifying that all payrolls, material bills, and other indebtedness incurred by the Contractor in connection with this project have been paid in full.

SP-47 STORED MATERIALS: Payment for stored materials will made in accordance with Section 3.2 of the General Provisions.

SP-48 PAYMENT ADJUSTMENT: The following will apply: This Contract will *not* provide for fuel or other payment adjustments due to increase in material costs during the life of the contract.

SP-49 TERMINOLOGY: Throughout the Contract Documents, references to City or Owner shall, where appropriate, refer to the City of North Port, a municipal corporation of the State of Florida. References to Utilities Department and North Port Utilities refer to the City of North Port's Utilities Department and are used interchangeably. References to Engineer or "Resident Project Representative" may, where appropriate, refer to either the City's Engineer of Record for the Project, which is Stantec Consulting Services, Inc., or to the City's Utilities Engineering Manager.

The terms General Conditions and General Provisions are used interchangeably in the Contract Documents. The terms Special Conditions and Special Provisions are used interchangeably in the Contract Documents.

The term "Contract Documents" is used interchangeably with "Agreement."

SP-50 WORK HOURS: The Contractor shall conduct work between 7 A.M. and 4 P.M. Monday through Friday, which is defined as regular work hours. The Contractor shall not conduct work on Saturdays, Sundays, legal holidays or holidays observed by the City. Work conducted outside of the regular work hours and days shall be permitted only with written permission from the City. Any additional cost incurred by North Port Utilities and/or the Engineer of Record for work outside these hours will be paid by the Contractor.

SP-51 NOTIFICATIONS OF 48 HOURS: Wherever the technical specifications or plans indicate a minimum of 48 hours' notice to Owner/City or Engineer, this special provision shall prevail dictating a minimum of three (3) business days' notice to Owner/City or Engineer.

SP-52 QUALIFICATIONS/REFERENCES: Contractor shall submit a minimum of four (4) recent (within the past five (5) years) references of projects of similar size and scope. Two of the four references shall be directly applicable to the horizontal directional drilling or similar project. Each reference shall include a project description, project location, name and phone number of a contact person, total project amount, and completion date. The City reserves the right

to contact references. Bidder is referred to MINIMUM QUALIFICATIONS AND REFERENCE FORM included later herein.

The Contractor/Subcontractor qualification requirements include the following criteria:

Successful completion of utility relocations during roadway construction or similar project.

SP-53 LICENSE(s) REQUIREMENT: Certified General Contractor OR Certified Underground Utilities Contractor.

SP-54 CITY'S STATUS: The City shall examine and inspect the work to assure compliance with the requirements of these Contract Documents. The City shall determine the quality and acceptability of materials and workmanship relative to the requirements of the Plans and Technical Specifications. The City has the authority as follows:

- 1. To stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract.
- 2. To reject all work which does not conform to the Contract.
- 3. To resolve questions which arise in the execution of the work.
- 4. To stop work whenever materials or shop drawings have not been approved prior to placement.
 No additional time or compensation will be added to the Contract when stopping the work for the above listed reasons.

SP-55 CRITERIA FOR AWARD: The award of this bid shall be to the lowest responsive, responsible bidder who meets or exceeds the minimum requirements of these specifications. Other consideration(s) of award shall be references, and equipment list. Any unfavorable references may be cause to deem bidder non-responsive.

The City reserves the right to reject the bid proposal of any bidder who has previously failed to perform properly, or on time, contracts of similar nature; or who is not in a position to satisfactorily perform the contract.

END OF SECTION III

SECTION IV. INSURANCE

Before performing any Contract work, the Contractor shall procure and maintain, during the life of this Contract, the following types of insurance coverage and shall furnish certificates representing such insurance to the City. The policies of insurance shall be primary and written on forms acceptable to the City and placed with insurance carriers approved and licensed by the Insurance Department in the State of Florida and meet a minimum financial AM Best and Company rating of no less than "A- Excellent: FSC VII." No changes are to be made to these specifications without prior written approval by the City Manager or designee. The City Manager or designee may alter the amounts or types of insurance policies required by this Contract upon agreement with Contractor.

WORKERS COMPENSATION: Coverage to apply for all employees for Statutory Limits in compliance with the applicable state and federal laws. The policy must include Employers' Liability with a limit of \$1,000,000 each accident; \$1,000,000 each employee; and \$1,000,000 policy limit for disease.

<u>COMPREHENSIVE GENERAL LIABILITY</u>: Occurrence form required. Aggregate must apply separately to this Contract/job. Minimum \$1,000,000 each occurrence; \$1,000,000 general aggregate; \$1,000,000 products and completed ops; and \$100,000 damage to rented premises. The city is to be name additionally insured.

BUSINESS AUTOMOBILE LIABILITY: To include all vehicles owned, leased, hired and non-owned vehicles with limits of not less than \$1,000,000 per each accident and for property damage and bodily injury, with Contractual liability coverage for all work performed under this agreement. The city is to be named additionally insured.

All insurance policies must be issued by companies of recognized responsibility licensed to do business in Florida and must contain a provision that prohibits cancellation unless the CITY is provided notice as stated within the policy. It is the Contractor's responsibility to provide notice to the CITY.

A. Special Requirements:

- 1. Occurrence Basis: All policies required by this Contract, with the exception of Workers' Compensation, or unless specific approval is given by Risk Management through the City's Purchasing Office, are to be written on an occurrence basis. Claims Made Policies will be accepted for professional and hazardous materials and such other risks only as authorized by the City's Purchasing Office. All Claims Made Policies contributing to the satisfaction of the insurance requirements herein shall have an extended reporting period option or automatic coverage of not less than two (2) years. If provided as an option, the Contractor agrees to purchase the extended reporting period on cancellation or termination unless a new policy is affected with a retroactive date, including at least the last policy year.
- 2. Additional Insured: All policies required by this Contract, with the exception of Workers' Compensation, or unless specific approval is given by Risk Management through the City's Purchasing Office, shall name the City of North Port, its Commissioners, officers, agents, employees and volunteers as additional insureds as their interest may appear under this Contract. This MUST be written in the description of operations section of the insurance certificate, even if there is check-off-box on the insurance certificate. Any costs for adding the City as "additional insured" shall be at the Contractor's expense.

<u>Certificates of Insurance</u>: All certificates of insurance must be on file with and approved by the City before commencement of any work activities under this Contract. All certificate(s) of insurance required herein must be accompanied by a copy of the additionally insured documents/endorsements (. Certificates of Insurance evidencing claims made or occurrences

form coverage and conditions to this Contract, as well as the contract number and description of work, are to be furnished to the City's Purchasing Office (4970 City Hall Boulevard, Suite 337, North Port, FL 34286) prior to commencement of work AND a

- minimum of thirty (30) calendar days prior to expiration of the insurance contract when applicable. The Certificate
 of Insurance issued by the underwriting department of the insurance carrier shall certify compliance with the
 insurance requirements provided herein.
- 2. Premiums and Deductibles: The Contractor shall be solely responsible for payment of all premiums for insurance contributing to the satisfaction of this Contract and shall be solely responsible for the payment of all deductibles and retention to which such policies are subject, whether or not the City is an insured under the policy. The Contractor's insurance is considered primary for any loss regardless of any insurance maintained by the City. The Contractor is responsible for all insurance policy premiums, deductibles, SIR (self-insured retentions) or any loss or portion of any loss that is not covered by any available insurance policy.
- 3. Waiver of Subrogation: All required insurance policies are to be endorsed with a waiver of subrogation. The insurance companies, by proper endorsement or thru other means, agree to waive all rights of subrogation against the City, its officers, officials, agents, employees, affiliates and volunteers, and the City's insurance carriers, for losses paid under the terms of these polices that arises from the contractual relationship or work performed by the Contractor for the City. It is the Contractor's responsibility to notify each insurance company of the Waiver of Subrogation and request written authorization or the proper endorsement. Additionally, the Contractor, its officers, officials, agents, employees, volunteers, and any subcontractors, agree to waive all rights of subrogation against the City, its officers, officials, agents, employees, affiliates and volunteers, and the City's insurance carriers for any losses paid, sustained or incurred, but not covered by insurance, that arise from the contractual relationship or work performed. This waiver also applies to any deductibles or self-insured retentions for which the Contractor or its agents may be responsible for.

B. POLICY FORM

- i. All policies, required by this Agreement, with the exception of Professional Liability and Workers Compensation, or unless specific approval is given by Risk Management through the City's Purchasing Office, are to be written on an occurrence basis, shall name the City of North Port, its Commissioners, officers, agents, employees and volunteers as additional insured as their interest may appear under this Agreement. Insurer(s), with the exception of Professional Liability and Workers Compensation, shall agree to waive all rights of subrogation against the City of North Port, its Commissioners, officers, agents, employees or volunteers.
 - ii. Insurance requirements itemized in this Agreement, and required of the Contractor, shall be provided by or in behalf of all Subcontractors to cover their operations performed under this Agreement. The Contractor shall be held responsible for any modifications, deviations, or omissions in these insurance requirements as they apply to Subcontractors.
- iii. Each insurance policy required by this Agreement shall:
 - Apply separately to each insured against whom claim is made and suit is brought, except with respect to limits of the insurer's liability.
 - 2. Be endorsed to state that coverage shall not be suspended, voided or cancelled by either party except after notice is delivered in accordance with the policy provisions. The Contractor is to notify the City Purchasing Office by written notice via certified mail, return receipt requested.

- iv. The City shall retain the right to review, at any time, coverage, form, and amount of insurance.
- v. The procuring of required policies of insurance shall not be construed to limit Contractor's liability nor to fulfill the indemnification provisions and requirements of this Agreement.
- vi. The Contractor shall be solely responsible for payment of all premiums for insurance contributing to the satisfaction of this Agreement and shall be solely responsible for the payment of all deductibles and retentions to which such policies are subject, whether or not the City is an insured under the policy.
- vii. Claims Made Policies will be accepted for professional and hazardous materials and such other risks as are authorized by the City's Purchasing Office. All Claims Made Policies contributing to the satisfaction of the insurance requirements herein shall have an extended reporting period option or automatic coverage of not less than two (2) years. If provided as an option, the Contractor agrees to purchase the extended reporting period on cancellation or termination unless a new policy is affected with a retroactive date, including at least the last policy year.

Certificates of Insurance evidencing Claims Made or Occurrences form coverage and conditions to this Agreement, as well as the agreement number and description of work, are to be furnished to the City's Purchasing Office (4970 City Hall Boulevard, Suite 337, North Port, FL 34286) prior to commencement of work AND a minimum of thirty (30) calendar days prior to expiration of the insurance contract when applicable. All insurance certificates shall be received by the City's Purchasing Office before the Contractor will be allowed to commence or continue work.

Applicants / bidders should carefully review their existing insurances and consider their ability to meet these requirements prior to submission. The requirements should be forwarded to their agent, broker, and insurance providers for review

END OF SECTION IV

BIDDER CHECKLIST

This checklist is provided to assist each Bidder in the preparation of their bid response. Included in this checklist are important requirements, which is the responsibility of each Bidder to submit with their response in order to make their response fully compliant. This checklist is only a guideline it is the responsibility of each Bidder to read and

con	nply	with the Invitation to Bid in its entirety.
	1.	Carefully read and become familiar with the Instructions to Bidders, General Provisions, Special Conditions and Technica Provisions, Permits, Inspections Reports, Surveys and Insurance Requirements.
	2.	Fill out and sign Bid Form (acknowledge addenda, bond information, subcontractors and suppliers, if applicable).
	3.	Fill out Bid Price Schedule (unit prices must be filled in every block).
	4.	Fill out and sign the Statement of Organization and have it properly notarized.
	5.	Provide State of Florida Registration (http://www.sunbiz.org/search.html)
	6.	Fill out and sign the Non-Collusive Affidavit and have it properly notarized.
	7.	Fill out and sign the Conflict of Interest Form
	8.	Fill out the Reference Form
	9.	Fill out and Sign the Vendor Drug Free Workplace Form.
	10.	Fill out and sign the "Local Business Affidavit" or "North Port Local Business Affidavit" NOT APPLICABLE
	11.	Fill out and sign Public Entity Crime Information
	12.	Fill out and sign No Lobbying Affidavit
	13.	Provide USB drive (pdf of submittal)
	14.	Fill out and sign the SWORN STATEMENT: THE FLORIDA TRENCH SAFETY ACT
	15.	Fill out and sign the CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS,
	ı	Attachment Number 10
	16.	Fill out and sign the CERTIFICATION REGARDING LOBBYING, Attachment Number 11
	17.	Fill out and sign the SCRUTINIZED BUSINESS FORM
	18.	Provide any additional documentation requested within the Bid Document, such as licensing.
	19.	Submit ONE (1) Original AND ONE (1) Copy of submittal.
insp	20. ectio	CREDIT CARDS Does your company accept Credit Card Payments? (Credit card payments will be processed upon the City's on and acceptance of goods/services and receipt of invoice for payment. The City will not pay fees for credit card transactions) YES NO
	21.	Clearly mark the sealed bid with the BID NUMBER AND BID NAME on the outside of the package.
	•	IF SUPPLYING A BID BOND USE THE ATTACHED BID BOND FORM. PERFORMANCE AND PAYMENT BONDS USE THE ATTACHED FORM, (FOR THE AWARDED CONTRACTOR TO TURN IN AT TH PRE CONSTRUCTION MEETING. City of North Port
		Finance Department/Purchasing Division Keith Raney, Contract Administrator II
		4970 City Hall, Suite 337
		North Port, Florida 34286 RFB NO. 2019-43 BRIDGE WATER MAIN REPLACEMENT – S. SALFORD BOULEVARD
Dat	e:	MID NO. 2013-43 DMDGE WATER WAIR REFLACEIVIENT - 3. SALFORD BOOLEVARD

Signed (Person authorized to bind the company): Title: Name (printed):_

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

BID FORM (THIS PAGE MUST BE COMPLETED AND SUBMITTED)

Name of Bidder:	
Business Address:	
Telephone Number:	_Fax Number:
E-mail Address:	
FEID #:	
(Invitation to Bid), Instructions to Bidd having familiarized himself/herself with performance of the Contract, and the cost agrees to perform within the time stiput required to be performed, and to provide and all utility and transportation services in a workmanlike manner, all of the workmanlike manner, all of the workmanlike manner.	rth Port pursuant to and in compliance with your notice inviting sealed bids ers, and the other documents relating thereto, the undersigned bidder, the terms of the Contract documents, local conditions affecting the tof the work at the place where the work is to be done, hereby proposes and lated in the Contract, including all of its component parts and everything and furnish any and all of the labor, material, tools, expendable equipment, and design of certain items necessary to perform the Contract and complete rk required in connection with the construction of said work all in strict ons and other Contract documents for the prices hereinafter set forth.
General Provisions, Special Provisions, Tec Fees, Plan Revisions, Plans, grants, geot REPLACEMENT – S. SALFORD BOULEVAR	by declare that he has read the Request for Bids, Instructions to Bidders, chnical Specifications & Conditions, Insurance Requirements, Bid Form, Permit echnical reports and any other documentation for: BRIDGE WATER MAIN and further agrees to furnish all items listed on the attached Bid Form in ms as indicated on the bid schedule form submitted. The above specified the BidForm.
those named herein; that this submitt he/she proposes and agrees, if the proposet set forth in the Contract documents and TOTAL BID PRICE:	It the only persons or parties interested in this submittal as principals are all is made without collusion with any person, firm, or corporation; and sal is accepted, that he/she will execute a Contract with the City in the form that he/she will accept in full payment thereof the following prices, to wit:
(TYPE/PRINT)	\$(NUMERIC)
Through the signing of this Bid Form, Bid (90) DAYS from the date of the official bid	der attests his/her bid is guaranteed for a period of not less than NINETY
	y):
Name (printed):	Title:

The undersigned acknowledges receipt of the following addenda, and the cost, if any, of such revisions has been included in the bid price.

Addendum No.	Dated	Addendum	Dated
		No.	
Addendum No.	Dated	Addendum	Dated
		No.	
Addendum No.	Dated	Addendum	Dated
		No.	
Addendum No.	Dated	Addendum	Dated
		No.	

BID BOND AND PERFORMANCE/PAYMENT BOND

BID BOND: ACCOMPANYING THIS PROPOSA	IS
	check", as the case may be) in an amount equal to at least 5% of the tota the port. Cashier's checks will be returned to all bidders after award of bid.
City as liquidated damages in case this proposition of the contract of the con	security as a proposal guarantee and agrees that it shall be forfeited to the sal is accepted by the City and the undersigned fails to execute a contract ocuments accompanied by the required labor and material and faithfully to the City, and accompanied by the required certificates of insurance age the services of an attorney in connection with the enforcement of this attorneys' fees incurred with or without suit.
total project price within ten (10) calenda undersigned shall be responsible and bear a	to furnish a Performance and Payment Bond in the amount of 100% of the days after notification of award to the Purchasing Department. The costs associated to record Performance and Payment Bond with Sarasota ling and a certified copy of the Bond shall be furnished to the Purchasing eeting.
All contract documents (i.e.; performance a of North Port".	nd payment bond, cashier's check, bid bond) shall be in the name of "City
Date:	
Signed (P <i>erson authorized to bind the company</i>):	
Name (printed):	Title:
(THIS PAGE	MUST BE COMPLETED AND SUBMITTED

BID SCHEDULE - SUMMARY OF PAYITEMS

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

It is understood that the estimated summary of pay item quantities are approximate only and are solely for the purpose of facilitating the comparison of bids, and that the Contractor's compensation shall be computed upon the basis of the actual quantities in the completed work, whether they be more or less than those shown.

Preparation of Bid Schedules: Contractor MUST use the bid schedule below (DO NOT RECREATE THIS FORM). All blank spaces in the Bid Form must be filled in legibly. Bidder should not reference the words "No Charge, N/A, included, dash, etc." in any of the blocks. Bidder must identify a monetary amount for each UNIT PRICE line item and the extended price (unless the unit price is "x" out by the City). If bidder is not providing a bid price for an item, zero (0) must be designated on that line item. Failure to identify a monetary amount in any of the UNIT PRICE line items may cause bidder to be deemed non-responsive and bid response be rejected. In case of discrepancy between unit price and extended price, the unit price will govern. Apparent errors in extension will be corrected.

Date:	
Signed (Person authorized to bind the company):	
Signed (Ferson dutilonized to bill the company).	
Name (printed):	_Title:

ITEM DESCRIPTION		UNIT OF MEASURE	EST QTY	UNIT PRICE	EXTENDED PRICE
2	"12-inch HDPE DR-11 DIRECTIONAL BORE UNDER COCOPLUM WATERWAY	LF	336		
3	10-inch PVC C-900, DR-18 R.J. PIPE and FITTINGS	LF	50		
4	10-inch GATE VALVE	EA	1		
5	12-inch X 10-inch TAPPING SLEEVE and 10-INCH TAPPING VALVE	EA	1		
6	CONNECTION TO EXISTING 10-inch AC WATER MAIN	EA	1		
7	REMOVE AND DISPOSE OF BRIDGE SUPPORTED WATER MAIN	LS	1		
8	GROUT, CAP, and ABANDON EXISTING WATERMAINS IN PLACE	LS	1		
9	MANUAL PRESSURE TESTING STATION/AIR RELEASE	EA	2		
SUB-TOTAL BID PRICE (ITEMS 2-9)					
1	MOBILIZATION/DEMOBILIZATION (MAX. OF 5% OF ITEMS 2 THROUGH 9)				
				TOTAL	

NON-COLLUSIVE AFFIDAVIT Before me, the undersigned authority, personally appeared: _____ who, being first duly sworn, deposes and says that: 1. He/She is the _____ (Owner, Partner, Officer, Representative or Agent) of , the Respondent that has submitted the attached reply; 2. He/She is fully informed respecting the preparation and contents of the attached reply and of all pertinent circumstances respecting such reply; 3. Such reply is genuine and is not a collusive or sham reply; 4. Neither the said Respondent nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other respondent, firm, or person to submit a collusive or sham reply in connection with the work for which the attached reply has been submitted; or have in any manner, directly or indirectly sought by agreement or collusion, or communication or conference with any respondent, firm, or person to fix the price or prices in the attached reply or of any other respondent, or to fix any overhead, profit, or cost elements of the reply price or the reply price of any other respondent, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the reply work. Signed, sealed and delivered this ______day of ______, 20_____. By: _____ (Printed Name) (Title) STATE OF _____

NOTARY SEAL:

THIS PAGE MUST BE COMPLETED AND SUBMITTED WITH YOUR PROPOSAL

Notary Public - State of Florida

Commission No:

Print Name: ____

Sworn to and subscribed before me this____ day of ______, 20___, by ______who \[\sqrt{}

is personally known to me or \square has produced his/her driver's license as identification.

EQUIPMENT LIST

Description	Manufacturer	Year	Condition	Leased/Owned (If leased, date of expiration)
•	to City approval. (If not app SUBCONTR EASE INCLUDE ADDRESS/TE	ACTOR(S) LEPHONE NUM	BER & E-MAIL)	When a source or su
(PLE	SUBCONTR EASE INCLUDE ADDRESS/TE	ACTOR(S) LEPHONE NUM	BER & E-MAIL)	
(PLE	SUBCONTR EASE INCLUDE ADDRESS/TE	ACTOR(S) LEPHONE NUM	BER & E-MAIL)	
(PLI	SUBCONTREASE INCLUDE ADDRESS/TE	ACTOR(S) LEPHONE NUM	BER & E-MAIL)	
(PLE	SUBCONTREASE INCLUDE ADDRESS/TE	ACTOR(S) LEPHONE NUM	BER & E-MAIL)	
(PLE	SUBCONTREASE INCLUDE ADDRESS/TE	EACTOR(S) LEPHONE NUM	BER & E-MAIL)	

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

QUALIFICATIONS AND REFERENCES

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

The Bidder (Company) shall have been in COMMERCIAL CONSTRUCTION BUSINESS WITH EXPERIENCE in projects involving water distribution infrastructure or other similar structures. Bidder shall demonstrate successful completion of a minimum of four (4) projects completed within the past five (5) years of similar size and scope to the BRIDGE WATER MAIN REPLACEMENT – S. SALFORD BOULEVARD.

1. Business/Customer Name:						
Name of Contact Person/Title:						
Telephone#	Fax	E-mail	_			
Address			_			
Phone Number		<u> </u>				
Duration of Contrac	t or business relationship		_			
Type of Services Pro	vided		_			
Contract Period:	FROM	ТО				
Contract Price \$	Cont	tract Price at Completion of the Project \$				
2. Business/Custom	er Name:		_			
Name of Contact Pe	rson/Title:					
Telephone#	Fax	E-mail	_			
Address			_			
Phone Number		<u> </u>				
Duration of Contract or business relationship						
Type of Services Provided						
3. Business/Custom	3. Business/Customer Name:					
Name of Contact Pe	rson/Title:					
Date:						
Signed (Person autho	rized to bind the company):					
Name (printed):		Title:				

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

Telephone#	Fax	E-mail	
Address			
		TO	
Contract Price \$		Contract Price at Completion of the Proje	ect \$
Phone Number			
Duration of Contra	act or business relation	onship	
Type of Services P	rovided		
Contract Period:	FROM	TO	
Contract Price \$		Contract Price at Completion of the Proje	ect \$
1 Rusinoss/Custo	mar Nama:		
Name of Contact i	Person/Title:		
Telephone#	Fax	E-mail	
Address			
Phone Number			
Duration of Contra	act or business relation	onship	
Type of Services P	rovided	_	
Contract Period:	FROM	TO	
Contract Price \$		Contract Price at Completion of the Proje	ect \$
Date:			
Signed (P <i>erson autl</i>	norized to bind the con	npany):	
Name (printed):		Title:	

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

STATEMENT OF ORGANIZATION

(Information Sheet for Transactions and Conveyances Corporation Identification)

The following information will be provided to the City of North Port for incorporation in legal documents. It is; therefore, vital all information is accurate and complete. Please be certain all spelling, and capitalization is exactly as registered with the state or federal government.

E-Ma	il	Fax #	
	State	Zip Code	
g City of North Port	, if different than	above: SAME AS ABOVE	
	State	Zip Code	
E-mail		Fax #	
esentative			
nber:			
hat it is authorized	to do business ir	n the State of Florida unless re	gistration is not required b
.m.			
		OIINO	
t created: that State:			
	E-Ma E-mail Esentative	State E-mail esentative that it is authorized to do business in (Pin: Yes n, it created: that State: ———————————————————————————————————	State Zip Code City of North Port, if different than above: SAME AS ABOVE State Zip Code

Is it in good standing: Authorized to transact business	Yes or No			
in Florida:	Yes or No			
State of Florida Department of State Certificate of Aut	chority Document No.:			
Does it use a registered fictitious name:	Yes or No			
Names of Officers: President:	Secretary:			
Vice President:	Treasurer:			
Director:	Director:			
Other:	Other:			
Name of Corporation (As used in Florida):				
(Spelled exactly as it is registered with the	he state or federal government)			
Corporate Address:				
Post Office Box:				
City, State Zip:				
Street Address:				
City, State, Zip:				
STATE OF				
COUNTY OF				
Sworn to and subscribed before me this day of, 20, by who \square is personally known to me or \square has produced his/her driver's license as identification.				
	Notary Public - State of Florida Print Name:			
Date:_	Commission No:			
Signed (Person authorized to bind the company):				
Name (printed):				

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

CONFLICT OF INTEREST FORM

F.S. §112.313 places limitations on public officers (including advisory board members) and employees' ability to contract with the City either directly or indirectly. Therefore, please indicate if the following applies:

An employee, public officer or advisory board member of the City, or their spouse or child, is an officer, partner, director, or proprietor of Respondent or has a material interest in Respondent. "Material interest" means direct or indirect ownership of more than 5 percent of the total assets or capital stock of any business entity. For the purposes of [§112.313], indirect ownership does not include ownership by a spouse or minor child. Name: Respondent employs or contracts with an employee, public officer or advisory board member of the City Name: None of The Above PART II: Are you going to request an advisory board member waiver? I will request an advisory board member waiver under §112.313(12) I will NOT request an advisory board member waiver under §112.313(12) N/A The City shall review any relationships which may be prohibited under the Florida Ethics Code and will disqualify any bidders whose conflicts are not waived or exempt. Date: Signed (Person authorized to bind the company): Title:		I am the spouse or child of an employee, public officer or advisory board member of the City
partner, director, or proprietor of Respondent or has a material interest in Respondent. "Material interest" means direct or indirect ownership of more than 5 percent of the total assets or capital stock of any business entity. For the purposes of [§112.313], indirect ownership does not include ownership by a spouse or minor child. Name: Respondent employs or contracts with an employee, public officer or advisory board member of the City Name: None of The Above PART II: Are you going to request an advisory board member waiver? I will request an advisory board member waiver under §112.313(12) I will NOT request an advisory board member waiver under §112.313(12) N/A The City shall review any relationships which may be prohibited under the Florida Ethics Code and will disqualify any bidders whose conflicts are not waived or exempt. Date: Signed (Person authorized to bind the company):		Name:
Name: None of The Above PART II: Are you going to request an advisory board member waiver? I will request an advisory board member waiver under §112.313(12) I will NOT request an advisory board member waiver under §112.313(12) N/A The City shall review any relationships which may be prohibited under the Florida Ethics Code and will disqualify any bidders whose conflicts are not waived or exempt. Date:		partner, director, or proprietor of Respondent or has a material interest in Respondent. "Material interest" means direct or indirect ownership of more than 5 percent of the total assets or capital stock of any business entity. For the purposes of [§112.313], indirect ownership does not include ownership by a spouse or minor child.
PART II: Are you going to request an advisory board member waiver? I will request an advisory board member waiver under §112.313(12) I will NOT request an advisory board member waiver under §112.313(12) N/A The City shall review any relationships which may be prohibited under the Florida Ethics Code and will disqualify any bidders whose conflicts are not waived or exempt. Date: Signed (Person authorized to bind the company):		, , , , , , , , , , , , , , , , , , , ,
Are you going to request an advisory board member waiver? I will request an advisory board member waiver under §112.313(12) I will NOT request an advisory board member waiver under §112.313(12) N/A The City shall review any relationships which may be prohibited under the Florida Ethics Code and will disqualify any bidders whose conflicts are not waived or exempt. Date: Signed (Person authorized to bind the company):		None of The Above
 □ I will request an advisory board member waiver under §112.313(12) □ I will NOT request an advisory board member waiver under §112.313(12) □ N/A The City shall review any relationships which may be prohibited under the Florida Ethics Code and will disqualify any bidders whose conflicts are not waived or exempt. Date: Signed (Person authorized to bind the company):	PART II:	
☐ I will NOT request an advisory board member waiver under §112.313(12) ☐ N/A The City shall review any relationships which may be prohibited under the Florida Ethics Code and will disqualify any bidders whose conflicts are not waived or exempt. Date:	Are you	going to request an advisory board member waiver?
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The City shall review any relationships which may be prohibited under the Florida Ethics Code and will disqualify any bidders whose conflicts are not waived or exempt. Date: Signed (Person authorized to bind the company):		I will NOT request an advisory board member waiver under §112.313(12)
any bidders whose conflicts are not waived or exempt. Date: Signed (Person authorized to bind the company):		N/A
Signed (Person authorized to bind the company):	•	, , , , , , , , , , , , , , , , , , , ,
	Date:	
Name (printed):Title:	Signed (Pers	son authorized to bind the company):
	Name (print	ted):Title:

This page to be returned only if Contractor is claiming a North Port Local Business Status
(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

PUBLIC ENTITY CRIME INFORMATION

As provided by F.S. §287.133, a person or affiliate who has been placed on the convicted vendor 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, supplier, 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 Section 287, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

l,		, being an authorized	representative of the Respondent
City:	State:	Zip Code:	, have read and understand
the contents above. I furth	ner certify that Responde	nt is not disqualified from replyi	ng to this solicitation because of F.S.
§287.133.			
Signature:		Date:	
Telephone #:		Fax #:	
Federal ID #:		E-mail:	
State of			
County of			
		of, 20, by over's license as identification.	who 🗆
NOTARY SEAL:			
		Notary Public - State of Flori	
		Print Name:	
		Commission No:	
Date:			
Signed (Person authorized to	bind the company):		
Name (printed):		Title:	

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

DRUG FREE WORKPLACE FORM

The	undersigned	Respondent	in ac	cordance	with	Florida	Statute doe	§287.087	hereby	certifies	that
-		(Company I	Vama)				uoc.	J.			
	 Publish a st or use of a cont employees for v 	atement notify rolled substan	ring emp	nibited in							
	2. Inform emp drug free work penalties that n	place, any ava	ilable dr	ug counse	eling, re	habilitati	on, and e				_
	3. Give each e the statement s			_	e comm	nodities o	r contractı	ual services	that are u	nder bid a	copy of
;	4. In the statement specified in subsection (1), notify the employees that, as a condition of working on t commodities or contractual services that are under bid, the employee 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 Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in t workplace no later than five (5) days after such conviction.					tement tion of					
	5. Impose a s program if such	anction on, or is available in	-		-			_		e or rehabi	ilitation
	6. Make a goo	d faith effort to	continu	e to main	tain a d	rug free v	vorkplace t	through imp	lementati	on of this s	section.
,	As the person a require		gn the st	atement,	I certify	that Res	pondent co	omplies full	y with the	above	
	Check one:										
		As the person requirements.		ed to sign	this sta	atement,	I certify th	at this firm	complies f	ully with a	bove
		As the person requirements.	authoriz	ed to sign	this sta	atement,	this firm d	oes not con	nply fully v	vith the ab	oove
						Signatu	re				

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

Print Name

Date

SWORN STATEMENT: THE FLORIDA TRENCH SAFETY ACT

(Complete if applicable)

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC BY AN OFFICER AUTHORIZED TO ADMINISTER OATHS.

1.	This Sworn Statement is submitted with Bid No					
2.	This Sworn Statement is submitted by	and (if applicable) its Feder	 whose business address is all Employer Identification 			
	Number (FEIN) is		, ,			
3.	My name is(PRINTED OR TYPED NAME OF INDIVIDUAL SIGNING	G) and hold the position of	 with the above entity			
4.	The Trench Safety Standards that will be in effect d 553.60-55.64, Trench Safety Act, and OSHA Standa	-	are Florida Statute Section			
5.	The undersigned assures that the entity will comply with the applicable Trench Safety Standards and agrees indemnify and hold harmless the County and ENGINEER, and any of their agents or employees from any clair arising from the failure to comply with said standard.					
6.	The undersigned has appropriated \$ for compliance with the applicable standards and it					
7.	The undersigned has appropriated \$requirements and intends to comply by instituting		liance with shoring safety			
8.	The undersigned, in submitting this Bid, represent geotechnical information and made such other in adequately design the trench safety system(s) he contact the safety system is a system of the contact that the system is a system of the syst	nvestigations and tests as he or sh				
		Authorized Signature/Title				
Swor	n to and subscribed before me					
this _						
	(date)	Notary Public Signature				
My C	ommission Expires:	(N	otary Seal)			

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

Scrutinized Company Certification Form

·	ne and Title:		
Address:	City:	State:	ZIP:
Phone Number:	Email Address:		
goods or services of any amount	ay not, bid on, submit a proposal for, or if, at the time of bidding on, submitted Companies that Boycott Israel List,	ing a proposal for, or entering	into or renewing such contract
goods or services of \$1 million of contract, the company is on the	ay not, bid on, submit a proposal for, or or more if, at the time of bidding on, Scrutinized Companies with Activities st, created pursuant to Florida Statu	submitting a proposal for, or in Sudan List, the Scrutinized	entering into or renewing sucl Companies with Activities in the
	CHOOSE ONE OF THE	FOLLOWING	
on behalf of the above-nam	or contract renewal is for goods or se ned company, and as required by Floric cicipating in a boycott of Israel.		
on behalf of the above-nam named company is not part	or contract renewal is for goods or so ned company, and as required by Floric icipating in a boycott of Israel, is not o n Activities in the Iran Petroleum Energ	da Statutes, section 287.135(5 n the Scrutinized Companies v), I hereby certify that the above vith Activities in Sudan List or th
	orida Statutes, section 287.135, the sull into, and may subject the above-nam		
Certified By:	ENTATIVE SIGNATURE		
AUTHORIZED REFRES	ENTATIVE SIGNATURE		
Print Name and Title:			
Date Certified:			

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

LOBBYING CERTIFICATION

STATE OF	F	_		
COUNTY	OF			
she is the au vendor and a active City of other staff or Contact and directed to the any question disqualification.	othorized representa any of its agents agro North Port solicitati routside individuals to abide by the rest he project manager, s for bid, proposal, q	tive ofee to have no contact or on, with any City of Nort working with the city in crictions outlined in the is prohibited. These peualification and/or any or process. The selection	(Name of the contractor, firm communication with, or discuss any matter the Port elected officials, officers, their appoint respect to this request other than the design General Terms and Conditions of the Solicitations shall not be lobbied, either individual ther solicitations released by the city. To do process is not considered final until such a terms.	or individual), and that the related in any way to any ntees or their agents or any gnated Procurement Official itation. Technical questions lly or collectively, regarding so is grounds for immediate
attemptin awarding (b) If any fun influence shall comp	g to influence either of any City Contract. ds other than City a a member of City Co olete and submit Sta	directly or indirectly an oppropriated funds have be mmission or an officer or ndard Form-L "Disclosure	aid, by or on behalf of the undersigned, to a officer or employee of the City, City Commispeen paid or will be paid to any person for in employee of the City in connection with this e Form to Report Lobbying", in accordance vegate of, 2019.	ssion in connection with the influencing or attempting to is contract, the undersigned
			Ву:	-
			(Printed Name)	
	F OF		(Title)	
			, 2017, by driver's license as identification.	who 🗆
			Notary Public - State of Print Name: Commission No:	

(THIS PAGE MUST BE COMPLETED AND SUBMITTED)

63

CITY OF NORTH PORT BID BOND

In Compliance with F.S. Chapter 255.051

STATE OF FLORIDA, CITY OF NORTH PORT

KNOW ALL BY THESE PRESENTS,	that			, aut	horized by law to do
business as a	contractor	in the	State of	Florida,	as Principal, and
		, a Corpo	ration char	tered and ex	xisting under the laws
of the State of, as	Surety, with its	principal o	offices in the	ne City of _	, and
authorized to do business in the State of	Florida, and in a	accordance	with Secti	on 255.051	, Florida Statues, are
held and firmly bound unto the City of N	orth Port, Florida	, in the ful	l and just s	um of 5% o	f the Total Bid Price,
in good and lawful money of the United			-	•	•
which payment well and truly to be mad		lves, our h	eirs, execu	tors, admini	strators, and assigns,
joint and severally and firmly by these pr					
The condition of the obligation is such					
, for (Bridge W	/ater Main Repla	cement So	outh Salfor	d Boulevar	d AND RFB 2019-
<u>43</u>).					
NOW, THEREFORE, if the Principal sha					
10 days after the prescribed forms are p		-			
North Port, Florida, in accordance with the	-	_		•	_
and sufficient surety or sureties as may	•				
Contract and for the prompt payment of		_			
the event of failure to enter into such Cor	_			-	
pay the City the difference between the	-				
procure the required work and/or supplie bid, then the above obligations shall be v	•				ount specified in said
IN THE WITNESS WHEREOF, the above					dar thair cayaral caala
dated, the name and corpor	-				
duly signed by its undersigned representa					ed and these presents
duly signed by its undersigned represent	itive, pursuant to	addiointy C	i its govern	ing oody.	
Witness as to Principal:				(SEA	AL)
		(Princ	cipal)		 /
(By)			1 " /		
Witness as to Surety:		Printe	d Name		
				(SEA	<u>(L)</u>
		(Sure	ty's Name)		

(By-As Attorney-in-Fact, Surety)

Affix Corporate Seals and attach proper Power of Attorney for Surety.

CITY OF NORTH PORT

PERFORMANCE AND PAYMENT BOND

In compliance with F.S. Chapter 255.05(1)(a) and Code of North Port Sec. 2-414

BOND NO.:	
BOND AMOUNT:	\$
CONTRACTOR NAME:	
PRINCIPAL ADDRESS:	
PRINCIPAL PHONE NO.:	
SURETY COMPANY NAME:	
SURETY AGENT:	
PRINCIPAL ADDRESS:	
PRINCIPAL PHONE NO.:	
CITY NAME:	City of North Port, Florida
PRINCIPAL ADDRESS:	4970 City Hall Boulevard
	North Port, Florida 34286
CITY CONTACT PHONE NO.:	(941)
CONTRACT NO.: (if applicable)	
PROJECT ADDRESS:	
(if applicable)	
DESCRIPTION OF PROJECT:	
(if applicable)	
DESCRIPTION OF	
IMPROVEMENT:	

	
Ву	this Bond, we,, as Principal, hereinafter called Contractor,
and	d, a corporation organized and existing under the laws of the State
of _	, with its principal office in the City of, as Surety, hereinafter called Surety,
are	held firmly bound unto the City of North Port, Florida, as Obligee, hereinafter called City, in the amount
of _	Dollars (\$), for the payment whereof Contractor and Surety bind
the	mselves, their heirs, executors, administrators, personal representatives, successors, and assigns, jointly
and	severally, firmly by these presents.
WH	IEREAS, Contractor has by written agreement dated, entered into a contract with City for
In a	accordance with drawings and specifications prepared by
Wh	ich contract is by reference made a part hereof, and is hereinafter referred to as the CONTRACT.
NO	W, THEREFORE, THE CONDITION OF THIS BOND is such that if Contractor:
1.	Performs the Contract dated, between Contractor and City for construction of Bridge Water Main Replacement South Salford, Bid #2019-43 , 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 Contractor with labor, materials, or supplies, used directly or indirectly by Contractor in the prosecution of the work provided for in the Contract; and
3.	Pays City all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that City sustains because of a default by Contractor 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 City 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.

(date)		
Principal		
	Ву:	
		As Presiden
		(SEAL)
Surety		
	Ву:	
Any Claims under this bond may be addressed to (name and address of Surety):		

elephone No:
Name and address of agent or representative in Florida if different from above:
Celephone No:

"SAMPLE" CONTRACT (SUBJECT TO CHANGE)

This Contract ("Contract") is made this	day of	, 2018 , by and between the City of
North Port, Florida, a municipal corporation of the State of	of Florida, hereinafter referre	ed to as the "City" and XXXXXXX, a
Florida limited liability company, whose principal place	of business is located at A	ADDRESS, CITY, Florida ZIP CODE,
hereinafter referred to as the "Contractor".		

WITNESSETH

That the parties to this Contract, in consideration of their mutual agreements and promises hereinafter contained, bind themselves, their partners, successors, assigns and legal representatives to all covenants, agreements and obligations contained in the agreements and bid documents executed between the parties, and do hereby further agree as follows:

1. RESPONSIBILITIES OF THE CONTRACTOR:

A. Responsibility for and Supervision: The Contractor shall supervise and direct the work to the best of his/her ability, give it all the attention necessary for such proper supervision and direction and not employ for work on the project any person without sufficient skill to perform the job for which the person was employed.

The Contractor assumes full responsibility for acts, negligence, or omissions of all his/her employees on the project, for those subcontractors and their employees, and for those of all other persons doing work under a contract with him/her. All contracts between the Contractor and any such subcontractor as the Contractor shall hire, shall conform to the provisions of the Contract and bid documents and shall incorporate in them the relevant portions of this Contract.

B. **Furnishing of Labor and Materials:** The Contractor shall provide and pay for all labor, materials, and equipment, including tools, construction equipment and machinery, and all transportation and all other facilities and services necessary for the proper completion of the work in strict conformity with the provisions herein contained, and with the Request For Bid No. 2019-43 (RFB), including the EPA grant documents, plans and specifications, addendums and with the proposal submitted by the Contractor and on file with the City. The foregoing RFB, specifications, and proposal submitted by the Contractor, are hereby specifically made a part of this Contract and are incorporated herein.

The Contractor represents and warrants to the City that all equipment and materials used in the work, and made a part of the structures thereon, or placed permanently in connection therewith, will be new unless otherwise specified in the Contract and bid documents, of good quality, free of defects, and in conformity with the Contract and bid documents. It is understood between the parties thereto that all equipment and materials not in conformity are defective.

- C. **Incorporation of Bid Documents:** The Request For Bid No. 2019-43, including the EPA grant documents, plans, specifications, and addendums, and Contractor's response to RFB, are specifically made a part of this Contract and are incorporated herein. In the event of a conflict between or among the documents or any ambiguity or missing specifications or instruction, the following priority is established:
 - 1. First, this Contract (Contract No. 2019-43) Approved by Commission, and any attachments
 - 2. Second, Request for Bid, including any and all attachments and addenda
 - 3. Third, Contractor's response to this solicitation.

- 4. Fourth, specific direction from the City Manager
- D. **Public Records Law:** In accordance with Florida Statutes 119.0701, Contractor shall comply with all public records laws, and shall specifically:
- 1. Keep and maintain public records required by the City to perform the service.
 - a. The timeframes and classifications for records retention requirements must be in accordance with the General Records Schedule GS1-SL for State and Local Government Agencies.

(See http://dos.dos.state.fl.us/library-archives/records-management/general-records-schedules/).

- b. "Public records" means and includes those items specified in Florida Statutes 119.011(12), as amended from time to time, and currently defined as: All documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form, characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business with the City. Contractor's records under this Agreement include but are not limited to, supplier/subcontractor invoices and contracts, project documents, meeting notes, e-mails and all other documentation generated during this Agreement.
- 2. Upon request from the City's custodian of public records, provide the City, at no cost, 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 for by law. All records kept electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.
- 3. Ensure that project 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, if the Contractor does not transfer the records to City following completion of the contract, for the time period specified in General Records Schedule GS1-SL for State and Local Government Agencies.
- 4. Upon completion of the contract, transfer, at no cost, to the City all public records in Contractor's possession or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City 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 the completion of the contract, the Contractor shall meet all applicable requirements for retaining public records.
- 5. IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT CUSTODIAN OF PUBLIC RECORDS, 4970 CITY HALL BOULEVARD, NORTH PORT, FLORIDA 34286, 941.429.7063 OR HOTLINE 941.429.7270; E-MAIL: keto@cityofnorthport.com.
- 6. Failure of the CONTRACTOR to comply with these requirements shall be a material breach of this Agreement. Further, Contractor may be subject to penalties under Florida Statutes 119.10.

2. CONTRACT PRICE:

In consideration of the foregoing services, work, labor and materials to be furnished by the Contractor as per said plans, specifications and addendums, the City agrees to pay, and the Contractor agrees to receive payments in accordance with the prices set forth in the RFB NO. 2019-43 and amended from time to time to account for actual field conditions.

The **CONTRACT PRICE** Is **XXXXXX-XXX** (\$XXXX).

3. PAYMENT:

Two (2) original requests for payment must be submitted to the City of North Port on a form approved by the City. Each pay request must be accompanied by an updated work schedule to reflect progress of work. Payment shall be accompanied by either written approval and direction of the surety, or receipt of updated affidavits of payment by subcontractors and/or suppliers, in accordance with F.S. §255.05(11). Price shall be net and all invoices payable according to the Florida Local Government Prompt Payment Act (F.S. ch. 218). Upon certification and approval by the City or its duly authorized agent, progress payments may be made to the Contractor upon its application for all services or work completed or materials furnished in accordance with the Contract. Prior to fifty percent (50%) completion, the Contractor will be paid monthly the total value of the work completed and accepted during the preceding month, less ten percent (10%) retainage. After fifty percent (50%) completion of the construction services purchased pursuant to the Contract, the City must reduce to five percent (5%) the amount of retainage withheld from each subsequent progress payment made to the Contractor upon request of the Contractor. For purposes of this subsection, the term "fifty percent (50%) completion" is the point at which the City has expended fifty percent (50%) of the total cost of the construction services purchased as identified in the Contract together with all costs associated with existing change orders and other additions or modifications to the construction services provided for in the Contract. The City shall inform the Contractor's Surety of any reduction in retainage. Contractor must update each new pay request in accordance with any changes made to the previous submittal. The City or its duly authorized administrative agent, shall approve final payment for all work, materials or services furnished under this Contract retainage may be reduced upon issuance of the Certificate of Substantial Completion by the City if, in the sole opinion of the City, sufficient progress on the schedule has been accomplished, all required affidavits have been provided, and the City has retained adequate coverage for the project through the achievement of Final Completion.

4. CONTRACT TIME:

The Contractor specifically agrees that it will commence operations within a mutually agreed upon time following notification by the City to commence work and that all work to be performed under the provisions of this Contract shall be completed in not more than **120 calendar days**, from the notice to proceed; subject only to delays caused through no fault of the Contractor or acts of God. The work will be substantially completed within **90 calendar days**; with final completion within **30 calendar days** after attaining Substantial Completion. Time is of the essence in the performance of this Contract. This project is partially funded by a grant, as such, time is of the essence to complete the project by the Final Completion date and grant funding date.

5. LIQUIDATED DAMAGES:

The work shall be completed within the Contract time specified. The Contract time shall include the preparation, submittal, review and approval of submittals, delivery of materials, and construction, assembly, adjustment and placement into service for beneficial use of all facilities covered under this Contract.

The City shall issue a Notice of Substantial Completion when it has determined that the work identified in the Contract has been substantially completed; record drawings have been submitted and approved by the City and that the facility is operating satisfactorily. The Contract time also includes up to fourteen (14) calendar days for the review of submittals, excluding pay requests, by the City. The City shall provide the Contractor a punch list within two (2)

calendar days after the Notice of Substantial Completion is issued. The punch list will identify the remaining items that must be addressed to the satisfaction of the City by the Contractor to meet his/her obligations under the Contract. The Contractor shall complete the items on the punch list to the satisfaction of the City within twenty-eight (28) additional calendar days of the issuance of the Final Punch List or Notice of Substantial Completion, whichever is later, and prior to submittal of the application for reduction of retainage or final payment. Any cost incurred by the City (i.e. inspection time) after the twenty-eight (28) calendar day period shall be charged to the Contractor.

The City and the Contractor hereby agree that time is of the essence on this Contract and the City will suffer damages if the work is not substantially completed within the Contract time, plus any extensions thereof allowed by Change Order. It is further recognized and agreed by the City and the Contractor that the determination of the exact value of the damages the City would suffer due to a delay in the Substantial Completion of the work would be a difficult, time consuming and costly process. It is therefore hereby agreed by the City and the Contractor that it is in their mutual interest to establish a figure of (\$958.00) as Liquidated Damages (but not as a penalty) to be paid by the Contractor to the City for each calendar day that Substantial Completion is delayed beyond the Contract Time.

It is mutually agreed by the City and the Contractor that neither shall make any claim to increase or reduce the amount to be paid under Liquidated Damages as the result of any calculation of actual damages suffered by the City as the result of delay in the Substantial Completion of the work.

6. BOND REQUIREMENTS:

A. Bond Requirements: The successful bidder shall provide the required performance and payment bond or other acceptable security to the City within ten (10) business days of being awarded the bid. Failure by the successful bidder to provide the bond within ten (10) business days shall be considered a default under Sec. 2-404 of the Code of City of North Port, Florida. Upon such default the City may immediately award the bid to the next lowest responsive and responsible bidder, and recover from the original successful bidder the difference in cost between the original winning bid and the next lowest responsive and responsible bidder. Such default shall only be curable at the option of the City.

In addition, the Contractor shall be responsible and bear all costs associated to record the Performance and Payment Bond with Sarasota County Clerk's Office. The Contractor shall furnish the receipt of said recording and certified copy of the bond to the Purchasing Department at the time of the pre-construction meeting. Such default shall only be curable at the option of the City.

- **B.** Performance and Payment Bond: The Contractor shall provide a Performance and Payment Bond, in the form prescribed in Florida Statutes Section 255.05 in the amount of one hundred percent (100%) of the Contract amount, the costs of which are to be paid by the Contractor. The bond will be acceptable to the City only if the Surety Company:
 - 1. Is licensed to do business in the State of Florida;
 - 2. Holds a certificate of authority authorizing it to write surety bonds in this state;
 - 3. Has twice the minimum surplus and capital required by the Florida Insurance Code at the time the invitation to bid is issued;
 - 4. Is otherwise in compliance with the provisions of the Florida Insurance Code;

- 5. Holds a currently valid certificate of authority issued by the United States Department of Treasury under 31 U.S.C. §§ 9304-9308;
- 6. A current rating of at least Excellent (A or A-) as reported in the most current Best Key Rating Guide, published by A.M. Best Company, Inc., of 75 Fulton Street, New York, New York 10038; and
- 7. With an underwriting limitation of at least two times the dollar amount of the contract.

If the Surety Company for any bond furnished by the Contractor files for bankruptcy, has a receiver appointed, is declared bankrupt, becomes insolvent, has an assignment made for the benefit of creditors, has its right to do business terminated in the State of Florida, or ceases to meet the requirements imposed by the Contract Documents, the Contractor shall, within five (5) calendar days thereafter, substitute another Bond and Surety Company, both of which shall be subject to the City's approval.

By execution of this bond, the Surety Company acknowledges that it has read the surety qualifications and surety obligations imposed by the Contract documents and hereby satisfies those conditions.

By execution of this bond, the Surety Company acknowledges that it has read the surety qualifications and surety obligations imposed by the Contract documents and hereby satisfies those conditions.

7. INSURANCE:

Before performing any Contract work, the Contractor shall procure and maintain, during the life of this Contract, the following types of insurance coverage and shall furnish certificates representing such insurance to the City. The policies of insurance shall be primary and written on forms acceptable to the City and placed with insurance carriers approved and licensed by the Insurance Department in the State of Florida and meet a minimum financial AM Best and Company rating of no less than "A- Excellent: FSC VII." No changes are to be made to these specifications without prior written approval by the City Manager or designee. The City Manager or designee may alter the amounts or types of insurance policies required by this Contract upon agreement with Contractor.

A. WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE (PER CHAPTER 440, FLORIDA STATUTES):

The Contractor shall procure and maintain during the life of this Contract Worker's Compensation insurance for all his employees to be engaged in work on the project under this Contract and, in case any such work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation insurance for all of the latter's employees to be engaged in such work unless such employees are covered by protection afforded by the Contractor's Workers Compensation insurance. For additional information contact the Department of financial Services, Workers' Compensation Division at 850.413.1601 or on the web at www.fldfs.com.In case any class of employees engaged in hazardous work on the project under this Contract is not protected under the Worker's Compensation Statute, the Contractor shall provide, and shall cause each subcontractor to provide, Employer's Liability Insurance for the protection of such of his employees not otherwise protected under such provisions. The minimum liability limits of such insurance shall not be less than herein specified or in that amount specified by law for that type of damage claim.

Proof of such insurance shall be filed by the Contractor with the City within ten (10) days after the execution of this Contract. Coverage is to apply for all employees in the statutory limits in compliance with the applicable state and federal laws. The policy must include Employers' Liability with a limit of \$1,000,000 for each accident; \$1,000,000 each employee; and \$1,000,000 policy limit for disease.

B. COMPREHENSIVE GENERAL LIABILITY: The Contractor shall procure and maintain, and require all subcontractors to procure and maintain during the life of this Contract, a comprehensive general liability policy, including, but not

limited to, 1) Independent Contractor's liability; 2) products and completed operations liability; 3) contractual liability; 4) broad form property damage liability; and 5) personal injury liability. The minimum shall be no less than \$1,000,000 each occurrence; \$1,000,000 general aggregate; \$1,000,000 products and completed ops; and \$100,000 damage to rented premises. The City of North Port shall be named as an additional insured.

C. BUSINESS AUTOMOBILE LIABILITY: The Contractor shall procure and maintain, and require all subcontractors to procure and maintain, during the life of this Contract, automobile liability insurance including all owned, hired, and nonowned automobiles. The minimum combined single limit per occurrence shall be no less than \$1,000,000 for bodily injury and property damage liability. This shall include owned vehicles, hired, and non-owned vehicles, as well as employee's non-ownership. The City of North Port shall be named as additional insured.

SPECIAL REQUIREMENTS: The City of North Port, Florida, is to be named additional insured on any Comprehensive Commercial General Liability Policy and Auto Policy. All certificates of insurance must be on file with and approved by the City before commencement of any work activities under this Contract.

Any and all deductibles to the above referenced policies are to be the responsibility of the Contractor. The Contractor's insurance is considered primary for any loss regardless of any insurance maintained by the City. The Contractor is responsible for all insurance policy premiums, deductibles, or SIR (self-insured retentions) or any loss or portion of any loss that is not covered by any available insurance policy.

All insurance policies must be issued by companies of recognized responsibility licensed to do business in the State of Florida and must contain a provision that prohibits cancellation unless the City is provided notice as stated within the policy. It is the Contractor's responsibility to provide notice to the City.

This must be written in the description of operations section of the insurance certificate, even if there is check-off- box on the insurance certificate. Any costs for adding the City as "additional insured" shall be at the Contractor's expense. All certificates of insurance must be on file with and approved by the City before commencement of any work activities under this Contract.

WAIVER OF SUBROGATION: All required insurance policies, with the exception of Workers Compensation, are to be endorsed with a waiver of subrogation. The insurance companies, by proper endorsement or thru other means, agrees to waive all rights of subrogation against the City, its officers, officials, employees and volunteers, and the City's insurance carriers, for losses paid under the terms of these polices that arises from the contractual relationship or work performed by the Contractor for the City. It is the Contractor's responsibility to notify their insurance company of the Waiver of Subrogation and request written authorization or the proper endorsement. Additionally, the Contractor, its officers, officials, agents, employees, volunteers, and any subcontractors, agrees to waive all rights of subrogation against the City and its insurance carriers for any losses paid, sustained or incurred, but not covered by insurance, that arise from the contractual relationship or work performed. This waiver also applies to any deductibles or self-insured retentions the Contractor or its agents may be responsible for.

POLICY FORM:

- 1. All policies, required by this Contract, with the exception of Workers Compensation, or unless specific approval is given by Risk Management through the City's Purchasing Office, are to be written on an occurrence basis, shall name the City of North Port, its Commissioners, officers, agents, employees and volunteers as additional insured as their interest may appear under this Contract. Insurer(s), with the exception of Professional Liability and Workers Compensation, shall agree to waive all rights of subrogation against the City of North Port, its Commissioners, officers, agents, employees, or volunteers.
- 2. Insurance requirements itemized in this Contract, and required of the Contractor, shall be provided by or on behalf

of all subcontractors to cover their operations performed under this Contract. The Contractor shall be held responsible for any modifications, deviations, or omissions in these insurance requirements as they apply to subcontractors.

- 3. Each insurance policy required by this Contract shall:
- a. Apply separately to each insured against whom claim is made and suit is brought, except with respect to limits of the insurer's liability.
- b. Be endorsed to state that coverage shall not be suspended, voided or cancelled by either party except after notice is delivered in accordance with the policy provisions. The Contractor is to notify the City Purchasing Office by written notice via certified mail, return receipt requested.
- 4. The City shall retain the right to review, at any time, coverage, form, and amount of insurance.
- 5. The procuring of required policies of insurance shall not be construed to limit Contractor's liability nor to fulfill the indemnification provisions and requirements of this Contract. The extent of Contractor's liability for indemnity of the City shall not be limited by insurance coverage or lack thereof, or unreasonably delayed for any reason, including but not limited to, insurance coverage disputes between the Contractor and its carrier.
- 6. The Contractor shall be solely responsible for payment of all premiums for insurance contributing to the satisfaction of this Contract and shall be solely responsible for the payment of all deductibles and retention to which such policies are subject, whether or not the City is an insured under the policy.
- 7. Claims Made Policies will be accepted for professional and hazardous materials and such other risks as are authorized by the City's Purchasing Office. All Claims Made Policies contributing to the satisfaction of the insurance requirements herein shall have an extended reporting period option or automatic coverage of not less than two (2) years. If provided as an option, the Contractor agrees to purchase the extended reporting period on cancellation or termination unless a new policy is affected with a retroactive date, including at least the last policy year.
- 8. Certificates of Insurance evidencing Claims Made or Occurrences form coverage and conditions to this Contract, as well as the contract number and description of work, are to be furnished to the City's Purchasing Office (4970 City Hall Boulevard, Suite 337, North Port, FL 34286) prior to commencement of work AND a minimum of thirty (30) calendar days prior to expiration of the insurance contract when applicable. All insurance certificates shall be received by the City's Purchasing Office before the Contractor will be allowed to commence or continue work. The Certificate of Insurance issued by the underwriting department of the insurance carrier shall certify compliance with the insurance requirements provided herein.

8. INDEMNITY:

TO THE EXTENT PERMITTED BY FLORIDA LAW, THE CONTRACTOR SHALL INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY, ITS COMMISSIONERS, OFFICERS, AGENTS AND EMPLOYEES, FROM ALL LIABILITIES, FINES, CLAIMS, ASSESSMENTS, SUITS, JUDGMENTS, DAMAGES, LOSSES AND COSTS, INCLUDING CONSEQUENTIAL, SPECIAL, INDIRECT, AND PUNITIVE DAMAGES, (INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND COURT COSTS, WHETHER SUCH FEES AND COSTS ARE INCURRED IN NEGOTIATIONS, AT THE TRIAL LEVEL OR ON APPEAL, OR IN THE COLLECTION OF ATTORNEYS' FEES), ARISING OUT OF ANY ACTS, ACTIONS, BREACHES, NEGLECT OR OMISSIONS OF THE CONTRACTOR, OR CONTRACTOR'S OFFICERS, EMPLOYEES, AGENTS, SUBCONTRACTORS, SUB-CONSULTANTS, AND OTHER PERSONS EMPLOYED OR UTILIZED BY THE CONTRACTOR IN THE PERFORMANCE OF, OR THE FAILURE TO PERFORM, THE CONTRACT. THE CONTRACT DOES NOT CONSTITUTE A WAIVER OF SOVEREIGN IMMUNITY OR CONSENT

BY THE CITY OR ITS SUBDIVISIONS TO SUIT BY THIRD PARTIES.

- B. IN THE EVENT OF A CLAIM, THE CITY SHALL PROMPTLY NOTIFY THE CONTRACTOR IN WRITING BY PREPAID CERTIFIED MAIL (RETURN RECEIPT REQUESTED) OR BY DELIVERY THROUGH ANY NATIONALLY RECOGNIZED COURIER SERVICE (SUCH AS FEDERAL EXPRESS OR UPS) WHICH PROVIDES EVIDENCE OF DELIVERY, AT THE ADDRESS PROVIDED FOR RECEIPT OF NOTICES IN THIS CONTRACT.
- C. THE CITY SHALL PROVIDE ALL AVAILABLE INFORMATION AND ASSISTANCE THAT THE CONTRACTOR MAY REASONABLY REQUIRE REGARDING ANY CLAIM. THIS AGREEMENT FOR INDEMNIFICATION SHALL SURVIVE TERMINATION OR COMPLETION OF THE CONTRACT. THE INSURANCE COVERAGE AND LIMITS REQUIRED IN THIS CONTRACT MAY OR MAY NOT BE ADEQUATE TO PROTECT THE CITY AND SUCH INSURANCE COVERAGE SHALL NOT BE DEEMED A LIMITATION ON THE CONTRACTOR'S LIABILITY UNDER THE INDEMNITY PROVIDED IN THIS SECTION. IN ANY PROCEEDINGS BETWEEN THE PARTIES ARISING OUT OF OR RELATED TO THIS INDEMNITY PROVISION, THE PREVAILING PARTY SHALL BE REIMBURSED ALL COSTS, EXPENSES AND REASONABLE ATTORNEY FEES THROUGH ALL PROCEEDINGS (AT BOTH TRIAL AND APPELLATE LEVELS).
- D. NOTHING IN THIS CONTRACT SHALL BE DEEMED TO AFFECT THE RIGHTS, PRIVILEGES AND IMMUNITIES OF THE CITY AS SET FORTH IN FLORIDA STATUTES, SECTION 768.28.
 - E. THE TERMS OF THIS SECTION SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.
- F. FURTHER, THE CONTRACTOR SHALL FULLY INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY OF NORTH PORT, FLORIDA, FROM ANY SUITS, ACTIONS, DAMAGES, AND COSTS OF EVERY NAME AND DESCRIPTION, INCLUDING ATTORNEYS' FEES, ARISING FROM OR RELATING TO VIOLATION OR INFRINGEMENT OF A TRADEMARK, COPYRIGHT, PATENT, TRADE SECRET OR INTELLECTUAL PROPERTY RIGHT.

9. CONTRACTOR'S AFFIDAVIT:

When all work contemplated by this Contract has been completed, and has been inspected and approved by the City, or its duly authorized agent, the Contractor shall furnish to the City, a Contractor's Affidavit in a form acceptable to the City. Signed affidavits of payment will also be required by the City from any and all subcontractors hired by the Contractor, unless payment is approved by the surety in accordance with F.S. §255.05(11). The affidavits shall state whether the subcontractor(s) has been paid in full or whether there are payments remaining. A list of all subcontractors shall be furnished to the City prior to any payments against the Contract.

10. TERMINATION AND DEFAULT:

The City Manager or designee shall have the right at any time upon thirty (30) calendar days written notice to the Contractor to terminate the services of the Contractor and, in that event, the Contractor shall cease work and shall deliver to the City all documents (including but not limited to reports, designs, specifications, and all other data) prepared or obtained by the Contractor in connection with its services. Upon delivery of the documents, the City shall pay the Contractor in full settlement of all claims by it hereunder as the work actually completed bears to the entire work under the Contract, as determined by the City, less payments already made to the Contractor, and any amounts withheld by the City to settle claims against or to pay indebtedness of the Contractor in accordance with the provisions of the Contract.

A. Funding in Subsequent Fiscal Years: It is expressly understood by the City and the Contractor that funding for any subsequent fiscal year of the Contract is contingent upon appropriation of monies by the City Commissioners. In the event that funds are not available or appropriated, the City reserves the right to terminate the Contract. The City

will be responsible for payment of any outstanding invoices and work completed by the Contractor prior to such termination.

- B. ABANDONMENT: In the event that the Contractor has abandoned performance under this Contract, then the City Manager or designee may terminate this Contract upon three (3) calendar days' written notice to the Contractor indicating its intention to do so. The written notice shall state the evidence indicating the Contractor's abandonment.
- C. The Contractor shall have the right to terminate the Contract only in the event of the City failing to pay the Contractor's properly documented and submitted invoice within ninety (90) calendar days of the approval by the City's Administrative Agent, or if the project is suspended by the City for a period greater than ninety (90) calendar days.
- D. The City Manager or designee reserves the right to terminate and cancel this Contract in the event the Contractor shall be placed in either voluntary or involuntary bankruptcy, a receiver is appointed for the Contractor or an assignment is made for the benefit of creditors.
- E. BREACH: In the event Contractor breaches this Contract, the City shall provide written notice of the breach and Contractor shall have ten (10) days from the date the notice is received to cure. If Contractor fails to cure within the ten (10) days, the City Manager or designee shall have the right to immediately terminate the Contract and/or refuse to make any additional payment, in whole or in part, and, if necessary, may demand the return of a portion or the entire amount previously paid to Contractor due to:
- 1. The quality of a portion or all of the Contractor's work not being in accordance with the requirements of this Contract;
- 2. The quantity of the Contractor's work not being as represented in the Contractor's Payment Request, or otherwise;
- 3. The Contractor's rate of progress being such that, in the City's opinion, substantial or final completion, or both, may be inexcusably delayed;
- 4. The Contractor's failure to use Contract funds, previously paid the Contractor by the City, to pay Contractor's project related obligations including, but not limited to, subcontractors, laborers and material and equipment suppliers;
 - 5. Claims made, or likely to be made, against the City or its property;
 - 6. Loss caused by the Contractor;
- 7. The Contractor's failure or refusal to perform any of the obligations to the City, after written notice and a reasonable opportunity to cure as set forth above.
- 8. Violation of any local, state or federal law in the performance of this Contract shall constitute a material breach of this Contract.
- 9. In the event that the City makes written demand upon the Contractor for amounts previously paid by the City as contemplated in the clause, the Contractor shall promptly comply with such demand. The City's rights hereunder survive the term of this Agreement, and are not waived by final payment and/or acceptance.

In the event that the City makes written demand upon the Contractor for amounts previously paid by the City as contemplated in the clause, the Contractor shall promptly comply with such demand. The City's rights hereunder survive the term of this Contract, and are not waived by final payment and/or acceptance.

F. TERMINATION WITH OR WITHOUT CAUSE: The performance of work under the Contract may be terminated with or without cause by the City Manager in whole or in part or whenever the City Manager determines that termination is in the City's best interest. Any such termination shall be effected by the delivery to the Contractor of a written notice of termination at least (30) days before the date of termination, specifying the extent to which performance of the work under the Contract is terminated and the date upon which such termination becomes

effective. After receipt of a notice of termination, except as otherwise directed, the Contractor shall stop work on the date of receipt of the notice of termination or other date specified in the notice; place no further orders or subcontracts for material, services, or facilities except as necessary for completion of such portion of the work not terminated; terminate all vendors and subcontracts; and settle all outstanding liabilities and claims. The Contractor will be paid only for such work performed and materials supplied up to the termination. Under no circumstances shall the City make any payment to the Contractor for services that have not been performed or that are performed subsequent to the termination date.

11. INDEPENDENT CONTRACTOR:

The Contractor is, and shall be, in the performance of all work, services and activities under this Contract, an independent contractor, and not an employee, agent or servant of the City. All persons engaged in any of the work or services performed pursuant to this Contract shall at all times, and in all places, be subject to the Contractor's sole direction, supervision, and control. The Contractor shall exercise control over the means and manner in which it and its employees perform the work, and in all respects the Contractor's relationship and the relationship of its employees to the City shall be that of an independent contractor and not as employees or agents of the City. The Contractor does not have the power or authority to bind the City in any promise, agreement or representation other than as specifically provided for in this Contract. The Contractor shall not pledge the City's credit or make it a guarantor of payment of surety for any contract, debt, obligation, judgment, lien or any form of indebtedness. The Contractor further warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms of this Contract.

12. SUBCONTRACTORS AND SUPPLIERS:

Contractor shall furnish to City a list of all subcontractors and/or suppliers prior to any payments against the Contract. All subcontractors are subject to City approval. No change in subcontractors or suppliers shall be made without written consent and approval from the City.

13. LICENSES AND PERMITS/LAWS AND REGULATIONS:

The Contractor shall pay all taxes required by law in connection with the activity in accordance with this Contract including sales, use, and similar taxes, and unless mutually agreed to in writing to the contrary, shall secure all licenses and permits necessary for proper completion of the work, paying any fees therefore. Violation of any local, state or federal law in the performance of this Contract shall constitute a material breach of this contract. The Contractor shall comply with all laws and ordinances, and the rules, regulations, and orders of all public authorities relating to the performance of the work herein. If any of the Contract documents are at variance therewith, the Contractor shall notify the City promptly on the discovery of such variance.

14. AMENDMENT:

This Contract constitutes the sole and complete understanding between the parties and supersedes all agreements between them, whether oral or written with respect to the subject matter. No amendment, change or addendum to this Contract is enforceable unless agreed to in writing by both parties and incorporated into this Contract. The City Manager or designee may agree to amendments that do not increase compensation to Contractor. The City Commission shall approve all increases in compensation under this Contract.

15. EQUAL EMPLOYMENT OPPORTUNITY:

The City of North Port, Florida, in accordance with the provisions of Title VII of the Civil Rights Act of 1964 (78 Stat.

252) and the Regulations of the Department of Commerce (15 CFR, Part 8) issued pursuant to such Act, hereby notifies all bidders that it will ensure that in any Contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit replies in response to this advertisement and will not be discriminated against on the ground of race, color or national origin in consideration for an award.

16. NON-DISCRIMINATION:

The City of North Port does not discriminate on the basis of race, color, national origin, sex, age, disability, family or religious status in administration of its programs, activities or services. Pursuant to F.S.§287.134(2)(a), an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies 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 publicentity.

17. ASSIGNMENT:

The Contractor shall not assign any interest in this Contract and shall not transfer any interest in same (whether by assignment or novation) without prior written consent of the City Manager or designee, except that claims for the money due or to become due the Contractor from the City under this Contract may be assigned to a financial institution or to a trustee in bankruptcy. Notice shall be promptly given to the City.

18. NOTICES:

Any notice, demand, communication, or request required or permitted hereunder shall be sent by certified mail, return receipt requested, and shall be mailed to:

As to the City: Michael Acosta, P.E. Utilities Engineering Manager

City of North Port Utilities Department

6644 W Price Blvd.

North Port, Florida 34291

Tel: 941.240. 8013 Fax: 941.240.8022

E-Mail: macosta@cityofnorthport.com

With copies of notices

and demands sent to: City of North Port, Florida

City Attorney's Office 4970 City Hall Boulevard North Port, Florida 34286

As to CONTRACTOR:

Notices shall be effective when received at the addresses specified above. Changes in the respective addresses which such notice is to be directed may be made from time to time by either party by written notice to the other party. Facsimile transmission is acceptable notice effective when received, however, facsimile transmissions received after 5:00 pm or on weekends or holidays, will be deemed received on the next business day. The original of the notice must additionally be mailed as required herein. Nothing in this Article shall be construed to restrict the transmission of routine

communications between representatives of Contractor and City.

19. WAIVER:

No delay or failure to enforce any breach of this Contract by either City or Contractor shall be binding upon the waiving party unless such waiver is in writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach. The making or acceptance of a payment by either party with knowledge of the existence of a default or breach shall not operate or be construed to operate as a waiver of any subsequent default or breach.

20. ATTORNEY'S FEES:

In any proceedings between the parties arising out of or related to this Contract, the prevailing party shall be reimbursed all costs, expenses and reasonable attorney fees through all proceedings, at both trial and appellate levels.

21. GOVERNING LAW, VENUE AND SEVERABILITY:

The rights, obligations and remedies of the parties under this Contract shall be governed by the laws of the State of Florida and the exclusive venue for any legal or judicial proceedings in connection with the enforcement or interpretation of this Contract shall be in Sarasota County, Florida. The invalidity, illegality, or unenforceability of any provision of this Contract shall in no way affect the validity or enforceability of any other portion or provision of the contract. Any void provision shall be deemed severed from the Contract and the balance of the Contract shall be construed and enforced as if the Contract did not contain the particular portion or provision held to bevoid.

22. PARAGRAPH HEADINGS:

Paragraph headings are for the convenience of the parties and for the reference purposes only and shall be given no legal effect.

23. ENTIRE AGREEMENT:

This Contract (with all referenced grant documents, plans, attachments, addenda and provisions incorporated by reference) embodies the entire agreement of both parties, superseding all oral or written previous and contemporary agreements between the parties relating to matters set forth in this Contract. In the event of any conflict between the provisions of this Contract and the RFB or Contractor's bid, this signed Contract (excluding the RFB and Contractor's bid) shall take precedence, followed by the provisions of the RFB, and then by the terms of the Contractor's bid.

24. SCRUTINIZED COMPANIES:

- **A.** As required by section 287.135(5), Florida Statutes, for contracts of \$1,000,000.00 or less, the Contractor shall certify on a form provide by the City, that it is not on the Scrutinized Companies that Boycott Israel List, created pursuant to section 215.4725, Florida Statutes, and that it is not engaged in a boycott of Israel.
- **B.** As required by section 287.135(5), Florida Statutes, for contracts of \$1,000,000.00 or more, the Contractor shall certify on a form provided by the City, that all of the following are true:
- 1. It is not on the Scrutinized Companies that Boycott Israel List, created pursuant to section 215.4725, Florida Statutes, and that it is not engaged in a boycott of Israel; and

- 2. It is not on the Scrutinized Companies with Activities in Sudan list or the Scrutinized Companies with Activities in Iran Petroleum Energy Sector list, created pursuant to section 215.473, Florida Statutes; and
 - 3. It is not engaged in business operations in Cuba or Syria.
- **C.** If the Contractor provides a false certification or has been placed on one of the above-noted Lists of Scrutinized Companies, or has engaged in business operations in Cuba or Syria, the Contractor will be in breach of this Contract and the City may terminate the Contract.

D. PENALTY:

- 1. A Contractor that has been found to have provided a false certification may be subject to a civil penalty equal to the greater of \$2 million or twice the amount of the Contract, plus all reasonable attorney's fees and costs, including any costs for investigations that led to the finding of the false certification; and
- 2. Shall be ineligible to bid on any contract with the City for three (3) years after the date the City determined that the Contractor submitted a false certification.

IN WITNESS WHEREOF, the parties have hereto caused the execution of these documents, the year and date first above written.

ATTEST:	CITY OF NORTH PORT, FLORIDA	
By:		
Katie Peto, City Clerk	Peter D. Lear, CPA, CGMA, City Manager	
APPROVED AS TO FORM AND CORRECTN By:		
Amber L. Slayton, City Attorney		
CONTRACTOR:		
Ву:		
SIGNATURE	PRINT NAME AND TITLE	
STATE OF FLORIDA COUNTY OF		
	acknowledged before me this day of, 201 rsonally known to me or who produced	
as identification.		
	Notary Public State of Florida	
	Notary Public, State of Florida	

City of North Port Bridge Water Main Replacement S. Salford Boulevard

Technical Specifications 100%



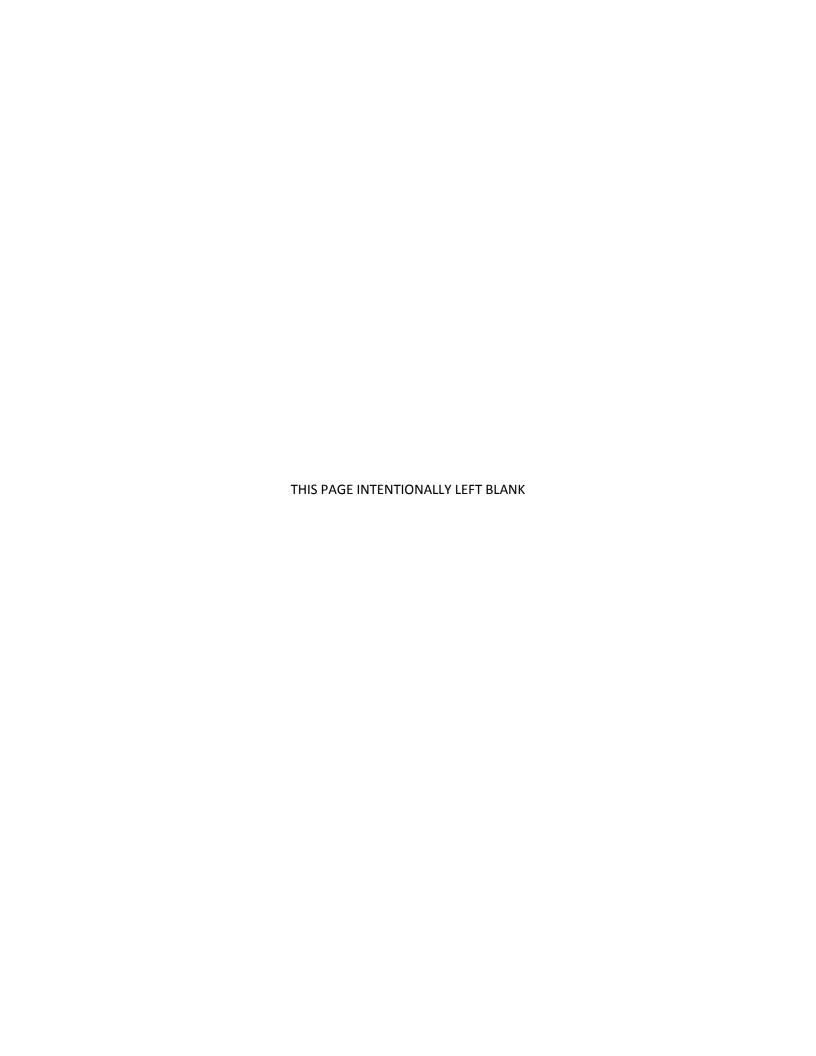
Prepared for: City of North Port Utilities

Prepared by: Stantec Consulting Services Inc. 5172 Station Way Sarasota, FL 34233 941-365-5500

Stephen C. MacEachern, PE Florida License # 76020

Stantec Consulting Services Inc. Florida Certification No. 27013

November 2017



Division 01 - General Requirements

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01620	Storage and Protection	01620-1 to 01620-2
01720	Project Record Documents	01720-1 to 01720-3
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Division 02 - Site Work

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	Polyethylene Pipe (HDPE) For Pressure Service	
02660	Ductile Iron Pipe and Fittings for Pressure Pipe	02660-1 to 02660-10
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02663	Valves	02663-1 to 02663-15
02932	Topsoil	02932-1 to 02932-3
02933	Sodding	02933-1 to 02933-4
02990	Miscellaneous Work and Clean Up	02990-1

Division 03 - Concrete

SECTION	TITLE	PAGE
03315	Nonstructural Concrete	03315-1 to 03315-2

SHEET	TITLE	<u>Plans</u>
1 2 3 4 6 7 8	Cover Sheet General Notes and Legend Plan and Profile Plan and Profile Standard Details Standard Details Best Management Practices	
		Appendices
Appendix A Appendix B	Geotechnical Report DOH Permit	

SECTION 01010 SUMMARY OF WORK

PART 1 - GENERAL

10.1 THE REQUIREMENT

A. The Work to be performed under this Contract shall consist of furnishing tools, equipment, materials, supplies, manufactured articles, and all labor, transportation, and services, including fuel, power, water, and essential communications, and performing all Work or other operations required for the fulfillment of the Contract in strict accordance with the Contract Documents which may be necessary for the complete and proper construction of the work in good faith shall be provided by the Contractor as though originally so indicated, at no increase in cost to the City.

1.02 PURPOSE

B. The purpose of this project is to install a new potable water main on South Salford Boulevard beneath the Cocoplum Waterway. The new water main will replace the existing water main that is currently attached to the side of the bridge. The new main shall be installed via horizontal directional drill (HDD) construction techniques. Once the new main is in service, the existing water main will be removed/abandoned.

1.03 DESCRIPTION

- A. The subaqueous water main replacement includes a water body crossing of approximately 350 linear feet of 12-inch HDPE SDR-11 water main via HDD. The work also includes 10-inch PVC DR 18 water main and necessary fittings to perform the HDPE connections to the existing main. Once the new main is in service, the existing water main mounted on the side of the bridge will be removed while the buried porting of the existing water main between the tie-ins will be capped, grouted and abandoned in place.
- B. A manual pressure testing station shall be installed on the new water main.
- C. The project shall be constructed using the provisions of the Best Management Practices (BMP) shown on the contract drawings along with all permitting requirements, and environmental regulations.

1.04 SUBSURFACE INFORMATION

A. Boring logs have been provided in Appendix A of these Specifications.

1.05 SEQUENCE OF WORK

A. The Contractor shall submit a working schedule detailing the order in which the Contractor proposes to perform the Work. The working schedule shall be submitted at the preconstruction meeting and comply with the requirements of Section II – General Provisions.

- 1. The Contractor's schedule shall allow sufficient time for the City to review necessary submittals. The schedule shall allow a minimum of two (2) weeks for the City to review and comment on any submittal.
- 2. The Contractor's schedule shall take into consideration the performance of construction efforts to include the periods between 7:00 AM and 5:00 PM on weekdays. No work shall occur on weekends, legal holidays, or on weekdays between the hours of 5:00 PM and 7:00 AM without prior authorization from City.
- 3. The general sequence of work is listed below.
 - a. Maintenance-of-traffic plan submittal
 - b. Shop drawing submittal
 - c. Water main testing, sampling, and clearance plan submittal
 - d. Installation of the HDPE water main under Waterway using horizontal directional drill.
 - e. Installation on PVC pipe and fittings including a temporary cap on each end for testing purposes.
 - f. Water main pressure testing and bacteriological testing.
 - g. Prepare certification as-builts and submittal package for water main clearance through the County Health Department.
 - h. Make final connections to existing water main.
 - i. Remove & dispose of the water main fixed to side of bridge.
 - j. Grout, cap, and abandon in place portions of the AC water main.
 - k. Final record drawing preparation.
 - I. Complete site restoration including removal of hardware holding pipe on bridge and grouting the pipe penetrations through the wing walls.
- 4. The Contractor's schedule shall be reviewed and approved by the City prior to beginning construction. Any subsequent changes in the sequencing of work shall be made only after a revised schedule is submitted by the Contractor and approved by the City.
- 5. Upon receipt of the submittal items, the CITY will schedule a preconstruction meeting to be held approximately one (1) week from the date of receipt.
- 6. Following the CONTRACTOR's attendance at the preconstruction meeting and receipt of approval of the submittal items, the CONTRACTOR shall obtain the required permits.
- 7. Work cannot start until the CONTRACTOR has a P.O. from the CITY in-hand. To get a P.O. from the CITY, the CONTRACTOR will need:
 - a. An executed contract,
 - b. A Performance and Payment Bond,
 - c. An insurance certificate,
 - d. An executed Notice-to-Proceed,
 - e. Current information on file with CITY Finance Department.
- 8. Any subsequent changes in the sequencing of work shall be made only after a revised schedule is submitted by the CONTRACTOR and approved by the CITY.

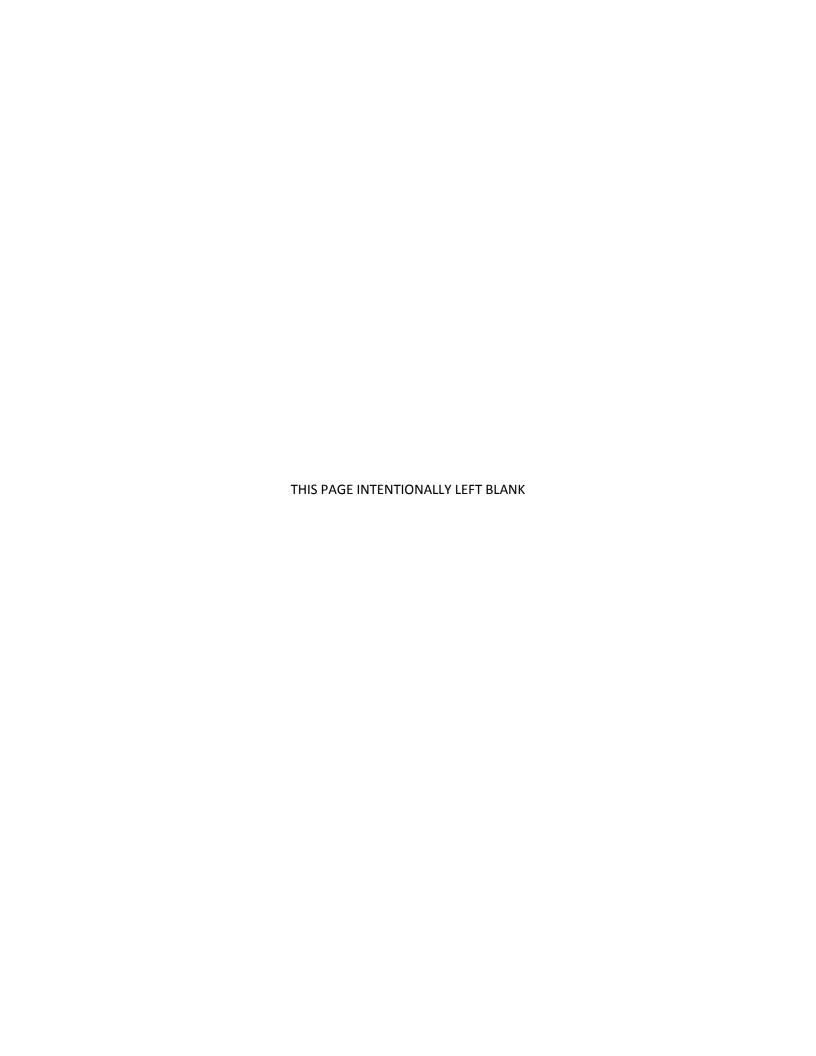
1.05 NOISE ABATEMENT

A. This Project shall be executed in accordance with all Noise Ordinances of the City of North Port. All equipment and machinery shall be equipped with exhaust mufflers maintained in good working order so as to reduce operation noise to minimum levels. Operation of equipment and machinery will be limited to the hours between 7:00 AM and 5:00 PM during regular work days, unless permission is granted in advance by the City based on a critical need for the operation.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION



SECTION 01025 MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 EXPLANATION AND DEFINITIONS

A. The following explanation of Measurement and Payment for the bid form items is made for information and guidance. The omission of reference to any item in this description shall not, however, alter the intent of the bid form or relieve the Contractor of the necessity of furnishing such as a part of the Contract at no additional cost.

1.02 MEASUREMENT

- A. The quantities set forth in the bid form are approximate and are given to establish a uniform basis for the comparison of bids. The CITY reserves the right to increase or decrease the quantity of any class or portion of the work during the progress of construction in accord with the terms of the Contract.
- B. The lump sum price for mobilization/demobilization shall not exceed five percent (5%) of the total of all other items bid (excluding this item). The CONTRACTOR shall provide a breakdown of the lump sum bid for mobilization. The breakdown shall identify items of preparatory work and operations with the corresponding cost per item.

1.03 PAYMENT

- A. Payment shall be made for the items listed on the Bid Form on the basis of the work actually performed and completed, such work including but not limited to, the furnishing of all necessary labor, materials, equipment, transportation, clean up, restoration of disturbed areas, and all other appurtenances to complete the construction and installation of the work as shown on the drawings and described in the specifications.
- B. Unit prices are used as a means of computing the final figures for bid and Contract purposes, for periodic payments for work performed, for determining value of additions or deletions and wherever else reasonable.

1.04 MEASUREMENTS FOR PAYMENT

- A. Methods for Measurement: Units for measurement shall be:
 - 1. Each (EA).
 - 2. Linear Feet (LF).
 - 3. Lump Sum (LS).
 - 4. Square Yards (SY).
- B. Unit Price Contracts/Items:

- Linear Feet (LF) shall be measured along the horizontal length of the centerline of the installed material, unless otherwise specified. Pipe shall be measured along the centerline of the length of the completed pipeline, regardless of the type of joint required, without deduction for the length of valves or fittings. Pipe included within the limits of lump sum items will not be measured.
- 2. Square Yards (SY) shall be measured as the amount of the material installed within the limits shown and specified in the Construction Plans and these Specifications. Slope angles and elevations shall be measured using land surveying equipment. The Contractor shall provide supporting documentation (i.e., drawings, delivery tickets, invoices, survey calculations, etc.) to verity the actual quantity installed.

PART 2 – PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 GENERAL

- A. Payment shall be made on the basis of Work actually performed completing each item in the Bid Form, such Work including, but not limited to, the furnishing of all necessary labor, materials, equipment, transportation, cleanup, and all other appurtenances to complete the construction and installation of the work to the configuration and extent as shown on the Construction Plans and described in these Technical Specifications. Payment for each item includes compensation for project photographs or videos, project layout, as built survey, cleanup, and restorations. Restoration is included but not limited to any sidewalk, curb, asphalt, mailboxes, sod, decorative landscape materials, etc.
- B. Water used for flushing, pressure testing, and other activities shall be provided through a metered jumper. The cost of the City meter, fee for water used, and the necessary piping and appurtenances shall be included in the unit price for the Item in which the water is being used for.
- C. No work outside the scope of work to be performed prior to a change order approval.

3.02 BID ITEMS

- A. <u>Mobilization/Demobilization (Item 1):</u> Payment for mobilization and demobilization will be made at the Contract lump sum price for mobilization/demobilization as one bid item for execution of the entire project. This price shall be full compensation for all costs incurred for preparatory work and operations including but not limited to:
 - Movement of personnel, equipment, supplies, and incidentals to and from the project site(s);
 - The establishment and removal of facilities necessary for work on the project, including but not limited to safety and sanitary facilities;

- Fees for bonds and insurance;
- Maintenance of traffic;
- Subcontractor coordination; and
- For all other work and operations, including submittals and obtaining construction permits, which must be performed prior to beginning work on the various items.

Payment for mobilization/demobilization will be payable in the first partial payment at seventy-five percent (75%) of the contract lump sum price for mobilization/demobilization and the balance payable in the final payment.

BID ITEM	DESCRIPTION	UNITS
1	MOBILIZATION/DEMOBILIZATION	LS

- B. <u>HDPE Directional Bores (Item 2)</u>: Payment for HDPE directional bores will be made at the contract unit price per linear foot of each size and dimension ration (DR) of a fully functional reclaimed water main furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, installing, and testing of the reclaimed water main and shall include but not be limited to:
 - Project layout;
 - Staging;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;
 - Restraining utility poles;
 - Protecting of existing facilities;
 - Clearing and grubbing;
 - Exploratory excavations;
 - Excavation of all material encountered including rock encountered during the drilling/boring process.
 - Sheeting and bracing;
 - Dewatering;
 - HDPE pipe with welded joints;
 - Connections to adjacent pipe, including but not limited to welded connections/adapters, ductile iron fittings, gaskets, and mechanical joint restraints;
 - Locator wire;
 - Sub-aqueous crossing signs;
 - Removal of drillers bentonite mud;
 - Compaction and compaction testing;
 - Grading;
 - Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
 - Cleanup;
 - Repair of existing utilities that are disturbed during construction;

- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Flushing, Pigging;
- Pressure testing;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the pipe complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, sidewalk, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

Measurement of the pipe shall be to the nearest foot along the centerline of the pipe as measured in the horizontal plane between the limits shown on the Construction Plans. If the City agrees that field conditions (e.g., minimum radius, installation conditions) require the beginning and/or end of directional drills be extended, the extension will be paid for at the unit price bid for Item 2B – 12-INCH PVC C-900, DR-18 RJ PIPE AND FITTINGS.

BID ITEM	DESCRIPTION	UNITS
2	12-INCH HDPE DR-11 DIRECTIONAL BORE	15
2	UNDER COCOPLUM WATERWAY	LF

- C. PVC Potable Water Main Pipe and Fittings (Item 3): Payment for PVC potable water main pipe and fittings will be made at the contract unit price per linear foot of each size and dimension ratio (DR) of a fully functional reclaimed water main (either with or without restrained joints) furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, laying, and testing of the reclaimed water main and shall include but not be limited to:
 - Project layout;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;
 - Restraining utility poles;
 - Protection of existing facilities;
 - Clearing and grubbing;
 - Exploratory excavations;
 - Excavation of all material encountered including rock;
 - Undercutting;
 - Sheeting and bracing;
 - Dewatering;

- PVC pipe and ductile iron fittings;
- Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
- Detectable tape and locator wire;
- Clamps, Harnessing, Adapters;
- Fill materials, including temporary fill;
- Removal and replacement of unsuitable subgrade;
- Compaction and compaction testing;
- Grading;
- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Flushing, Pigging;
- Pressure testing;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the pipe complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, sidewalk, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
3	10-INCH PVC C-900, DR-18 R.J. PIPE AND FITTINGS	LF

- D. <u>10-Inch Gate Valve (Item 4)</u>: Payment for 10-inch gate valve will be made at the contract unit price for each fully functional 10-inch gate valve furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, installing, and testing the gate valve and shall include but not be limited to:
 - Project layout;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;
 - Restraining utility poles;
 - Protection of existing facilities;
 - Clearing and grubbing;
 - Exploratory excavations;

- Excavation of all material encountered including rock;
- Undercutting;
- Sheeting and bracing;
- Dewatering;
- 10-inch gate valve and concrete valve collar including but not limited to bedding, adjustable cast iron valve box, operator extensions; tracer wire access box; reinforced concrete pad(s), brass ID tag, and reflective delineator;
- Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
- Detectable tape and locator wire;
- Clamps, Harnessing, Adapters;
- Fill materials, including temporary fill;
- Removal and replacement of unsuitable subgrade;
- Compaction and compaction testing;
- Grading;
- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the gate valve complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
4	10-INCH GATE VALVE	EA

- E. <u>Tapping Sleeve and Tapping Valve (Item 5)</u>: Payment for 12-inch X 10-inch tapping sleeve and 10-inch tapping valve will be made at the contract unit price for each fully functional tapping sleeve and tapping valve furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, installing, and testing the sleeve and valve and shall include but not be limited to:
 - Project layout;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;

- Restraining utility poles;
- Protection of existing facilities;
- Clearing and grubbing;
- Exploratory excavations;
- Excavation of all material encountered including rock;
- Undercutting;
- Sheeting and bracing;
- Dewatering;
- 10-inch tapping valve and concrete valve collar including but not limited to bedding, adjustable cast iron valve box, operator extensions; tracer wire access box; reinforced concrete pad(s), brass ID tag, and reflective delineator;
- Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
- Detectable tape and locator wire;
- Clamps, Harnessing, Adapters;
- Fill materials, including temporary fill;
- Removal and replacement of unsuitable subgrade;
- Compaction and compaction testing;
- Disinfecting the connection;
- Grading;
- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the gate valve complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
5	10-INCH TAPPING SLEEVE AND TAPPING VALVE	EA

- F. Connections to Existing Potable Water Mains (Item 6): Payment for connections to existing potable water mains will be made at the lump sum contract unit price for each connection complete in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for connecting new PVC water mains paid for under Bid Item 3 to existing potable water mains and shall include but not be limited to:
 - All necessary coordination with the City for connections to existing potable water mains;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;
 - Restraining utility poles;
 - Protection of existing facilities;
 - Clearing and grubbing;
 - Exploratory excavations;
 - Excavation of all material encountered including rock;
 - Undercutting;
 - Sheeting and bracing;
 - Dewatering;
 - Necessary demolition including but not limited to saw-cutting and removal of existing pipe and removal of existing fittings;
 - PVC pipe and ductile iron fittings;
 - Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
 - Detectable tape and locator wire;
 - Fill materials, including temporary fill;
 - Removal and replacement of unsuitable subgrade;
 - Compaction and compaction testing;
 - Disinfecting the connection;
 - Grading;
 - Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
 - Cleanup;
 - Repair of existing utilities that are disturbed during construction;
 - Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
 - Testing;
 - Placing into service;
 - Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
 - As-built record data, including but not limited to surveying and recording as-built information; and
 - All other work incidental to the installation of the connection complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, sidewalk, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
6	CONNECTION TO EXISTING 10-INCH AC WATER MAIN	EA

G. Remove and Dispose of Bridge Supported Water Main (Item 7): Payment for the removal and disposal of the existing water main connected to the side of the bridge will be made at the Contract lump sum price. This item shall include, but is not limited to, all labor, tools and equipment for removal and disposal of the existing water main attached to side of the bridge including all water main support materials and water main appurtenances within five-feet of the water main; cleaning, patching and touch-up painting of the affected bridge structure and including a clean cut of the water main parallel to the face of concrete wall of each bridge abutment.. The lump sum price shall include all necessary labor, tools and equipment for providing the demolition, removal, disposal (or transmittal, as directed, to City of North Port inventory) and cleanup of designated items of the existing water main as shown on the plans and specified herein.

BID ITEM	DESCRIPTION	UNITS
7	REMOVE AND DISPOSE OF BRIDGE SUPPORTED WATER MAIN	LS

H. Grout, Cap and Abandon Existing Water Mains in Place (Item 8): Payment for the grouting, capping and abandonment of the existing water main will be made at the Contract lump sum price. This item shall include, but is not limited to, all materials, equipment and labor necessary for capping the ends of the existing water mains called out to be grouted and abandoned in place with mechanical joint caps, filling the abandoned sections of water mains with flowable fill from the cap to the saw-cut end of the pipe at the bridge abutment and screening the flowable fill smooth at the saw-cut end to form a neat, finished end under the bridge.

This item shall include, but is not limited to, all materials, equipment and labor necessary for crushing of the existing water mains called out to be crushed and abandoned in place. Also included is backfill, cleanup, landscaping, sodding and other surface materials not specifically designated in the Bid.

This item also includes maintenance of traffic, protection of existing utilities, dewatering, sheeting, excavation, backfill, compaction, and restoration.

BID ITEM	DESCRIPTION	UNITS
8	GROUT, CAP, and ABANDON EXISTING WATER MAINS IN PLACE	LS

I. <u>Manual Pressure Testing Station/Air Release (Item 9):</u> Payment for manual pressure testing station will be made at the contract unit price each full functional station assembly furnished and installed in place and ready for service. The price shall include all necessary

labor, equipment, fittings, and materials for furnishing and installing the manual pressure testing station assembly and shall include but not be limited to:

- Double strap service saddle and connection to water main;
- Corporation stop;
- Curb stop;
- CTS tubing;
- Brass fittings;
- Locator wire;
- Meter box and cover;
- Crushed rock or shell;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the air release assembly complete in place.

BID ITEM	DESCRIPTION	UNITS
9	MANUAL PRESSURE TESTING STATION/AIR RELEASE	EA

END OF SECTION

SECTION 01040 CONTRACT COORDINATION PROCEDURES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Coordination of Work required by the Contract Documents.

1.02 GENERAL REQUIREMENTS

A. The Contractor shall coordinate scheduling, submittals, and Work of the various sections of these Technical Specifications to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.

1.03 MEETINGS

A. The Contractor shall hold frequent coordination meetings and pre-installation conferences with personnel and subcontractors to assure coordination of Work.

1.04 COORDINATION OF SUBMITTALS

- A. The Contractor shall schedule and coordinate submittals as specified in Section 01340.
- B. The Contractor shall coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing improvements in service.
- C. The Contractor shall coordinate requests for substitutions from all subcontractors to assure compatibility of space, of operating elements, and effect on work of other sections.

1.05 COORDINATION OF CONTRACT CLOSEOUT

- A. The Contractor shall coordinate completion and cleanup of work in preparation for Substantial Completion.
- B. After City occupancy of premises, the Contractor shall coordinate access to the site for correction of defective Work and Work not in accordance with Contract Documents, in a manner that minimizes disruption of the City's activities.
- C. The Contractor shall assemble and submit the following (if not previously submitted):
 - 1. Project Record Documents: In accordance with Section 01720.
 - 2. Warranties and Bonds: In accordance with Section 01740.

- 3. Evidence of payment and release of liens in accordance with the conditions of the Contract Documents.
- 4. Consent of Surety to final payment.
- D. See also General and Special Provisions.

1.06 COORDINATION WITH OTHER CONTRACTORS

- A. The Contractor shall cooperate with other contractors working within the same site or on adjacent sites.
- B. The Contractor shall coordinate the Work of this Contract with other contractors so as not to interfere with or hinder the progress or completion of the work being performed by other contractors.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01060 EXCAVATION – SUNSHINE 811

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

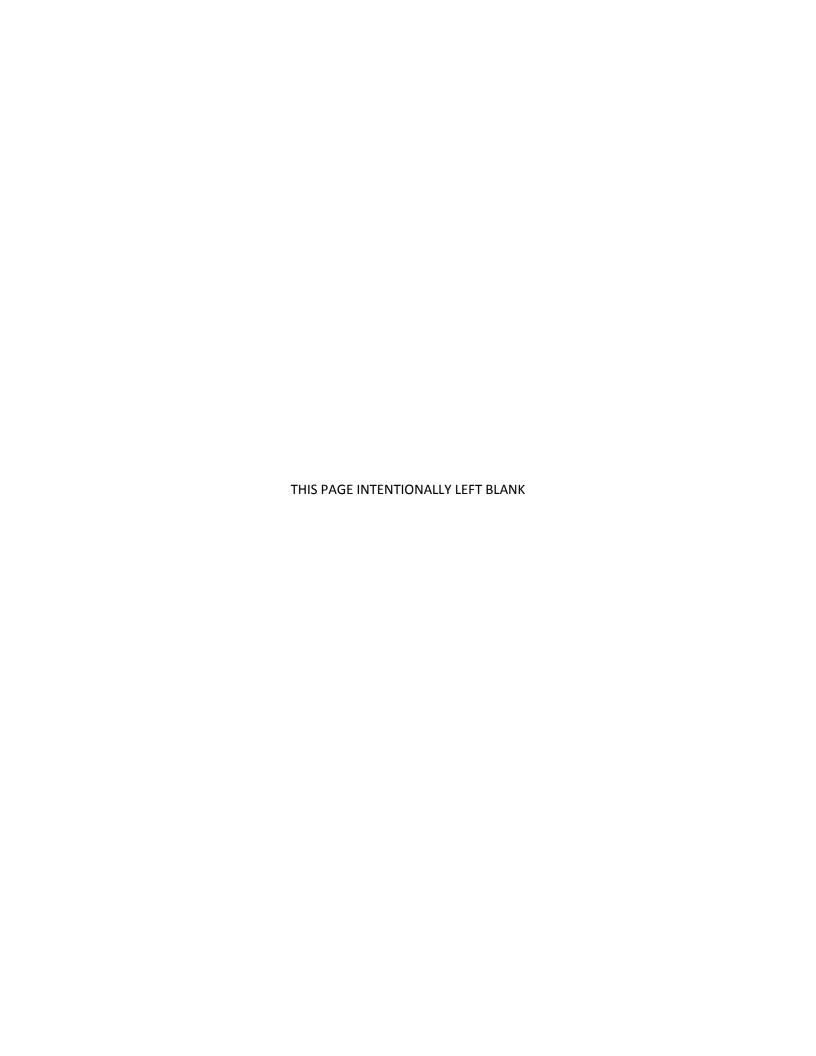
A. The Contractor shall comply with all regulations and laws concerning excavation, demolition, and use of explosives in any public way, public utility company right-of-way or easement, or privately owned land under which any public utility company maintains facilities.

1.02 REQUIREMENTS

- A. Utility Underground Plant Damage Prevention Authority: Sunshine State One Call (Sunshine 811) is the Utility Underground Plant Damage Prevention Authority in Florida.
 - 1. Not all utilities are members of Sunshine State One Call.
- B. The telephone number for Sunshine State One Call is 811.
 - Dialing 811 will not work to contact Sunshine State One Call if the call is made from a phone network that requires dialing 9 or another number before connecting to an outside network.
- C. The Contractor shall notify Sunshine State One Call of contemplated excavation, demolition, and use of explosives in public or private ways and in any utility company right of way or easement.
- D. The Contractor shall also notify all non-members of Sunshine State One Call of contemplated excavation, demolition, and use of explosives in public or private ways and in any utility company right of way or easement.
- E. Notification of Sunshine State One Call and non-members of Sunshine State One Call shall be made at least forty-eight (48) hours (two business days) prior to the work, but not more than five (5) days before the contemplated work. Such notice shall include the name of the street or the route number of said way and an accurate description of the location and nature of the proposed work. Utilities contacted are required to respond to the notice within forty-eight (48) hours (two business days) from the time said notice is received by designating at the specified site the location of pipes, mains, wires, or conduits.
- F. The Contractor shall not commence Work until all utilities have responded as noted above. The Work shall then be performed in such a manner and with reasonable precautions taken to avoid damage to utilities under the surface in said areas of Work.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)



SECTION 01201 PROJECT MEETINGS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Requirements for conducting conferences and meetings for the purposes of addressing issues related to the Work, reviewing and coordinating progress of the Work, and other matters of common interest.
- B. See also General and Special Provisions.

1.02 QUALIFICATIONS OF MEETING PARTICIPANTS

A. Representatives of entities participating in meetings shall be qualified and authorized to act on behalf of entity each represents.

1.03 PROGRESS MEETINGS

A. General:

- 1. Progress meetings shall be conducted in accordance with the requirements of Special Provisions. The frequency and location of these meetings may be altered upon the agreement of the City and Contractor.
- 2. The purpose of Progress Meetings shall be to expedite work of subcontractors or other organizations that are not meeting scheduled progress, resolve conflicts, and coordinate and expedite execution of the Work.
- B. The City shall make physical arrangements for the meetings, prepare agendas, notify each anticipated participant, preside at the meetings, record minutes, and distribute copies of the minutes within seven (7) days of meeting to participants and interested parties.
- C. Attendance: Contractor's superintendent; representatives of the City; subcontractors who are or are proximate to be actively involved in the Work; and others who are necessary to agenda are required. Representatives of utilities when the Work affects their interests shall be invited.
- D. The Contractor shall submit at each meeting:
 - 1. Construction schedule, regardless whether revisions have been made.
 - 2. A written projected schedule for the next two weeks.
 - 3. Written claims for additional compensation.

- 4. Written claims for rain days to extend the Contract
- 5. Results of all testing and Value Engineering Proposals.
- E. The Contractor shall submit at progress meeting once per month:
 - 1. Pay Request.
- F. Tentative Agenda:
 - 1. Review of Work progress and schedule.
 - a. Actual start and finish dates of completed activities since last progress meeting.
 - b. Durations and progress of activities not completed.
 - c. Subcontractors' progress.
 - d. Percentage of completion of items on Pay Request.
 - e. Delivery schedules.
 - f. Revisions to Schedule: Shall include reasons for required revisions and their effect on Contract Time and Contract Price.
 - 2. Potential problems which may impede scheduled progress and corrective measures
 - 3. Change Orders: Reason, time, and cost data.
 - 4. Submittals.
 - 5. Other items affecting progress of the Work.

1.04 PRE-INSTALLATION MEETINGS

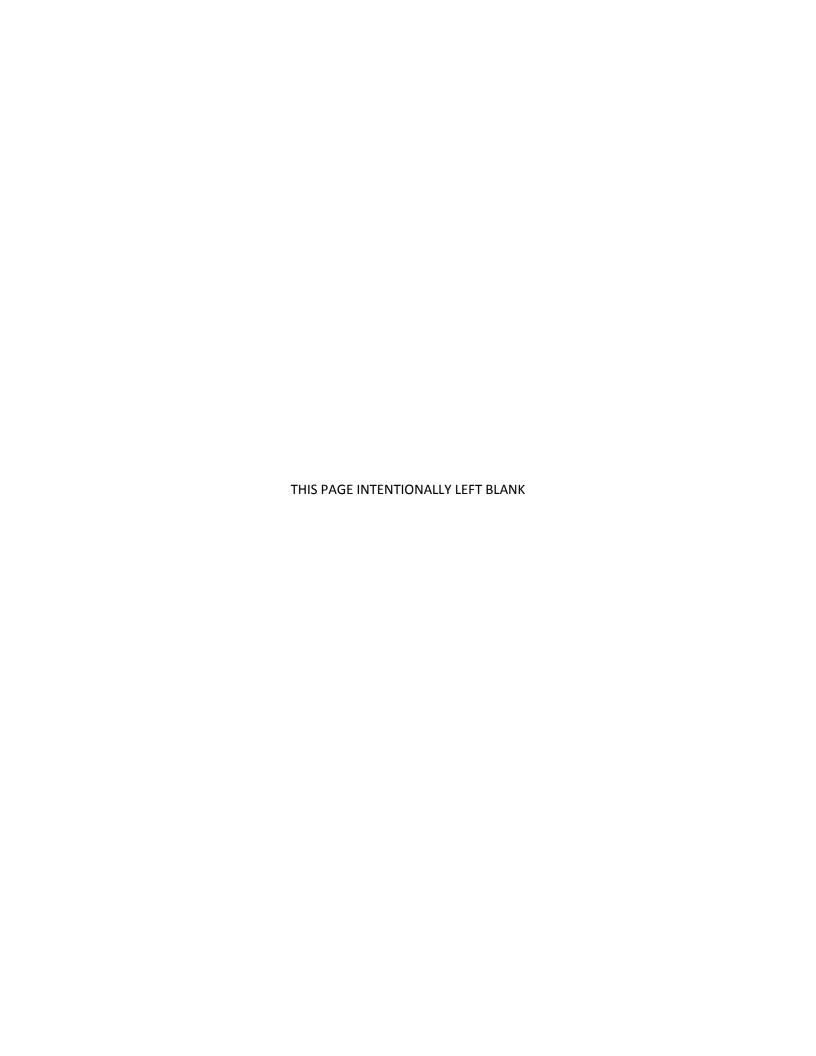
- A. General: The Contractor shall meet with manufacturers and installers of major units of construction which require coordination between the Contractor, the City, subcontractors, or others. Major units of construction which require pre-installation meetings include:
 - 1. Piping tie-ins.
 - 2. Removal and installation of pipe on bridge.
 - 3. Any work requiring a shutdown or other interruptions.
 - 4. Installation of in-line insertions on existing mains still in service.

- B. Meetings shall be conducted at the City's Utility Office, 6644 W. Price Blvd., North Port, FL 34291, or other mutually agreed upon place.
- C. The Contractor shall schedule meetings at least seven (7) days in advance of installation. The Contractor shall prepare and distribute to each anticipated participant a written notice and agenda at least four (4) days before the meeting. The Contractor shall preside at the meetings, record minutes, and distribute copies of the minute within seven (7) days of meeting to participants and interested parties.
- D. Attendance: Contractor's superintendent, appropriate manufacturers and installers of major units of constructions, affected subcontractors, and others affected. The City shall be invited.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION



SECTION 01310 PROGRESS SCHEDULES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Procedures for preparation and submittal of construction Progress Schedules and periodic updating using a Critical Path Method Schedule.

1.02 FORMAT

- A. Prepare schedules as a horizontal bar chart or network with separate bar or node for each major portion of Work or operation, identifying first work day of each week and identifying each portion of the Work that is critical to timely project completion.
- B. Sequence of Listings: The chronological order of the start of each item of Work.
- C. Scale and Spacing: Provide space for notations and revisions.
- D. Sheet Size: Multiple of 11 inches x 17 inches.

1.03 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction. Activities shall, as a minimum, include the bid items from the Bid Form or an explanation why a bid item is not included as an activity.
- B. Identify each item by major Specification Section number.
- C. Identify Work of separate stages and other logically grouped activities.
- D. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the last day of each month.
- E. A separate schedule of submittal dates for shop drawings, product data and samples, and dates reviewed submittals will be required by the City.
- F. Coordinate content with requests for payment of completed work.
- G. The Contractor shall not manipulate float time which results in a schedule that varies substantially from the contract time allowed in these Contract Documents.

1.04 REVISIONS TO SCHEDULES

- A. Indicate progress of each activity to date of submittal, and indicate projected completion date of each activity.
- B. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
- C. Provide narrative report to define problem areas, anticipated delays, and impacts on schedule. Report corrective action taken or proposed and its effect.

1.05 SUBMITTALS

- A. Submit initial schedules at the preconstruction meeting. After review, resubmit required revised data within ten (10) days.
- B. Submit revised progress schedules for review at each progress meeting and with each pay request.
- C. Submit six (6) copies.
 - 1. With prior approval from the City, schedules may be submitted electronically as PDF files in lieu of hard copies.

1.06 DISTRIBUTION

- A. Distribute copies of reviewed schedules to job site file, subcontractors, suppliers, and other concerned entities.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

SECTION 01340 SUBMITTALS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for submittals.
- B. Schedule of submittals.

1.02 SHOP DRAWINGS

- A. Present in a clear and thorough manner. Title each drawing with Project name and number; identify each element of drawings by reference to Specification Section and Paragraph, sheet number, detail, and schedule of Contract Documents. The Contractor shall use and complete the transmittal form included at the end of this Section.
- B. Identify field dimensions. Show relation to adjacent or critical features, Work, or products.
- C. Minimum Sheet Size: 8-1/2 inches x 11 inches.

1.03 PRODUCT DATA

- A. Submit only pages which are pertinent. Mark each copy of standard printed data to identify pertinent products, referenced to Specification Section number. Show reference standards, performance characteristics, and capacities; component parts; finishes; dimensions; required clearances; etc.; to show compliance with the Construction Plans and Technical Specifications. Provide Material Safety Data Sheets required by OSHA for all chemicals to be supplied under this Contract. Submittals made without the required transmittal form that clearly identifies the respective Specification Section number for which the submittal is being made will be returned without review. It is the Contractor's responsibility to make clearly identified submittals.
- B. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.
- C. Provide manufacturer's preparation, assembly, delivery, storage, installation, startup, adjusting, and finishing instructions.
- D. If similar or identical submittal material can be submitted under more than one Specification Section, the Contractor shall make separate, clearly identified submittals for each Specification Section. Submittal materials for any Specification Section shall be complete for that Section; partial submittals are unacceptable.

1.04 SAMPLES

- A. Submit full range of manufacturer's standard finishes, except when more restrictive requirements are specified, indicating colors, textures, and patterns, for the City's selection.
- B. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- C. Acceptable samples which may be used in the Work are indicated in the Specification Section.
- D. Label each sample with identification required for transmittal letter.
- E. Provide field samples of finishes for Project, at location acceptable to the City, as required by individual Specification Sections. Install each sample complete and finished. Acceptable finishes in place may be retained in completed work.
- F. Those provisions of Paragraph 1.03 of this Section that relate to submittal identification and completeness are applicable for sample submittal.

1.05 CONTRACTOR REVIEW

- A. Review submittals prior to transmittal. Determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirements of the Contract Documents.
- B. Coordinate submittals with requirements of the Work and Contract Documents.
- C. Sign and date each sheet of shop drawings and product data, and each sample label to certify compliance with requirements of the Contract Documents. Notify the City in writing at time of submittal of any deviations from requirements of the Contract Documents.
- D. Do not purchase, fabricate, or ship products or begin work that requires submittals until return of submittal that the City has reviewed.
- E. The Contractor shall check and verify all field measurements and shall be responsible for prompt submission of all shop and working drawings so there are be no delay in the Work.
- F. The Contractor shall be responsible for the delays and/or additional expenses that result from the Contractor's failure to submit a complete submittal and/or to identify portions of the submittal that do not conform to the Technical Specifications.

1.06 SUBMITTAL REQUIREMENTS

A. At the preconstruction meeting, it will be decided whether electronic submittals will be the selected submittal method for the project.

- B. Transmit submittals with required submittal form included herewith in accordance with the Progress Schedule and in such sequence to avoid delay in the Work.
- C. Apply Contractor's stamp, signed certifying to review, verification of products, field dimensions and field construction criteria, and coordination of information with requirements of the Work and Contract Documents.
- D. Coordinate submittals into logical groupings to facilitate interrelation of the several items:
 - 1. Finishes that involve the City's selection of colors, textures, or patterns.
 - 2. Associated items that require correlation for efficient function or for installation.
- E. Submit six (6) copies of shop drawings with each page or sheet assembled in separate sets: Three (3) copies will be retained by the City upon review and three (3) copies will be returned to the Contractor.
 - 1. With prior approval from the City, shop drawings may be submitted electronically as PDF files in lieu of hard copies.
- F. Submit six (6) copies of product data: Three (3) copies will be retained by the City upon review and three (3) copies will be returned to the Contractor.
 - 1. With prior approval from the City, product data may be submitted electronically as PDF files in lieu of hard copies.
- G. Submit number of samples required by individual Specification Sections.
- H. Use transmittal form provided in this Specification Section for submittals to the City. Identify Project by title and number. Identify work and product by Specification Section and Paragraph number. The City will designate a submittal number upon receipt.
 - 1. With prior approval, submittals may also be made electronically with PDF files in lieu of hard copies.

1.07 RESUBMITTALS

A. Contractor shall make resubmittals under procedures specified for initial submittals. Changes made since previous submittal shall be identified.

1.08 CITY REVIEW

- A. The City will respond to thorough, clear, complete submittals with reasonable promptness (approximately two (2) weeks).
- B. Submittals reviewed will be returned stamped.

C. Incomplete, vague, non-stamped, and otherwise unacceptable submittals will be returned unreviewed.

1.09 DISTRIBUTION

A. The Contractor shall duplicate and distribute reproductions of shop drawings, copies of product data, and samples that bear the City's stamp to the job site file, the Record Documents file, subcontractors, suppliers, other affected contractors, and other entities requiring information.

1.10 SCHEDULE OF SUBMITTALS

- A. Shop drawings, product data, and sample submittals shall be made in a timely and logical fashion taking into account work scheduling and job progress.
- B. It is the Contractor's responsibility to prepare, coordinate, and review all submittals prior to delivery to the City. The City will review each complete and thorough submittal and one resubmittal at no cost to the Contractor. The Contractor shall reimburse the City for all reasonable costs associated with the City's and/or the City's designated representative review of each subsequent resubmittal.

1.11 REVIEW QUALIFICATION

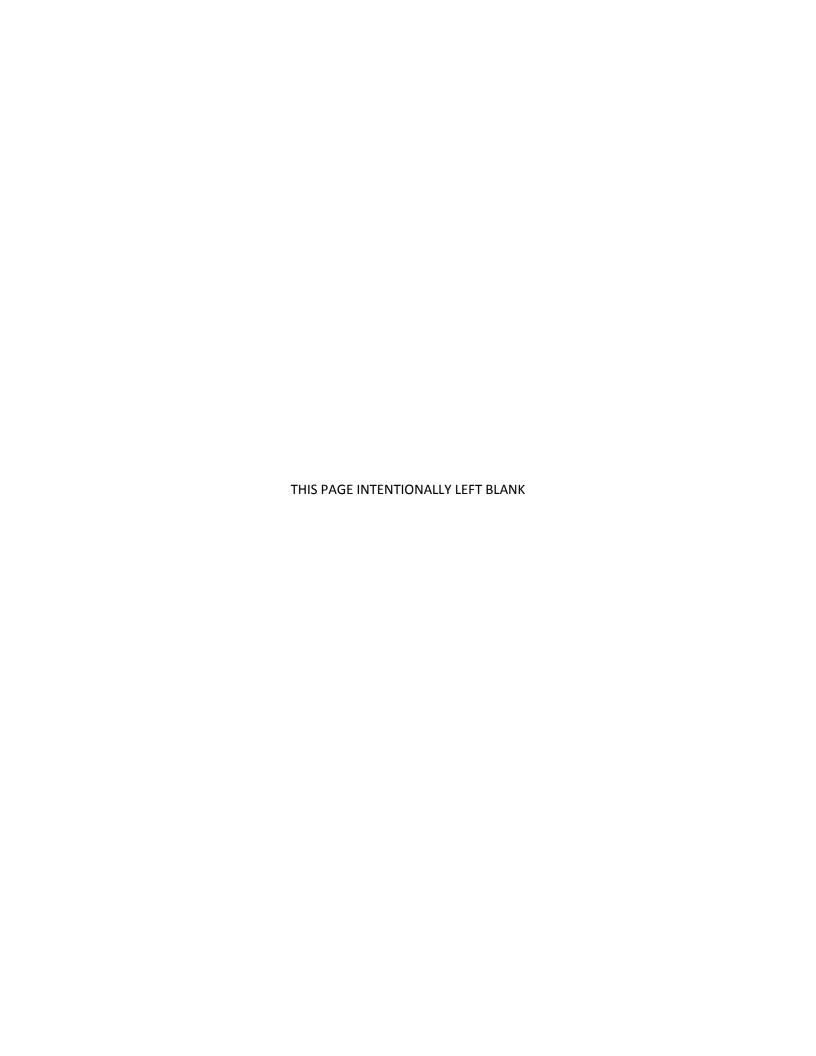
A. Regardless of corrections made or acceptance of such drawings by the City, the Contractor shall nevertheless be responsible for the accuracy of such drawings, their conformity to the Contract Documents, and suitability for the Work.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

SUBMITTAL FORM (TO BE USED AS A COVER TO EACH SUBMITTAL)

	Date
1.	The attached submittal covers materials or equipment specified under:
	Specification Section No, titled, and Drawing No, titled No other Specification Sections or drawings related to this submittal.
2.	This submittal covers material or equipment that is: (circle one):
	a. in full compliance with that specified
	b. in compliance with that specified except for the attached minor deviations:
	(Identify the minor deviations with particularity. If the City determines these deviations to be other than minor, the submittal will be rejected and the Contractor must submit a request for substitute materials or equipment. THE CITY'S REVIEW AND ACCEPTANCE OF SHOP DRAWINGS OR SAMPLES SHALL NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR EXPRESSLY BRINGS EACH VARIATION TO THE CITY'S ATTENTION AND THE CITY HAS GIVEN WRITTEN ACCEPTANCE OF EACH SUCH VARIATION BY A SPECIFIC WRITING).
3.	Certification
	Signed
	Title
	Company



SECTION 01400 QUALITY CONTROL

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. General quality control.
- B. Manufacturers' field services.

1.02 QUALITY CONTROL

A. Maintain quality control over suppliers, Manufacturers, products, services, site conditions, and workmanship to produce work of specified quality.

1.03 WORKMANSHIP

- A. Comply with industry standards except when more restrictive tolerances, more rigid standards, or more precise workmanship are specified.
- B. Perform work using persons fully qualified to produce workmanship of specified quality.
- C. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.

1.04 MANUFACTURER INSTRUCTIONS

- A. Comply with Manufacturers' printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing, as appropriate.
- B. Comply with instructions in full detail, including each step in sequence. Should instructions conflict with Contract Documents, the Contractor shall request clarification from the City before proceeding.

1.05 MANUFACTURERS' CERTIFICATES

A. As required by individual Specification Sections, submit Manufacturers' certifications, in duplicate, that products meet or exceed specified requirements.

1.06 MANUFACTURERS' FIELD SERVICES

A. As directed by the City and individual Specification Sections, Manufacturers shall provide qualified personnel to observe field conditions; conditions of surfaces and installation; quality of workmanship; start-up of equipment; and testing, adjusting, and balancing of equipment as applicable.

B. Manufacturers' representatives shall submit written reports to the City listing observations, tests, and corrective measures.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

SECTION 01540 PROTECTION OF WORK AND PROPERTY

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Contractor's responsibility for protecting public and private property.

1.02 PROTECTION OF WORK AND PROPERTY

A. The Contractor shall be responsible for the preservation of all public and private property, and shall protect all land monuments and property markers from disturbance and damage.

1.03 RESPONSIBILITY FOR DAMAGE

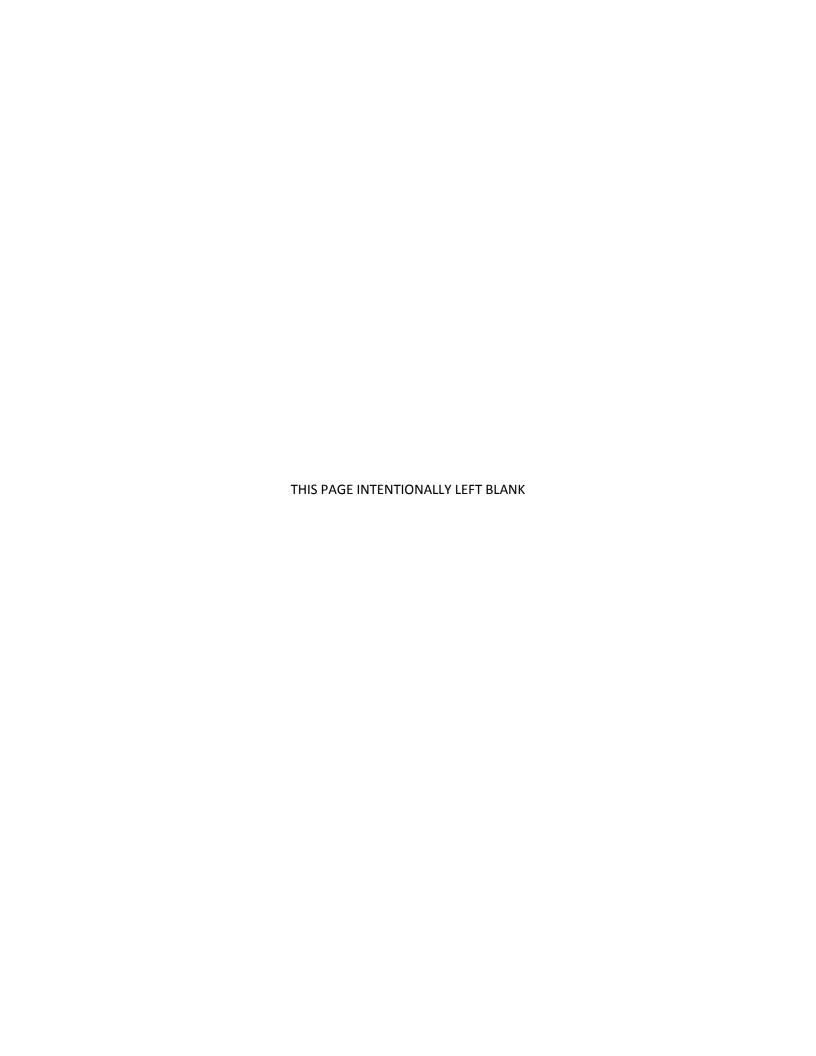
A. The Contractor shall be responsible for all damage or injury to property of any character during the execution of the Work resulting from any act, omission, neglect, or misconduct in the manner or method of executing the Work, or at any time due to defective work or materials. The Contractor shall restore, at no expense to the City, any damage or injury done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the Work, or inconsequence of any non-execution thereof by the Contractor. Such property shall be restored to a condition equal or better than existing before such damage or injury was done by repairing, rebuilding, or otherwise restoring as directed by the City.

1.04 PAYMENT

A. The CITY shall make no separate payment for any labor or materials necessary for Work performed under this Section.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)



SECTION 01620 STORAGE AND PROTECTION

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Providing secure storage and protection for products to be incorporated into the Work.
- B. Maintaining and protecting products after installation and until completion of the Work.

1.02 STORAGE

- A. Store and protect products immediately on delivery. Store products in accordance with Manufacturers' instructions, with seals and labels intact and legible.
- B. The City will allow the Contractor to utilize a select area of the Water Treatment Plant for storage. The Contractor will be required to limit the area and location for storage as directed by the City. Any damage to the Water Treatment Plant property caused by the Contractor shall be repaired at the Contractor's expense.

Should the Contractor prefer to utilize private property, it shall be the Contractor's responsibility to negotiate with private owners regarding the location(s) for storing materials. It shall be the contractor's responsibility to ensure appropriate permits, if required, are obtained to prepare and store material on private property; and, provide for City's representative access to storage site(s) if requested for inspection.

- C. Store products subject to damage by elements in substantial weather tight enclosures.
 - 1. Maintain temperatures within ranges required by Manufacturers' instructions.
 - 2. Provide humidity control for sensitive products as required by Manufacturers' instructions.
 - 3. Store unpacked products on shelves, in bins, or in neat piles accessible for inspection.

D. Exterior Storage:

- 1. Provide substantial platforms, blocking, or skids to support fabricated products above ground and to prevent soiling or staining. Cover products subject to discoloration or deterioration from exposure to the elements with impervious sheet coverings. Provide adequate ventilation to avoid condensation.
- 2. Store loose granular materials on solid surfaces such as paved areas, or provide plywood or sheet materials to prevent mixing with foreign matter.
 - a. Provide surface drainage to prevent flow or ponding of rainwater.

- b. Prevent mixing of refuse or chemically injurious materials or liquids.
- E. Arrange storage in a manner to provide easy access for inspection.
- F. Provide erosion control measures if needed.

1.03 MAINTENANCE OF STORAGE

- A. Maintain periodic system of inspection of stored products on a scheduled basis to assure that:
 - 1. State of storage facilities is adequate to provide required conditions.
 - 2. Required environmental conditions are maintained on continuing basis.
 - 3. Surfaces of products exposed to elements are not adversely affected.
- B. Any weathering of products, coatings, and finishes is unacceptable under requirements of the Contract Documents. Any product damaged because of improper storage or protection shall be unacceptable for installation and shall be removed from the site. Damaged products shall be replaced by the Contractor at no cost to the City.

1.04 PROTECTION AFTER INSTALLATION

- A. Provide protection of installed products to prevent damage from subsequent operations. Remove protection when no longer needed, prior to completion of Work.
- B. Control traffic to prevent damage to equipment and surfaces.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

SECTION 01720 PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Maintaining and submitting project record documents and samples.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Maintain at the site for the City one (1) record copy of:
 - 1. Construction Plans.
 - 2. Technical Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Accepted shop drawings, product data, and samples.
 - 6. Field test records.
 - 7. Inspection certificates.
 - 8. Manufacturers' certificates.
 - 9. Manufacturers' operating and maintenance manuals.
 - 10. Up to date project as-built red-lines.
- B. Label and file record documents and samples in accordance with section number listings in Table of Contents of these Technical Specification. Label each document "PROJECT RECORD" in neat, large, printed letters.
- C. Store record documents and samples in field office apart from documents used for construction. Provide files, racks, and secure storage for record documents and samples. Maintain record documents in a clean, dry, and legible condition. Do not use record documents for construction purposes.
- D. Keep record documents and samples available for inspection by the City.

1.03 RECORDING

A. Record information on a full-size set of Construction Plans.

- B. Use separate colors for each major system for recording information.
- C. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
- D. As-built Drawings and Shop Drawings: Legibly mark each item to record actual construction, including:
 - Measured horizontal and vertical locations of underground utility fittings and appurtenances, referenced to two permanent surface improvements and entered into a swing tie table.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances referenced to horizontal and vertical datums of the original Construction Plans. Horizontal and vertical locations (i.e., top of pipe elevations) of newly installed water mains and service connections shall be recorded at each fitting and at all changes in line and grade. Top of pipe elevations for newly installed water mains shall be recorded an interval no greater than 100 LF. Finished grade elevations shall also be recorded at these locations.
 - 3. All fittings, valves (with stem elevations), air release assemblies, water meters, backflow preventers, hose bibs, hydrants, couplings, etc.
 - 4. Limits of piping (water main, force main, and other) abandoned in place.
 - 5. Field changes of dimensions and details.
 - 6. Changes made by addenda or modifications.
 - 7. Details not on original Construction Plans.
 - 8. All other underground facilities encountered during construction.
- E. Specifications: Legibly mark each item to record actual construction, including:
 - 1. Manufacturer, trade name, and catalog number of each product actually installed, particularly optional items and substitute items.
 - 2. Changes made by addenda or modifications.
- F. Other Documents: Maintain Manufacturers' certifications, inspection certifications, and field test records, required by individual Technical Specification Sections.

1.04 STORMWATER POLLUTION PREVENTION PLANS

A. In accordance with EPA Guidelines, maintain records on stormwater management controls and inspections. Prepare an inspection and maintenance plan that corresponds to the sequencing of major activities.

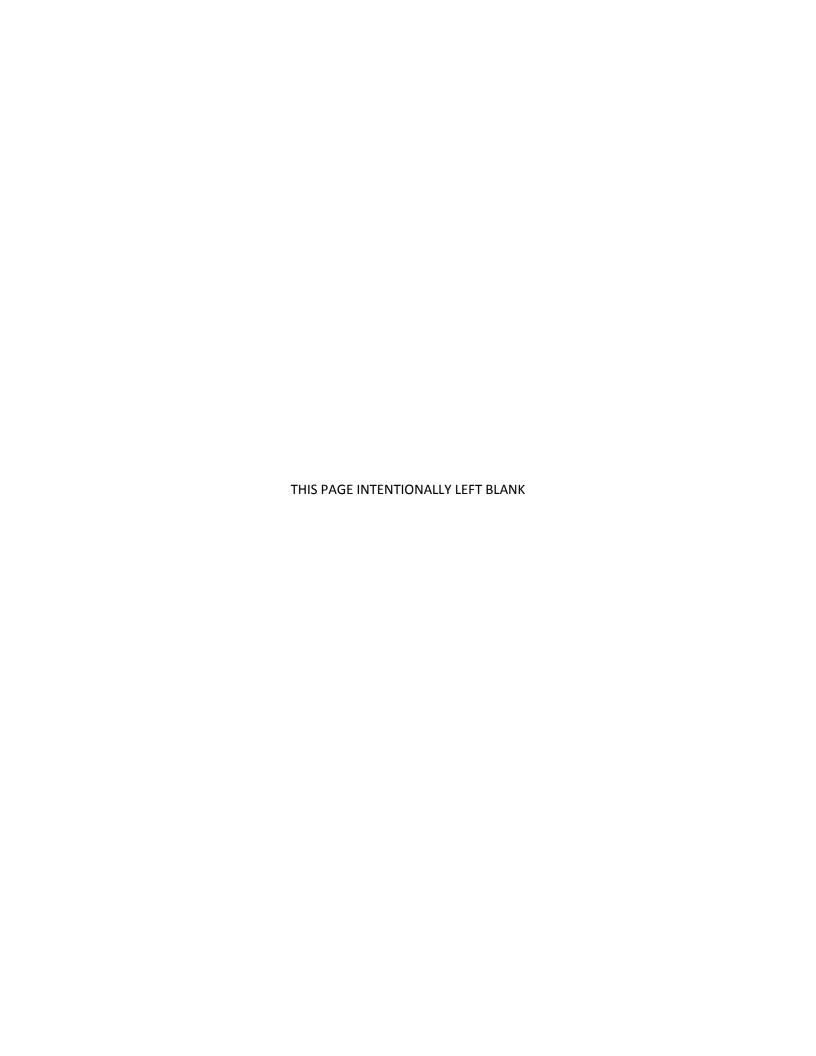
- 1. Reference Document: U.S. EPA Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-005, September, 1992.
- B. Provide for inspection of silt fencing and erosion control measures once every seven (7) days or after each rainfall event.
- C. Keep a record of these inspections in the field office. Note any changes to best management practices shown in the Contract Documents.
 - 1. Record the amount of rainfall on a daily basis. This information may be obtained from MCWTP staff.
 - 2. Dates when major grading activities occur.
 - 3. Dates when construction activities temporarily cease.
 - 4. Dates when construction activities permanently cease.
 - 5. Report any release of reportable quantities of oil or hazardous materials.
- D. Update and change the Stormwater Pollution Prevention Plan as necessary to address any change in design or construction operation.
- E. Submit a sample of the report format to be used.

1.05 SUBMITTALS

- A. At Contract closeout, the Contractor shall deliver all project record documents and samples specified herein to the City for use in the preparation of Project Record Drawings. Final as-built drawings shall be submitted to the City electronically in both PDF and AutoCAD formats, as well as four (4) hard copies signed and sealed by a Registered Surveyor.
 - 1. AutoCAD Format: Utilize the existing AutoCAD design as a base and add new information. New items shall be included on new, clearly identified layers. All applicable items listed in Paragraph 1.03 shall be included.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)



SECTION 01740 WARRANTIES AND BONDS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Preparing and submitting of warranties and bonds.

1.02 FORM OF SUBMITTALS

- A. Bind in new, commercial-quality, 8-1/2 inches X 11 inches, three-ring side binders with hardback, cleanable, plastic covers.
- B. Label cover of each binder with typed or printed title "WARRANTIES AND BONDS," with title of Project; name, address and telephone number of Contractor; and name of responsible principal.
- C. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Contract Documents, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- D. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List subcontractor, supplier, and Manufacturer, with name, address, and telephone number of responsible principal.

1.03 PREPARATION OF SUBMITTALS

- A. Obtain warranties and bonds, executed in duplicate by responsible subcontractors, suppliers, and Manufacturers within ten (10) days after completion of the applicable item of Work. Except for items put into use with the City's permission, leave date of beginning of time of warranty open until the date of substantial completion is determined. All warranty coverage shall be extended directly to the benefit of the City.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.

1.04 TIME OF SUBMITTAL

- A. For equipment or component parts of equipment put into service during construction with the City's permission, submit documents within ten (10) days after acceptance.
- B. Make other submittals within ten (10) days after date of project completion, prior to the final application for payment.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

SECTION 01850 COLOR AUDIO-VIDEO PRECONSTRUCTION RECORD

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Prior to commencing work, the Contractor shall have a detailed, continuous, color digital audiovideo recording taken along the entire length of the Project to serve as a record of preconstruction conditions. All recordings and written video log records shall become property of the City.

1.02 CONSTRUCTION SCHEDULE

A. Electronic Site recordings shall not be made more than fifteen (15) calendar days prior to construction. The Contractor shall notify the City two (2) weeks prior to conducting electronic site recordings so the City can notify residents and/or prepare a press-release if necessary. This notification to the City shall include the name of the company performing recordings and a description of identification used (i.e., vehicle logo). No construction shall begin prior to review and approval of the site recordings covering the construction area by the City.

1.03 VIDEOGRAPHERS

- A. The Contractor shall employ a competent party or commercial firm known to be skilled and regularly engaged in the business of preconstruction color digital audio-video site documentation.
 - The City shall have the authority to reject all or any portion of a site recording not conforming to this Section and order that it be redone at no additional charge. The Contractor shall reschedule unacceptable coverage within five (5) calendar days after being notified. The City shall designate those areas, if any, to be omitted from or added to the audio-video coverage.

PART 2 - PRODUCTS

2.01 GENERAL

A. Each audio-video recording shall be saved on DVD media viewable on standard DVD players and computers. The DVD video recording shall produce bright, sharp, clear pictures with accurate colors and shall be free from distortion or any other form of picture imperfection. All DVD video recordings shall display on the screen the time of day, the month, day, and year of the recording. This time and date information must be continuously and simultaneously generated with the actual recording. The audio portion of the recording shall produce the commentary of the camera operator with proper clarity and be free from distortion.

2.02 EQUIPMENT

- A. Camera and Recorder: The video camera and recorder used in the electronic media site recordings shall be of industrial grade, consistent with current standards, and approved by the City. The camera shall be a high-resolution, color digital recorder with optical stabilization and 20X minimum optical magnification. The camera shall also have a minimum NTSC 525 lines resolution/60 fields/30 frames per second.
- B. Electronic Media: The DVD shall be original, previously unrecorded, blank media. If duplicate copies are required by the City, all copies shall be direct copies of the original DVD and marked as such.
- C. Wheeled Vehicles: Clearly mark any vehicles used for recording purposes with company's name and telephone number. Vehicles shall incorporate signs, flaggers, and lights as needed for safety purposes.

PART 3 - EXECUTION

3.01 COVERAGE

A. The recordings shall contain coverage of all surface features within and directly adjacent to the construction zone. These features shall include, but not be limited to, all roadways, pavement, retention ponds, railroad tracks, curbs, bridges, bridge abutments, driveways, sidewalks, culverts, headwalls, retaining walls, landscaping, signs, mailboxes, trees, and fences. Of particular concern shall be the existence, or non-existence, of any faults, fractures, or defects. Electronic media coverage shall be limited to one side of the street at one time and shall include all surface conditions located within the zone of influence supported by appropriate audio description. Panning, zoom-in, and zoom-out rates shall be sufficiently controlled to maintain a clear view of the object.

3.02 AUDIO RECORDING

A. Accompanying the video recording of each electronic media presentation shall be a corresponding and simultaneously recorded audio recording. This audio recording, exclusively containing the commentary of the camera operator shall assist in viewer orientation and in any needed identification, differentiation, clarification, or objective description of the features being shown in the video portion of the recording. The audio recording shall also be free from any conversation between the Contractor, camera operator, and any other production technicians.

3.03 ELECTRONIC MEDIA INDEXING

- A. All electronic media site recordings shall be permanently labeled and shall be properly identified by electronic media site recording number and project title.
- B. Electronic Media Site Recordings Log: Each electronic media site recording shall have a log of that recording's contents. The log shall describe the various segments of coverage contained on

that recording (e.g., the names of the streets, waterways, or easements; coverage beginning and end times; directions of coverage; video unit counter numbers; engineering stationing numbers, when possible; and the date of recording).

3.04 TIME OF EXECUTION

A. Visibility: All recording shall be performed during time of good visibility; no recording shall be done during periods of significant precipitation, mist, or fog. The recording shall only be done when sufficient sunlight is present to properly illuminate the subject and to produce sharp, bright video recordings of those subjects.

3.05 CONTINUITY OF COVERAGE

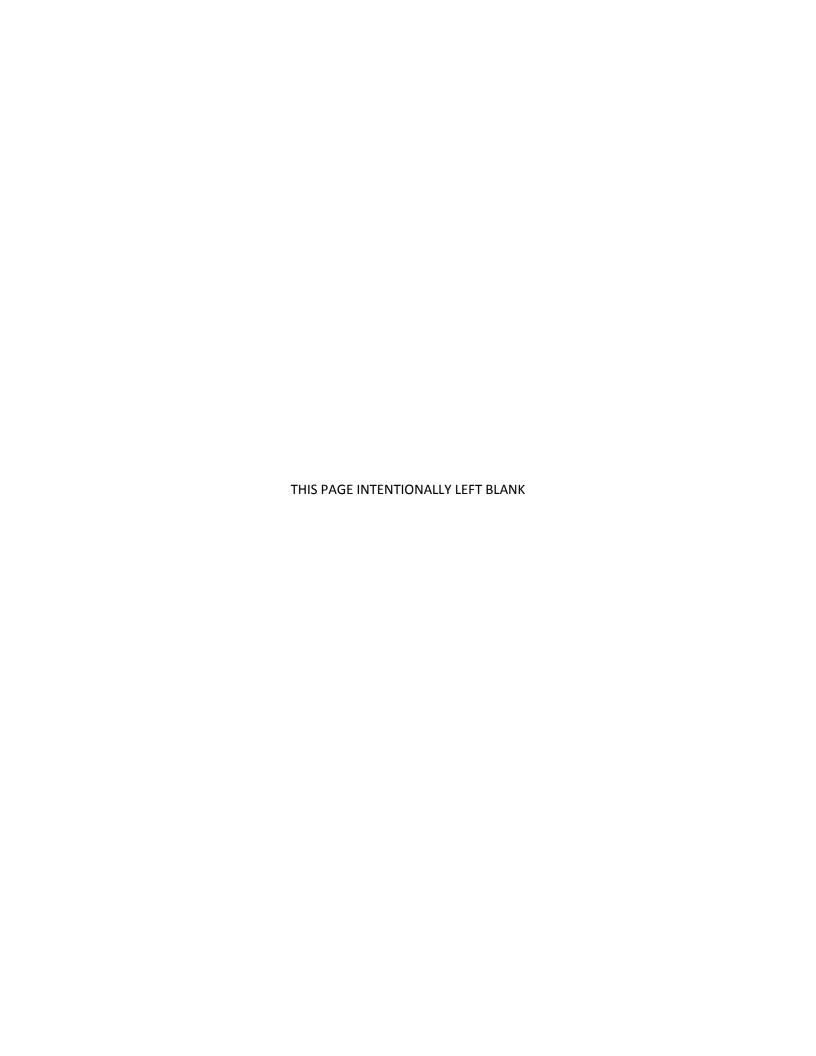
A. In order to insure the continuity of coverage, the coverage shall consist of a single continuous unedited recording which begins at one end of a particular construction area. However, where coverage is required in areas not accessible by conventional wheeled vehicles and smooth transport of the recording system is not possible, such coverage shall consist of an organized interrelated sequence of recordings at various positions along that proposed construction area (e.g., a wooded easement area). Such coverage shall be obtained by walking or by a special conveyance approved by the City.

3.06 COVERAGE RATES

A. Rate of speed in the general direction of travel of the vehicle used during videoing shall not exceed 75 feet per minute. Panning, zoom-in, and zoom-out rates shall be sufficiently controlled to maintain a clear view of the object.

3.07 CAMERA OPERATION

- A. Camera Height and Stability: When conventional wheeled vehicles are used as conveyances for the recording system, the vertical distance between the camera lens and the ground shall not exceed ten (10) feet. The camera shall be firmly mounted such that transport of the camera during the recording process will not cause an unsteady picture.
- B. Camera Control: Camera pan, tilt, zoom-in, and zoom-out rate shall be sufficiently controlled such that recorded objects shall be clearly viewed during audio-video playback. In addition, all other camera and recording system controls, such as lens focus and aperture, video level, pedestal, chroma, white balance, and electrical focus shall be properly controlled or adjusted to maximize picture quality.
- C. Viewer Orientation Techniques: The audio and video portions of the recording shall maintain viewer orientation. To this end, overall establishing views of all visible house and business addresses shall be utilized. In areas where the proposed construction location will not be readily apparent to the electronic media viewer, highly visible yellow flags shall be placed, by the Contractor, in such a fashion as to clearly indicate the proposed center line of construction.



SECTION 02050 ENVIRONMENTAL PROTECTION

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Furnishing all labor, materials, equipment, and incidentals required to ensure adequate erosion and sediment control measures are in place throughout prosecution of the Work.

1.02 REFERENCE STANDARDS

- A. Current rules and regulations relating to erosion control of Southwest Florida Water Management District and Florida Department of Environmental Protection.
- B. Current rules and regulations relating to erosion control of the Environmental Protection Agency

1.03 REQUIREMENTS

A. All Work shall comply with the measures shown in the Construction Documents and all conditions of the construction permit from Southwest Florida Water Management District, Florida Department of Environmental Protection, and the Environmental Protection Agency.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All materials shall be in accordance with the descriptions herein and/or as shown in the Contract Documents.
 - 1. Silt Barrier: Filter fabric shall be in accordance with Florida Department of Transportation Standard Specifications for Road & Bridge Construction, Section 985. Posts shall be 2 inches X 4 inches wood, 2 inches minimum diameter wood, or 1.33 lbs/ft steel.
 - 2. Silt Curtain: Shall be sufficient size and constructed of material to control siltation of waters. Silt curtain shall be Mark II or Mark III manufactured by American Boom & Barrier Corp. of Port Canaveral, Florida, or approved equal.
 - 3. Temporary Seeding: Mixture of seed for temporary use shall be supplied to City for approval.

PART 3 - EXECUTION

3.01 EARTH MOVING ACTIVITIES

- A. The Contractor shall exercise care to preserve the natural landscape and shall conduct his/her construction operations so as to prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the work area. Except where clearing is required for permanent work, for approved construction roads, or for excavation operations, all trees, native shrubbery, and vegetation shall be preserved and shall be protected from damage which may be caused by the Contractor's construction operations and equipment.
- B. Topsoil shall be taken from the construction areas and stockpiled for reuse in finished grading. Stockpiles shall be located so as not to add any additional sediment to the construction. Stockpiles shall be protected at all times by on-side drainage control measures and shall be mulched and/or seeded when exposed beyond 30 days.
- C. Exposed soil and fill materials shall be permanently stabilized at the earliest practicable date. Graded areas shall be seeded and/or sodded within 30 days following earth moving procedures. If the time of year is not conducive for permanent seeding, a temporary mulch and/or seeding shall be used.
- D. Temporary diversion berms and/or barriers shall be removed only after the construction of those areas directed to the berms and/or barriers have been completed.

3.02 FILLS

- A. Land to be cut or filled shall be cleared of trees, stumps, roots, brush, boulders, sod, and debris. Refer to the Construction Plans for trees to be removed.
- B. Fill areas shall be scarified, keyed, and drained.
- C. Fill material shall be free of sod, roots, or other decomposable material.
- D. The placing and spreading of fill material shall be started at the lowest point.
- E. Generally, a 6 (H): 1 (V) slope should be used unless specific engineering data shows a steeper slope is stable. Slopes of 4 (H): 1 (V) or flatter are desirable for erosion control and maintenance.
- F. Fills shall be seeded and/or mulches immediately upon completion of earth placement.
- G. Water management systems shall be provided to prevent water concentration and eroding the face of slope. Keep surface water off the face of the slope.

3.03 CUTS

- A. Diversions shall be constructed at top of slopes prior to cutting operations to convey water from face of slope.
- B. Steepness of cuts will depend on soil type and design; however, cut slopes of 4 (H): 1 (V) or flatter are desirable for erosion control and stability.
- C. Cut slopes should be benched to provide access for seeding and mulching equipment.
- D. Cut slopes should be seeded and/or mulches immediately after removal of earth.

3.04 PERMANENT STORMWATER BASINS (IF REQUIRED)

- A. Site Preparation: Areas under the embankment and any structural works shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots, or other objectionable materials.
- B. Embankment: The fill material shall be taken from approved borrow areas. It shall be clean mineral soil free of roots, woody vegetation, oversized stones, rocks, or other objectionable material. Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill material shall be placed in continuous layers six (6) to eight (8) inches thick over the entire length of the fill. Compaction shall be obtained by routing hauling equipment over the fill so that the entire surface of each layer of the fill is traversed by at least one wheel of tread truck of the equipment or by the use of a compactor. The embankment shall be constructed to an elevation 10 percent higher than the design height to allow for settlement if compaction is obtained with hauling equipment. If compactors are used for compaction, the overbuild may be reduced to not less than 5 percent.
- C. Pipe Spillways: The riser shall be securely attached to the barrel of the outfall pipe. The barrel and riser shall be placed on a firm, smooth soil foundation. The connection between the riser and the riser base shall be watertight. The fill material around the pipe spillway shall be placed in layers four (4) inch thick and compacted under the shoulders and around the pipe to at least the same density as the adjacent embankment. Hand compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment.
- D. Erosion Pollution Control: Construction operations shall be carried out in such a manner that erosion and water pollution will be minimized. State and local laws concerning pollution abatement shall be complied with.
- E. Sodding/Seeding: All exposed soil and fill areas shall be sodded or seeded unless otherwise directed by the City.

3.05 MAINTENANCE

- A. Repair all damages caused by soil erosion or construction equipment at or before the end of each working day.
- B. After grading is completed and areas are seeded and/or sodded, visual inspections should be made on a routine basis. Any damage to the berm shall be repaired at once and re sodded and/or re seeded. If the level of water is being maintained over the expected withdraw down time, the outfall system shall be cleaned and repaired. Areas shall be mowed and maintained by the Contractor until the project is closed out and accepted by the City.

3.06 HAZARDOUS MATERIALS

A. The Contractor shall be responsible for the independent inspection and certification of the removal, transportation, and disposal of all identified and unidentified hazardous materials located within the project Site.

3.07 CLEANUP OF SPILLS

A. The Contractor shall be responsible for cleanup of spills of bentonite drilling fluids, wastewater, or any other material encountered during construction efforts by the Contractor, his/her sub-contractors, and/or suppliers. Cleanup shall be completed to the satisfaction of the City at no additional cost to the City.

SECTION 02100 SITE PREPARATION

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Clearing of plant life and grass within limits of construction.
- B. Removing root systems of trees and shrubs in areas cleared.
- C. Pruning trees to remain where branches or roots will interfere with construction operations.
- D. Removal and disposal of material and debris off-site.

1.02 REGULATORY REQUIREMENTS

- A. Conform to applicable local, state, and federal regulations for disposal of debris.
- B. Disposing of material and debris on site is prohibited.
- C. Disposal by burning is prohibited.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 PROTECTION

- A. Protect plant growth and features to remain. Protect existing trees and other vegetation to remain in place against unnecessary cutting, breaking, skinning of roots, skinning or bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, and excess vehicular or pedestrian traffic or parking of vehicles within the drip line.
- B. Protect all benchmarks, land monuments, and property markers from disturbance, displacement, and damage.
- C. Maintain designated site access for vehicular and pedestrian traffic.

3.02 CLEARING AND GRUBBING

A. For areas to be cleared and grubbed, the surface of the ground shall be completely cleared of all timber, brush, stumps, roots, grass, weeds, rubbish, and all other objectionable obstructions resting on, or protruding through, the surface of the ground.

- B. Grubbing shall consist of the complete removal of all stumps, roots larger than 1-1/2 inches in diameter, matted roots, brush, timber, logs, and any other organic or metallic debris not suitable for foundation purposes resting on, under, or protruding through the surface of the ground to a depth of 18 inches below the subgrade. All depressions excavated below the original ground surface for, or by the removal of, such objects, shall be refilled with suitable materials and compacted to a density conforming to the surrounding ground surface.
 - 1. Use only hand methods for grubbing inside drip lines of trees that are to remain in place.
- C. Clearing for structures shall consist of topsoil and vegetation removal.
- D. Clearing and grubbing operations shall be conducted so that the contractor shall not damage the existing structures, installations, and plant growth to remain or structures and installations under construction.
- E. Clearing and grubbing shall be conducted in a manner that provides for the safety of employees and others.

3.03 STRIPPING

- A. Top soil shall be in areas designated or approved by the City.
- B. Stockpiled top soil shall be protected in accordance with the requirements of Section 02050.
- C. Any topsoil remaining after all work is in place shall be disposed of by the Contractor on site as directed by the City.

3.04 DISPOSAL

- A. The Contractor shall dispose of all material and debris from the clearing and grubbing operation by hauling such material and debris away to an approved facility.
- B. The cost of hauling and disposal of cleared and grubbed material and debris shall be considered a subsidiary obligation of the Contractor and the cost shall be included in the Contract prices.

SECTION 02140 DEWATERING

PART 1 - GENERAL

1.01 SYSTEM PERFORMANCE REQUIREMENTS

- A. Dewatering shall include all necessary control and disposal of groundwater on a continual basis during construction.
- B. Dewatering shall include the lowering of the groundwater table to relieve any hydrostatic head that could cause a decrease in the stability of the excavated subgrade. It shall also include the intercepting of seepage which could otherwise emerge from the slope or sides of excavations which could cause a decrease in the stability of the excavated subgrade or the slopes or sides of the excavations.

1.02 ADDITIONAL PROVISIONS

- A. Provide, operate, and maintain any dewatering system required to lower and control groundwater levels and groundwater hydrostatic pressure during the construction of the Work as required by this Section and the Contract Documents. The Contractor shall assume full responsibility and expense for the adequacy of the dewatering system with no additional time for performance.
- B. The development, drilling, operation, and abandonment of all wells used in the dewatering system shall comply with regulations of the Florida Department of Environmental Protection and the governing Water Management District.
- C. Remove and dispose of water resulting from activities described in this Section. Provide siltation settling basins for all discharges from dewatering systems. Submit plan of settling basins and discharge facilities for review by the City prior to dewatering system installation.
- D. Remove dewatering systems and equipment when no longer required.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 EXECUTION

- A. The dewatering system shall be capable of developing an excavated subgrade relieved of any hydrostatic pressure that could cause a decrease in the stability of the excavated subgrade and which will provide the necessary groundwater control for the proper performance required for completion of the Work.
- B. The dewatering system shall not cause damage to newly constructed or existing properties,

buildings, utilities, and other work due to the loss of support from incompletely drained soils or from removal of soil particles resulting from the dewatering system operation.

- C. Dewatering facilities shall be located where they will not cause interference with work performed by others.
- D. If the dewatering system utilized by the Contractor causes or threatens to cause damage to new or existing facilities, the dewatering system shall be modified at no additional cost to the City. The Contractor shall be responsible for and shall repair all damage caused by the dewatering system operation at no additional cost to the City and at no additional time for performance.
- E. Dispose of subsurface water collected in a manner which conforms to all applicable local and state ordinances, statutes, and laws.
- F. Maintain continual and complete effectiveness of the dewatering system operation to provide a firm, stable, excavated subgrade at all times as required for proper performance of the Work.
- G. Provide dewatering necessary to maintain the groundwater table below the level of backfill as it is being placed.

3.02 JOB CONDITIONS

- A. Erosion Control: Provide adequate protection from erosion from any of the dewatering operations utilized during the course of the construction. Any damage, disruption or interference to newly constructed work or existing properties, buildings, structures, utilities and/or other work resulting directly or indirectly from dewatering operations conducted under this Contract shall be remedied by the Contractor, at no cost to the City.
- B. Treatment of Dewatering Operations Discharges: Provide such additional treatment devices as may be required to meet the provisions of the Contract. This may include the construction of sumps and/or settling basins, stone rip-rap, silt fences or other requirements. The treatment devices shall be later removed and/or filled in with acceptable backfill material, and restored to original conditions once they are no longer needed, at no additional cost to the City.
- C. Noise Control: All Work under this Section shall executed in accordance with all Noise Ordinances of the City of North Port.

SECTION 02222 EXPLORATORY EXCAVATION

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Furnishing all labor, materials, equipment, and incidentals to necessary perform exploratory excavation, backfill exploratory excavations, and complete surface restoration.

1.02 DESCRIPTION

- A. Exploratory excavation shall be performed for the purpose of determining the location, size, material, etc., of underground structures and utilities.
- B. Exploratory excavation shall conform to the requirements of Section 01060.
- C. Damage to existing structures and utilities shall be avoided during exploratory excavation. Any such structures or utilities damaged by the Contractor shall be replaced or repaired at no additional cost to the City.

1.03 CONTROL OF WORK

A. The locations at which exploratory excavations are to be made shall be determined by the Contractor for facilitating safe and thorough execution of the Work. All exploratory excavations shall be reviewed and approved by the City prior to beginning excavation.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 SCHEDULING

- A. The Contractor shall consult with the City as to location of the exploratory excavations so that this Work may be scheduled sufficiently in advance of installation of other items of the Work.
- B. The Contractor shall obtain all available information on the location of existing underground structures and utilities prior to starting this type of excavation.
- C. The Contractor shall notify the utility owners of the structures and/or utilities to be affected in sufficient time to allow their representatives to observe the exploratory excavations.

3.02 EXCAVATION

- A. The Contractor shall perform exploratory excavations as necessary to investigate and verify the location of existing utilities and any other subsurface facilities. At a minimum, exploratory excavations shall be performed at each connection to an existing water main.
- B. The Contractor shall conduct all excavations with extreme care using tight control machinery supplemented by hand labor so as not to damage any existing structure or utility. If damage occurs, the Contractor shall notify immediately the City and the respective utility owner. The Contractor shall make repairs promptly if authorized by the utility owner or coordinate with the utility owner to facilitate prompt repair and compensation for damages.
- C. The Contractor shall permit the City to observe all exploratory excavations.

3.03 BACKFILL AND RESTORATION

A. Exploratory excavations shall be backfilled and the surface restored according with the Specifications unless otherwise directed by the City in writing.

SECTION 02231 TRENCHING, BEDDING, AND BACKFILL FOR PIPE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals necessary to perform all excavation (unclassified), backfill, fill, grading, and slope protection required completing the piping work shown in the Construction Plans.
- B. The Work shall include, but not necessarily be limited to: manholes, vaults, duct conduit, pipe, and roadways and paving; all backfilling, fill, and required borrow; grading; disposal of surplus and unsuitable materials; and all related work such as sheeting, bracing, and water handling.

1.02 GENERAL REQUIREMENTS

- A. A Certificate of Compliance with the Florida Trench Safety Act is required.
- B. The Contractor shall comply the requirements of Section 02100.

1.03 TRENCH PROTECTION

A. All excavation, trenching, and related sheeting, bracing, etc., shall conform to the requirements of the Florida Trench Safety Act (c5/5B 2626) which incorporates by reference OSHA's excavation safety standards (29 CFR 1926.650 subpart P).

B. Sheeting and Bracing in Excavations:

- 1. In connection with construction of below grade structures, the Contractor shall construct, brace, and maintain cofferdams consisting of sheeting and bracing as required to support the sides of excavations, to prevent any movement which could in any way diminish the width of the excavation below that necessary for proper construction, and to protect adjacent structures, existing piping, and/or foundation material from disturbance, undermining, or other damage. Care shall be taken to prevent voids outside of the sheeting, but if voids are formed they shall be immediately filled and rammed.
- 2. For trench sheeting for pipes, no sheeting is to be withdrawn if driven below mid diameter of any pipe, and no wood sheeting shall be cut off at a level lower than one foot (1') above the top of any pipe unless otherwise directed by the City. If during the progress of the Work the City decides that additional wood sheeting should be left in place, the City may instruct the Contractor in writing. If steel sheeting is used for trench sheeting, removal shall be as specified above, unless written approval is given for an alternate method of removal.
- 3. All sheeting and bracing not left in place shall be carefully removed in such a manner as not to endanger the construction or other structures, utilities, existing piping, or property.

Unless otherwise approved or indicated in the Construction Plans, all sheeting and bracing shall be removed after completion of the substructure, care being taken not to disturb or otherwise injure the finished masonry. All voids left or caused by withdrawal of sheeting shall be immediately refilled with sand by ramming with tools especially adapted to that purpose, by watering or otherwise as may be required.

- 4. The right of the City to instruct the Contractor will regard to sheeting and bracing to be left in place shall not be construed as creating any obligation on his part to issue such instructions, and his failure to exercise his right to do so shall not relieve the Contractor from liability for damages to persons or property occurring from or on the work occasioned by negligence or otherwise, growing out of a failure on the part of the Contractor to leave in place sufficient sheeting and bracing to prevent any caving or moving of the ground.
- 5. The Contractor shall construct cofferdams and sheeting outside the neat lines of the foundation unless indicated otherwise to the extent he deems it desirable for his method of operation. Sheeting shall be plumb and securely braced and tied in position. Sheeting, bracing, and cofferdams shall be adequate to withstand all pressures to which the structure will be subjected. Pumping, bracing, and other work within the cofferdam shall be done in a manner to avoid disturbing any construction of the masonry enclosed. Any movement or bulging which may occur shall be corrected by the Contractor at his own expense so as to provide the necessary clearances and dimensions.
- 6. Drawings of cofferdams, sheeting, and bracing and design computations shall be submitted to the City and construction shall not be started until such drawings are received. The drawings and computations shall be prepared and sealed by a Registered Professional Engineer in the State of Florida and shall be in sufficient detail to disclose the method of operation for each of the various stages of construction, if required, for the completion of the substructures.

C. Dewatering, Drainage, and Flotation:

- 1. The Contractor shall construct and place all pipelines, concrete work, structural fill, screened gravel, and gravel base course in the dry. All trenches and excavations are to be kept dry and free from water at all times when work is in progress and at no time is water to run through the pipeline(s) or structure excavations. The Contractor shall maintain the water level a minimum of one foot (1') below proposed bottom of excavation. For purposes of this Contract, "in the dry" is defined as within minus four (4) to plus two (2) percentage point of the optimum moisture content of the soil.
- 2. The Contractor shall, at all times during construction, provide, and maintain proper equipment and facilities to remove promptly and dispose of properly all water entering excavations and keep such excavations dry so as to obtain a satisfactory undisturbed subgrade foundation condition until the fill, structures, 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.

- 3. Pipe and masonry shall not be laid in water or submerged within 24 hours after being placed. Water shall not flow over new masonry within four (4) days after placement.
- 4. In no event shall water rise to cause unbalanced pressure on structures until the concrete or mortar has set at least 24 hours. The Contractor shall prevent flotation of the pipe promptly placing backfill.
- 5. Dewatering shall at all times be conducted in such a manner as to preserve the natural undisturbed bearing capacity of the subgrade soils at proposed bottom of excavation.
- 6. Well points may be required for pre-drainage of the soils prior to final excavation for some of the deeper in ground structures or piping and for maintaining the lowered groundwater level until construction has been completed to such an extent that the structure, pipeline, or fill will not be floated or otherwise damaged. Well points shall be surrounded by suitable filter sand and no fines shall be removed by pumping. Pumping from well points shall be continuous and standby pumps shall be provided. Once abandoned, well point holes shall immediately be backfilled with FDOT No. 89 stone from bottom to top or flowable fill meeting the requirements of FDOT Section 145, or as approved by the City.
- 7. The Contractor shall furnish all materials and equipment and perform all work required to install and maintain the drainage systems he proposes for handling groundwater and surface water encountered during construction of structures, pipelines, and compacted fills.
- 8. The Contractor shall provide for the disposal of the water removed from the excavation in such manner as shall not cause injury to public health or private or public property or to any portion of the work completed or in progress, to the surface of the streets, or cause any impediment to the reasonable use of the site by other contractors.
- 9. If requested by the City, the Contractor's proposed method of dewatering shall include a minimum of two (2) operating groundwater observation wells at each pump station structure and one (1) observation well at each manhole to be used to determine the water level during construction of the structure. Locations of the observations wells shall be at structures and along pipelines as approved by the City prior to their installation. The observation wells shall be extended to six inches (6") above finished grade, capped with screw on caps protected by a 24-inch X 24-inch concrete base, and left in place at the completion of this Project.
- 10. Prior to excavation, the Contractor shall submit his proposed method of dewatering and maintaining dry conditions to the City for review. However, such review shall not relieve the Contractor of the responsibility for the satisfactory performance of the system. The Contractor shall be responsible for correcting any disturbance or natural bearing soils or damage to structures caused by an inadequate dewatering system or by interruption of the continuous operation of the system as specified.
- 11. As part of his/her request for review of a dewatering system, the Contractor shall demonstrate the adequacy of the proposed system and well point filter sand by means of a

test installation. Discharge water shall be clear, with no visible soil particles in a one quart sample.

- 12. During backfilling and construction, water levels shall be measured in observation wells located as approved by the City.
- 13. Continuous pumping will be required as long as water levels are required to be below natural levels.
- 14. In the event that it is found that the water in a trench cannot be lowered by industry standards (i.e., well points and pumps) and if it is recognized by the Contractor that it is not feasible to dewater the trench, an alternate construction method may be proposed. The Contractor shall dewater the trench for a minimum of ten (10) calendar days prior to submitting any alternate method of dewatering which shall exhaust all standard means of dewatering. Complete details, specifications, Manufacturers' descriptive literature, installation lists, and any other pertinent data regarding the alternate method(s) shall be submitted as an alternate by the Contractor to the City for review within ten (10) days of the time that the Contractor anticipates using such alternate method.
- 15. The alternate method may be used, so long as the work is performed in a manner which, in the opinion of the City, conforms to the method and procedure as set forth in the information supplied by the Contractor in his original application for use of an alternate method. The City may revoke the alternate method if at any time, in his opinion, the work is not conforming to any applicable portion of these Technical Specifications. All alternate methods proposed for dewatering shall be at the Contractor's expense.

1.04 JOB CONDITIONS

- A. The Contractor shall examine the site and review the available test borings or undertake his own soil borings prior to submitting his bid, taking into consideration all conditions that may affect his work. The City will not assume responsibility for variations of sub-soil quality or conditions at locations other than places shown and at the time the investigation was made. Boring log data and soil samples are available for examination after signing a release at the office of the City.
- B. Existing Utilities: Locate existing underground utilities in the areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations.
 - 1. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, notify the City of such piping or utility immediately for directions.
 - 2. Cooperate with the City and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
 - 3. Demolish and completely remove from site existing underground utilities indicated in the Construction Plans to be removed.

- C. Protection of Persons and Property: Barricade open excavations occurring as part of this work and post with warning lights. Operate warning lights as recommended by authorities having jurisdiction.
 - 1. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.

1.05 SUBMITTALS

- A. Furnish the City, for approval, a representative sample of fill material obtained from onsite sources weighing approximately 100 pounds, at least seven (7) calendar days prior to the date of anticipated use of such material.
- B. For each material obtained from other than onsite sources, the Contractor shall notify the City of the source of the material and shall furnish the City, for approval, a representative sample weighing approximately 100 pounds, at least seven (7) calendar days prior to the date of anticipated use of such material.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Base, Fill, and Backfill:

- 1. Satisfactory soil materials are defined as those complying with American Association of State Highway and Transportation Officials (AASHTO) M 145, soil classification Groups A 1, A 2 4, A 2 5, and A 3.
- 2. Unsatisfactory soil materials are those defined in AASHTO M 145 soil classification Groups A 2 6, A 2 7, A 4, A 5, A 6, and A 7 along with peat and other highly organic soils.

B. Structural Fill:

- 1. Well graded soil material consisting of coarse aggregate to medium to fine grain sized sand, free of organic, deleterious and/or compressible material.
 - a. Shall not contain rock or stones exceeding 3-1/2 inches in diameter, hardpan, cobbles, or other similar materials.

C. Select Common Fill:

- 1. Soil material containing no more than 15 percent by weight finer than No. 200 mesh sieve.
 - a. Shall be free from organic matter, muck, marl, rock exceeding 3-1/2 inches in diameter, broken concrete, masonry, rubble, or other similar materials.

2. Material falling within the above specification, encountered during the excavation, may be stored in segregated stockpiles for reuse. All material which, in the opinion of the City, is not suitable for reuse shall be spoiled as specified herein for disposal of unsuitable materials.

D. Bedding Rock:

1. Bedding rock shall be FDOT No. 57, gradation washed and graded limerock or shell.

PART 3 - EXECUTION

3.01 GENERAL

- A. All excavation, backfill, and grading necessary to complete the Work shall be made by the Contractor and the cost thereof shall be included in the contract price.
- B. Material shall be furnished as required from off-site sources and hauled to the site.
- C. The Contractor shall take all the necessary precautions to maintain the work area in a safe and workable condition.
- D. The Contractor shall protect his work at all times by flagging, marking, lighting, and barricading. It shall also be the Contractor's responsibility to preserve and protect all above and underground structures, pipe lines, conduits, cables, drains or utilities which are existing at the time he encounters them. Failure of the Construction Plans to show the existence of these obstructions shall not relieve the Contractor from this responsibility. The cost of repair of any damage which occurs to these obstructions during or as a result of construction shall be borne by the Contractor without additional cost to the City.

3.02 TRENCH EXCAVATION

- A. Excavation for all trenches required for the installation of pipes and electrical ducts shall be made to the depths indicated in the Construction Plans. Excavate in such manner and to such widths as will give suitable room for laying the pipe or installing the ducts within the trenches, for bracing and supporting and for pumping and drainage facilities. The trench width at the top of the pipe shall not exceed the allowable as determined by the depth of cut and indicated in the Construction Plans.
 - 1. For water mains, excavate trench to provide a minimum of 36 inches of clear cover over the pipe bell unless otherwise noted in the Construction Plans or herein.
- B. Rock shall be removed to a minimum four inches (4") to six inches (6") clearance around the bottom and sides of all the pipe or ducts being laid as shown in the Construction Plans.

- C. The bottom of the excavations shall be firm and dry and in all respects acceptable to the City. Excavate unsatisfactory soil material from the bottom of the trench to a depth determined by the City and replace with rock or shell bedding.
- D. Where pipe or ducts are to be laid in bedding or encased in concrete the trench may be excavated by machinery to, or just below, the designated subgrade provided that the material remaining in the bottom of the trench is no more than slightly disturbed.
- E. Where the pipes or ducts are to be laid directly on the trench bottom the lower part of the trenches shall not be excavated to the trench bottom by machinery. The last of the material being excavated shall be done manually in such a manner that will give a flat bottom true to grade so that pipe or duct can be evenly and uniformly supported along its entire length on undisturbed material or bedding rock. Bell holes shall be made as required manually so that there is no bearing surface on the bells and pipes are supported along the barrel only.

3.03 PIPE INTERFERENCES AND ENCASEMENT

A. The Contractor shall abide by the following schedule of criteria concerning interferences with other utilities. In no case shall there be less than 0.3 feet between any two pipe lines or between pipe lines and structures. Concrete encasement shall be provided in accordance with the typical detail as shown in the Construction Plans.

3.04 BEDDING

- A. Where select common bedding material is used for pipe support as shown in the Construction Plans, the trench bottom or bedding should be prepared in accordance with Paragraph 3.02.E of this Section and the top six inches (6") shall be compacted using mechanical equipment to a minimum of 98 percent of the maximum dry density as determined by AASHTO T-180.
- B. Where rock or shell is used for pipe support, gravity sewer pipe shall have rock or shell bedding to six inches (6") over top of pipe, and four inches (4") to six inches (6") below the invert. Pressure pipe shall have rock or shell bedding to springline of pipe, and four inches (4") to six inches (6") below the invert depending on the diameter as shown in the Construction Plans. Rock or shell bedding shall be placed in maximum lift thicknesses of four inches (4") to six inches (6") with each lift compacted using mechanical equipment.
- C. Rock or shell bedding may be used under certain circumstances as a drain for ground water control, subject to the approval of the City. The Contractor shall take all precautions necessary to maintain the shell or rock bedding in a compacted state and to prevent washing, erosion, or loosening of this bed.

3.05 BACKFILLING

A. Backfilling over pipes shall begin as soon as practicable after the pipe has been laid, jointed, and inspected and the trench filled with suitable bedding material.

- B. Backfilling over ducts shall begin not less than three (3) days after placing concrete encasement.
- C. All backfilling shall be prosecuted expeditiously and as detailed in the Construction Plans.
- D. Any space remaining between the pipe and sides of the trench shall be packed full by hand shovel with selected earth, free from stones having a diameter greater than two inches (2") and thoroughly compacted with a tamper as fast as placed, up to a level of one foot (1') above the top of the pipe. The material shall be compacted to a minimum of 98 percent of the maximum dry density as determined by AASHTO T-180 in layers not to exceed four inches (4") up to the centerline of the pipe from the trench bottom and in layers not to exceed six inches (6") from the pipe centerline to twelve inches (12") above the pipe.
- E. The filling shall be carried up evenly on both sides with at least one person tamping for each person shoveling material into the trench.
- F. The remainder of the trench above the compacted backfill, as just described above, shall be filled and thoroughly compacted with select common fill with mechanical equipment. Compact select common fill in six-inch (6") layers to a minimum of 98 percent of the maximum dry density determined by AASHTO T-180.
- G. In locations where pipes pass through building walls, the Contractor shall take the following precautions to consolidate the refill up to an elevation of at least one foot (1') above the bottom of the pipes:
 - 1. Place structural fill in such areas for a distance of not less than three feet (3') either side of the center line of the pipe in level layers not exceeding six inches (6") in depth.
 - 2. Wet each layer to the extent requested and thoroughly compact each layer with a power tamper.
- H. The Contractor coordinate and pay for density tests to determine compaction of backfill spaced as required by the agencies having jurisdiction, or at a minimum of one in every 300 feet of trench cut per lift and shall include a test at the spring line of the pipe. The tests shall be sign and sealed by a Florida Licensed Engineer.

3.06 GRADING

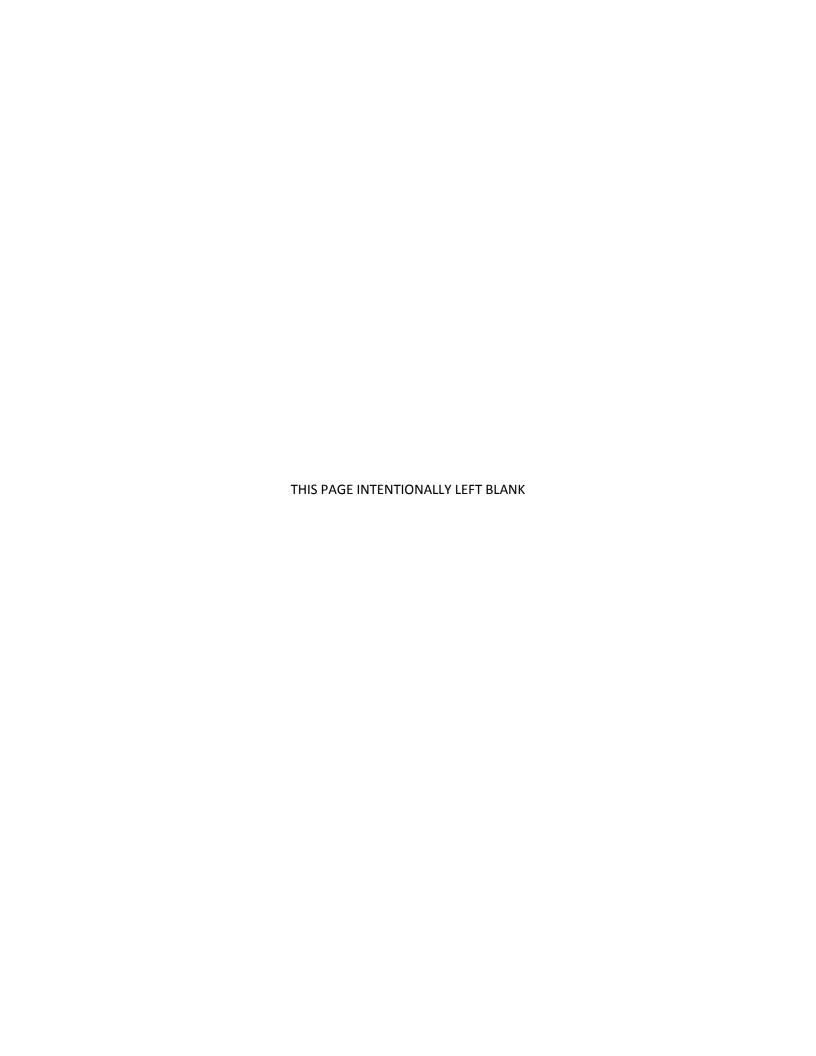
A. Grading shall be performed at such places as are indicated in the Construction Plans, to the lines, grades, and elevations shown or as approved by the City and shall be made in such a manner that the requirements for formation of embankments can be followed. All unacceptable material encountered, of whatever nature within the limits indicated, shall be removed and disposed of as requested. During the process of excavation, the grade shall be maintained in such condition that it will be well drained at all times. Temporary drains and drainage ditches shall be installed to intercept or divert surface water which may affect the prosecution or condition of the Work.

- B. If at the time of excavation it is not possible to place any material in its proper section of the permanent structure, it shall be stockpiled in approved areas for later use. No extras will be considered for the stockpiling or double handling of excavated material.
- C. The right is reserved to make minute adjustments or revisions in lines or grades if found necessary as the work progresses, due to discrepancies in the Construction Plans or in order to obtain satisfactory construction.
- D. Stones or rock fragments larger than 1-1/2 inches in their greatest dimensions will not be permitted in the top one foot (1') of the subgrade line of all dikes, fills, or embankments.
- E. All fill slopes shall be uniformly dressed to the slope, cross section, and alignment shown in the Construction Plans, or as approved in writing by the City.
- F. In cuts, all loose or protruding rocks on the back slopes shall be jarred loose or otherwise removed to line or finished grade of slope. All cut and fill slopes shall be uniformly dressed to the slope, cross section, and alignment shown in the Construction Plans or as approved in writing by the City.
- G. No grading is to be done in areas where there are existing pipe lines that may be uncovered or damaged until such lines which must be maintained are relocated, or where lines are to be abandoned, all required valves are closed and drains plugged at manholes.
- H. The Contractor shall replace all pavement cut or otherwise damaged during the progress of the Work as specified elsewhere herein.

3.07 DISPOSAL OF UNSUITABLE AND SURPLUS MATERIAL

- A. All surplus and/or unsuitable excavated material shall be disposed of in the following manner:
 - 1. Transport from City's property and legally dispose of. Any permit required for the hauling and disposing of this material beyond City's property shall be obtained prior to commencing hauling operations.
- B. Suitable excavated material may be used for fill if it meets the Technical Specifications for select common fill and is approved by the City. Excavated material so approved may be neatly stockpiled at the site where designated by the City provided there is an area available where it will not interfere with the operation of the facility nor inconvenience traffic or adjoining property owners.

END OF SECTION



SECTION 02300 DIRECTIONAL DRILLING

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

- A. The Contractor shall provide all necessary labor, tools, materials, and equipment to successfully complete the installation of directionally drilled piping as specified herein and shown on the Construction Plans. The Contractor shall be responsible for the final constructed product and for furnishing the qualified labor and supervision necessary for this method of construction.
- B. The Contractor shall furnish all items necessary to perform the horizontal directional drilling (HDD) operation and construct the pipe to the lines and grade shown on the Construction Plans.

1.02 REFERENCE STANDARDS

- A. American Association of State Highway and Transportation Officials (AASHTO).
- B. Occupational Safety and Health Administration (OSHA).

1.03 DEFINITIONS

A. Contractor's Construction Drawings: Drawings by which the Contractor proposes to construct, operate, build, etc., the referenced item. The submission of these drawings shall be required for the sole purpose of providing the sufficient details to verify that the Contractor's Work in progress is in accordance with the intent of the design.

1.04 QUALITY ASSURANCE

- A. Qualifications: Directional drilling contractor shall have a minimum of four (4) years' experience with similar construction including pipelines of the same or larger diameter and the same or greater lengths. The Contractor shall also have successfully completed a minimum of five (5) similar projects of the same or larger diameter and of equal or greater lengths.
- B. All pipe and appurtenances of similar type and material shall be furnished by a single manufacturer.

C. Design Requirements:

1. Horizontal alignment shall be as shown on the Construction Plans. The pipe shall have a minimum cover of 36 inches. The minimum clearances shall be as indicated on the Construction Plans. Compound curvatures may be used but shall not exceed the maximum deflections as set forth by the pipe manufacturer or AWWA C906 or C900, whichever is stricter. Entry angle shall be 12 to 14 degrees ideal, and shall not to exceed 15 degrees. Exit angle shall be 6 to 12 degrees to facilitate "pull-back." Entry and exit angles are defined as angles from the horizontal.

1.05 SUBMITTALS

- A. General: The Contractor shall submit required information to the City in conformance with Section 01340. The Contractor's schedule shall allow a minimum of two (2) weeks for review by the City.
- B. The City will base the review of submitted details and data on the requirements of the completed Work; safety of the Work in regards to the public, potential for damage to public or private utilities and other existing structures and facilities; and the potential for unnecessary delay in the execution of the Work. Such review shall not be construed to relieve the Contractor in any way of his responsibilities under the contract. The Contractor shall not commence Work on any items requiring Contractor's construction drawings or other submittals until the drawings and submittals are reviewed and accepted by the City.
- C. Prior to mobilizing HDD equipment and personnel to the site, the Contractor shall submit the following to the City for review:
 - 1. Work Plan: Submit a work plan detailing the procedure and schedule to be used to execute the project. The work plan should include a description of all equipment to be used; a list and resumes of key personnel and their qualifications and experience; a list of subcontractors; a schedule of work activity; a safety plan; a traffic control plan; a frac out plan; hazardous chemical list with all MSDS and technical data sheets; and contingency plans for possible problems. Work plan should be comprehensive, realistic, and based on actual working conditions for this particular project. The plan should document the thoughtful planning required to successfully complete the project.
 - 2. Equipment: Submit specifications on directional drilling equipment to be used to show that the equipment will be adequate to complete the project. Equipment shall include but not be limited to: drilling rig, mud system, mud motors (if applicable), down-hole tools, guidance system, and rig safety systems. Calibration records for guidance equipment shall be included. Specifications for any drilling fluid additives that Contractor intends to use or might use shall be included.
 - Material: Specifications on material to be used shall be submitted. Material shall include the pipe, fittings, locator wire, and any other item that is to be an installed component of the project.
 - 4. Bore Path Layout and Design: The Contractor shall submit a proposed bore path layout in both plan and profile for each pipe to be installed by HDD. The proposed path shall conform to the drilling equipment and pipe material constraints. The Contractor shall also submit calculations confirming the stresses imposed during installation and in-service (after installation) are within the allowable limits (i.e., allowable pullback force, deflection, and buckling) of the selected pipe materials. Calculations shall utilize the equations presented in ASTM F1962. The drill mix must also be included in this bore path layout and design
- D. Following the completion of each HDD pipe installation, the Contractor shall submit the bore log to the City. The information provided shall be sufficient for the City to determine the horizontal

and vertical location of the casing at any point along the bore path. The bore log shall include but not be limited to:

- HDD Starting and Ending Locations: Provide horizontal locations and elevations, station and
 offset referenced to the project baseline, and swing ties to the locations of the end points of
 the pipe installed by HDD methods. Required information shall be provided in accordance with
 Section 01720.
- 2. Course Length: The distance between two downhole surveys as measured along the drilled path.
- 3. Measured Distance: The total distance of a downhole survey from the entry point as measured along the drilled path; also the summation of the course lengths.
- 4. Inclination: The angle at which the downhole probe is projecting from the vertical axis at a particular downhole survey point; vertically downward corresponds to zero degrees.
- 5. Azimuth: The angle at which the downhole probe is projecting in the horizontal plane at a particular downhole survey point; magnetic north corresponds to zero degrees.
- 6. Station: The horizontal position of a downhole survey measured from an established horizontal control system.
- 7. Elevation: The vertical position of a downhole survey measured from an established vertical control system.
- 8. Right: The distance of a downhole survey from the design path reference line; positive values indicate right of the reference line while negative values indicate left of the reference line.

1.06 JOB CONDITIONS

A. Safety Requirements:

- 1. Work shall be performed in a manner to maximize safety and reduce exposure of workers and equipment to hazardous and potentially hazardous conditions, in accordance with applicable safety standards.
- 2. Whenever there is an emergency or stoppage of Work that is likely to endanger the excavation or adjacent structures, operate a full work force for 24 hours a day, including weekends and holidays, without intermission until the emergency or hazardous conditions no longer jeopardize the stability and safety of the Work.
- B. Air Quality: Conduct HDD operations by methods and with equipment that will positively control dust, fumes, vapors, gases, or other atmospheric impurities in accordance with applicable safety requirements.

1.07 PERMITS

- A. The City will obtain an FDEP Environmental Resource Permit for the Work in this Contract. The Contractor shall obtain any and all other permits required for prosecution of the Work. The costs associated with obtaining permits shall be considered incidental to the Work unless specified otherwise in Section III Special Provisions.
- B. The Contractor shall be responsible for complying with all permit requirements at no additional cost to the City.

PART 2 - PRODUCTS

2.01 GENERAL

A. The directional drilling equipment shall consist of a directional drilling rig of sufficient capacity to perform the bore and pull-back the pipe; a drilling fluid mixing, delivery, and recovery system of sufficient capacity to successfully complete the crossing; a drilling fluid recycling system to remove solids from the drilling fluid so that the fluid can be reused; a magnetic guidance system to accurately guide boring operations; a vacuum truck of sufficient capacity to handle the drilling fluid volume; and trained and competent personnel to operate the system. 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.

2.02 DRILLING SYSTEM

A. The directional drilling machine shall consist of a hydraulically powered system to rotate, push, and pull hollow drill pipe into the ground at a variable angle while delivering a pressurized fluid mixture to a guidable drill (bore) head. The machine shall be anchored to the ground to withstand the pulling, pushing, and rotating pressure required to complete the crossing. The hydraulic power system shall be self-contained with sufficient pressure and volume to power drilling operations. Hydraulic system shall be free of leaks. Rig shall have a system to monitor and record maximum pull-back pressure during pull-back operations. The rig shall be grounded during drilling and pull-back operations. There shall be a system to detect electrical current from the drilling string and an audible alarm, which shall automatically sound when an electrical current is detected.

2.03 PIPE

A. Comply with the requirements of Section 02616.

2.04 LOCATER WIRE

A. Locater wire shall consist of a single (unspliced) length of #10 reinforced composite tracer wire. Locator wire shall be HDPE-covered, hi-carbon-steel-core copper wire as manufactured by Copperhead Industries, LLC, of Monticello, MN, or approved equal.

2.05 DRILLING FLUIDS

- A. Drilling fluids shall be a mixture of bentonite and water or polymers and additives. Bentonite sealants and water will be used to lubricate and seal the mini-tunnel.
- B. The HDD Contractor shall be responsible for obtaining, transporting, and storing any water required for drilling fluids.

PART 3 - EXECUTION

3.01 GENERAL

- A. The Contractor shall be responsible for his/her means and methods of HDD construction and shall ensure the safety of the Work, the Contractor's employees, the public, and adjacent property, whether public or private.
- B. The Contractor should anticipate that portions of the drilled excavation will be below the groundwater table and/or under waterways.
- C. The Contractor shall comply with all local, state, and federal laws, rules, and regulations at all times to prevent pollution of the air, ground, and water.

3.02 EQUIPMENT

- A. Diesel, electrical, or air-powered equipment will be acceptable, subject to applicable federal and state regulations.
- B. Any method or equipment that the Contractor can demonstrate will produce the specified results will be considered.
- C. The Contractor shall employ equipment that will be capable of handling the various anticipated ground conditions. In addition, the equipment shall:
 - 1. Be capable of minimizing loss of ground ahead of and around the machine and providing satisfactory support of the excavated face at all times.
 - 2. Provide a system to indicate whether the amount of earth material removed is equivalent to that displaced by the advance of the machine such that the advance rate may be controlled accordingly.
- D. Provide adequate secondary containment for any and all portable storage tanks.

3.03 HORIZONTAL DIRECTIONAL DRILLING

A. Drilling must use techniques of creating or directing a borehole along a predetermined path to a specified target location. This must involve use of mechanical and hydraulic deviation equipment

to change the boring course and must use instrumentation to monitor the location and orientation of the boring head assembly along a predetermined course.

- B. Drilling must be accomplished with fluid-assisted mechanical cutting. It is mandatory that minimum pressures and flow rates be used during drilling operation as not to fracture the subgrade material around and or above the bore.
- C. The mobile drilling system shall utilize small diameter fluid jets to fracture and mechanical cutters to cut and excavate the soil as the head advances forward.
- D. Steering shall be accomplished by the installation of an offset section of drill stem that causes the cutterhead to turn eccentrically about its centerline when it is rotating. When steering adjustments are required, the cutterhead offset section is rotated toward the desired direction of travel and the drill stem is advanced forward without rotation.
- E. The mobile drilling system must be capable of being launched from the surface at an inclined angle and drilling a two-inch (2") to three-inch (3") diameter pilot hole. The pilot hole shall then be enlarged with reamers as required to achieve the completed directional drill bore hole diameter.
- F. The path of the pilot hole shall be monitored during drilling by taking downhole survey readings at least once for each rod length of bore constructed, or more often as needed or directed by the City, but in no case at intervals exceeding 35 feet. These readings shall be used to calculate the horizontal and vertical coordinates of the downhole probe as it progresses along the pilot hole. Calculations shall be performed according to American Petroleum Institute (API) Bulletin D20 Bulletin on Directional Drilling Survey Calculation Methods and Terminology. Recorded data and calculations from downhole surveys shall include, but not be limited to the following items:
 - HDD Starting and Ending Locations: Provide horizontal locations and elevations, station and
 offset referenced to the project baseline, and swing ties to the locations of the end points of
 the pipe installed by HDD methods. Required information shall be provided in accordance with
 Section 01720.
 - 2. Course Length: The distance between two downhole surveys as measured along the drilled path.
 - 3. Measured Distance: The total distance of a downhole survey from the entry point as measured along the drilled path; also the summation of the course lengths.
 - 4. Inclination: The angle at which the downhole probe is projecting from the vertical axis at a particular downhole survey point; vertically downward corresponds to zero degrees.
 - 5. Azimuth: The angle at which the downhole probe is projecting in the horizontal plane at a particular downhole survey point; magnetic north corresponds to zero degrees.
 - 6. Station: The horizontal position of a downhole survey measured from an established horizontal control system.

- 7. Elevation: The vertical position of a downhole survey measured from an established vertical control system.
- 8. Right: The distance of a downhole survey from the design path reference line; positive values indicate right of the reference line while negative values indicate left of the reference line.
- In addition to a magnetic downhole survey system, a surface monitoring system, such as TruTracker (or equivalent) shall be used to determine the location of the downhole probe during pilot hole drilling. The TruTracker locates the downhole probe by inducing a magnetic field in a surface coil of known location. The probe senses its location relative to this magnetic field and communicates this information to the surface. Prior to drilling, the coil shall be laid out on the ground surface and its corners accurately surveyed.
- J. Regardless of the tolerance achieved, no pilot hole will be accepted if it will result in any of the pipeline being installed in violation of construction right-of-way or easement restrictions. Concern for adjacent utilities and/or structures takes precedence over the listed tolerances. Listing of tolerances does not relieve the Contractor of responsibility for safe operations or damage to adjacent utilities and structures.
- K. At the completion of pilot hole drilling, the HDD contractor shall provide a tabulation of coordinates, referenced to the drilled entry point, which accurately describe the location of the pilot hole.
- L. A swivel shall be used to connect the pull section to the reaming assembly to minimize torsional stress imposed on the section. The pull section shall be supported on rollers as it proceeds during pull back so that it moves freely.
- M. The HDD Contractor shall maximize the recirculation of drilling fluid surface returns. The HDD Contractor shall provide solids control and fluid cleaning equipment of a configuration and capacity that can process surface returns and produce a drilling fluid suitable for reuse.
- N. The HDD Contractor shall employ his best efforts to maintain full annular circulation of drilling fluids. Drilling fluid returns at locations other than the entry and exit points shall be minimized. In the event that annular circulation is lost, the HDD contractor shall take steps to restore circulation.

3.04 CONTROL OF THE DRILL LINE AND GRADE

A. Construction Control:

- 1. The Contractor shall establish and be fully responsible for the accuracy of his/her own control for the construction of the entire project, including structures, drill line, and grade.
- 2. The Contractor's control points shall be established sufficiently far from the drilling operation not to be affected by construction operations.

- 3. The Contractor shall maintain daily records of alignment and grade and shall submit these records to the City. The Contractor remains fully responsible for the accuracy of his/her Work and the correction of it, as required.
- 4. The Contractor shall check his/her control for the bore alignment against an above ground undisturbed reference. The Contractor shall furnish a "Directional Bore Log" for each bore completed to the City.

3.05 LOCATER WIRE

A. Locater wire shall be provided as indicated on the Construction Plans and as required herein. Locater wire shall be securely attached to each end of the directionally drilled pipe and intermittently as needed.

3.06 DISPOSAL OF EXCESS MATERIAL

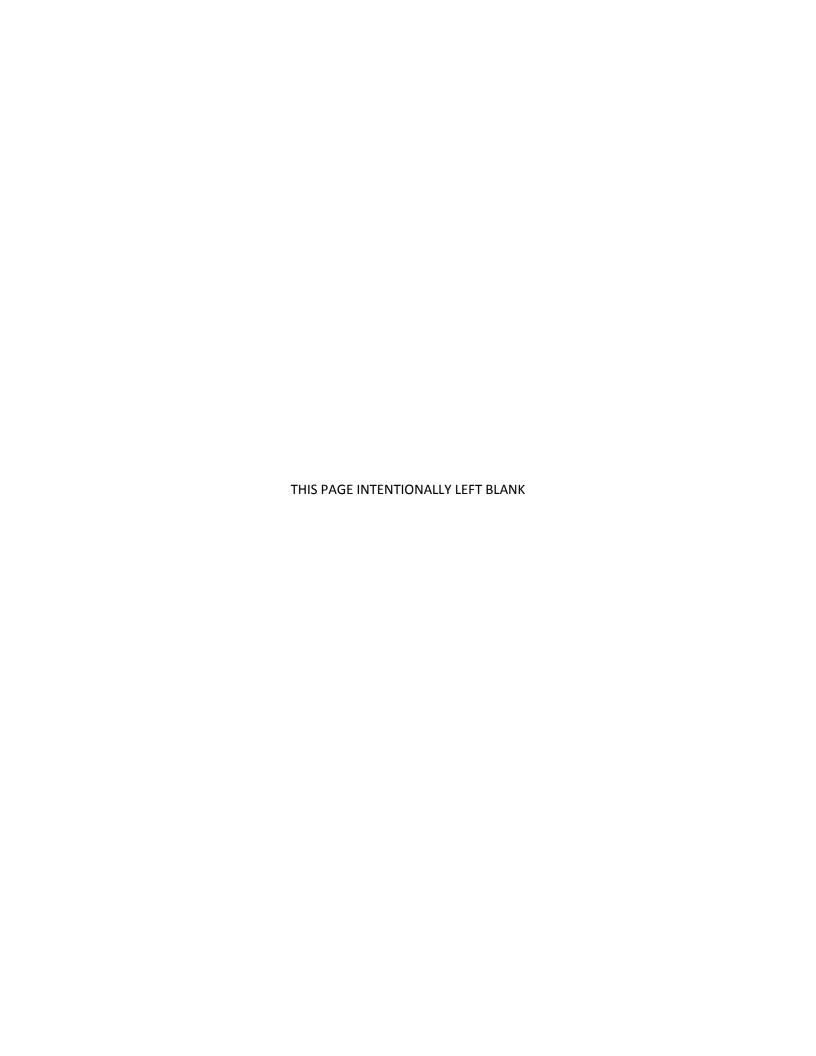
- A. Where such effort is necessary, cost for groundwater control during the course of the drilling work shall be included in the unit contract price for the Work.
- B. Dewatering required during the course of the project to lower water table, to remove standing water or surface drainage seepage, or to protect ongoing Work against rising waters or floods shall be considered incidental to the Work being performed.
- C. Contractor shall remove all puddled bentonite (drillers mud) and dispose of off-site in a legal manner, at no additional cost to the City.

3.07 PROTECTION OF EXISTING STRUCTURES

- A. When HDD operations occur in close proximity to existing structures, the Contractor shall take all reasonable precautions to prevent damage to such structures. The requirements described herein apply to all types of structures, whether on public or private property, that may be adversely affected by HDD operations due to vibrations, ground loss, ground heave, or dewatering.
- B. The Contractor shall survey and monitor structures for settlement by survey, recording elevations to 0.01 foot.
- C. The Contractor shall notify the City of any movements detected or damage to the structures and immediately stop drilling and excavation activities, backfill any open excavations, and contact the City for instructions.
- D. When excavating for construction, the Contractor is responsible for evaluating the need for, design of, and providing any necessary precautionary features to protect adjacent structures from damage, including, but not limited to, selecting construction methods and procedures that will prevent damaging the adjacent structures and monitoring and controlling the vibrations from construction activities, including driving of casings and sheeting. When sheeting and shoring are not detailed in the Construction Plans, the Contractor shall employ a qualified Specialty Engineer

to design the sheeting and shoring, and to sign and seal the plans and specification requirements. These designs shall be submitted to the City prior to beginning construction.

END OF SECTION



SECTION 02616 POLYVINYL CHLORIDE PIPE (PVC) AND HIGH DENSITY POLYETHYLENE PIPE (HDPE) FOR PRESSURE SERVICE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing pipe for water distribution systems.
- B. Furnishing all valves, hydrants, and miscellaneous appurtenances.
- C. Installation.
- D. Testing and disinfection (as required).

1.02 REFERENCE STANDARDS

A. Current Florida Department of Environmental Protection (FDEP) Rules and Regulations relating to water distribution systems.

1.03 COMPLY

- A. All excavation and backfilling shall be in conformance with pertinent Sections of these Specifications.
- B. All Contract Documents reflecting water line location and details.

1.04 SUBMITTALS

- A. Submit shop drawings and product data in conformance with Section 01340.
- B. Submit Manufacturers' recommendations for pipe jointing and laying.
- C. No later than two (2) weeks prior to commencing operations, submit to the City for approval, a description of operations, including equipment to be used, qualifications of personnel, traffic control, maintenance of flow, and method of protecting existing utilities.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Pipe shall be unloaded and inspected in accordance with the Manufacturers' written instructions.
- B. Pipe and fittings stored on the site shall be stored in the protective unit packages provided by the Manufacturer. If packages need to be opened, the pipe shall be stored on a flat surface and not in direct contact with the ground. Do not stack higher than four (4) feet. Keep inside of pipe

and fittings free from dirt and debris. Care shall be exercised to avoid compression damage or deformation to the pipe.

- C. All pipe and fittings that are stored shall be covered to provide protection from the sunlight.
- D. Handle all material carefully at all times. Any pipe or fitting having a crack or which has received a severe blow shall be marked rejected and immediately be removed from the work.

PART 2 - PRODUCTS

2.01 PVC PIPE

- A. Polyvinyl chloride (PVC) pressure pipe shall conform to the requirements of American Water Works Association (AWWA) C-900 or AWWA C-905 with outside diameter equal to that of standard ductile iron pipe and minimum wall thickness of DR Series 25, Class 100, Type 1; DR Series 18, Class 150; or DR Series 14, Class 200, unless otherwise indicated.
- B. PVC pipe shall be colored to designate its end use: blue for water mains, purple for reuse water mains, and green for sewage force mains.

2.02 PIPE JOINTS

- A. Pipes four (4) inches in diameter or larger shall have an integral bell formed with a race designed to accept the gasket in accordance with AWWA C-900. The spigot end shall have a bevel and a stop mark on the outside diameter to indicate proper insertion depth. Provision shall be made for expansion and contraction at each joint.
- B. Pipes with nominal diameters of less than four (4) inches may have either compression joints as described herein or solvent-welded joints. Solvent cements shall be as specified in AWWA C-900. Jointing shall be in strict accordance with the pipe manufacturer's direction.
- C. When assembled, the gasket shall be compressed radically on the pipe spigot so as to effect a positive seal under all combinations of joint tolerances and is the only element depended upon to make the joint flexible and watertight.
- D. All surfaces of the joint upon or against which the gasket may bear shall be smooth, free of cracks, fractures, or imperfections that could adversely affect the performance of the joint.

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- C. When assembled, the gasket shall be compressed radically on the pipe spigot so as to effect a positive seal under all combinations of joint tolerances and is the only element depended upon to make the joint flexible and watertight.
- D. All surfaces of the joint upon or against which the gasket may bear shall be smooth, free of cracks, fractures, or imperfections that could adversely affect the performance of the joint.

2.04 FUSION JOINTS

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

2.05 GASKETS

- A. The gasket shall be molded to a circular form and to the proper cross section and shall consist of a vulcanized high grade elastomeric compound conforming to AWWA C-900, Elastomeric Seals for joining plastic pipe.
 - 1. Quality Control Test Requirements: The Manufacturer shall take adequate measures in the production of PVC pipe, couplings, and solvent cements to assure product compliance with the requirements of AWWA C-900. All of the tests specified in Section 3 of AWWA C-900 shall be performed at the intervals indicated therein.
 - 2. Hydrostatic Proof-Test: The Manufacturer shall pressure test all pipe and couplings in accordance with Section 3.3 of AWWA C-900.

2.06 PIPE FITTINGS

A. All fittings four (4) inches in diameter and larger shall be ductile iron with mechanical joints and shall conform to American National Standards Institute (ANSI) A-21.53 (AWWA C-153) for short body fittings with a 350 psi pressure rating for fittings.

2.07 JOINT LUBRICANT

A. The joint lubricant shall have been tested and approved for potable water service. No lubricant shall be used that will harbor bacteria or damage the rings.

2.08 THRUST BLOCKING MATERIALS

A. The proportions and mix design shall be such that the concrete will develop a minimum compressive strength of 2,500 psi at 28 days.

B. The use of high-early cement will be required to allow hydrostatic testing five (5) days following the installation of the thrust blocking.

2.09 MECHANICAL PIPE JOINT RESTRAINTS

A. Mechanical pipe joint restraints shall include strapping logs, tie rods, retainer glands, joint harnesses, split clamping rings, threaded flanges, and other mechanical restraints approved by the City. All mechanical restraint systems shall be capable of preventing movement of the pipe and withstanding the thrust in pounds for various line sized as follows:

Nominal Pipe					
Diameter	Thrust				
(inches)	(lbs force)				
2	750				
3	1,500				
4	2,700				
6	6,000				
8	10,400				
10	16,800				
12	24,000				
16	36,000				

2.10 PVC PIPE RESTRAINTS

A. Restraint rings for C-900 PVC pipe bells shall be made of ductile iron components. All ductile iron shall conform to ASTM A536. A split ring shall be used behind the bell and a serrated restraint ring shall be used to grip the pipe. A sufficient number of bolts shall be used to connect the bell ring and the pipe ring. The combination shall have a minimum working pressure rating of 150 psi. The restraint shall be the Series 1600 as produced by the EBAA Iron, Inc., Romac 600 Series, or approved equal.

2.11 HDPE PIPE

A. Materials:

1. High-density polyethylene (HDPE) pipe shall be a PE4710 high density, extra high molecular weight polyethylene manufactured from first-quality high density polyethylene resin containing no additives, fillers, or extenders. The HDPE pipe shall have an ASTM D3350 cell classification of PE 445474C or PE 445574C, and shall meet or exceed the properties listed in the table below. The HDPE pipe shall be SDR-11 DriscoPlex 4000 (blue stripe) for water mains, 4300 (green stripe) for sewage force mains or 4500 (purple stripe) for reuse water mains, or approved equal, and shall bear the seal of approval of the National Sanitation Foundation (NSF).

HDPE Pipe Material Requirements

Property	Specification	Unit	Nominal Value		
Material Designation	PPI/ASTM		PE 4710		
Cell Classification	ASTM D3350		445574C		
Density	ASTM D1505	gms/cm3	0.960		
Melt Index	ASTM D1238	gm/10 min.	0.08		
Flex Modulus	ASTM D790	Psi	>120,000		
Tensile Strength	ASTM D638	Psi	> 3,500		
HDB @ 73°F	ASTM D2837	Psi	1,600		
Color U-V Stabilizer	ASTM D3350	% (Carbon Black)	≥ 2		
Hardness	ASTM D2240	Shore "D"	62		
Tensile Strength @ Yield (Type VI Spec.)	ASTM D638 (2"/min.)	Psi	> 3,500		
Elongation @ Break	ASTM D638	%, minimum	>800		
Modulus of Elasticity	ASTM D638	Psi	>175,000		
Linear Thermal Expansion Coefficient	ASTM D696	in./in./°F	1.0 x 10 ⁻⁴		
Brittleness Temperature	ASTM D746	°F	<-103		
Vicat Softening Temperature	ASTM D1525	°F	257		

- 2. Fittings shall be butt fusion type, meeting the requirements of ASTM D3261, and shall be pressure rated to match the system piping to which they are fused. At the point of fusion, the outside diameter and minimum wall thickness shall meet the requirements of ASTM F714 for the same size pipe. The pipe Manufacturer shall supply fitting, flanges, compression couplings, or other mechanical means as approved by the City to join pipes of dissimilar materials.
- 3. Specified HDPE pipe sizes shown in the Contract Documents are nominal inside diameters with ductile iron pipe outside dimension.

2.12 MANUFACTURE OF PIPE

- A. The inside and the outside surface of each length of pipe shall be free from nicks, scratches, and other surface defects and blemishes. The pipe shall be homogeneous throughout, free of any bubbles, voids, or inclusions.
- B. The jointing areas of the barrel of each length of pipe shall be free from dents and gouges.

2.13 INSPECTION OF THE PLANT

A. Inspection by the City or their representative shall not relieve the responsibility to furnish material performing in all respects to requirements of this specification.

- B. If plant inspection is requested by the City, the Manufacturer shall notify the City in advance of the date, time, and place of testing of the pipe, in order that the City may be represented at the test. The City will pay all travel expenses for the City representative.
- C. The City's inspector shall have free access to those parts of the Manufacturer's plant that are involved in work performed under this specification. The Manufacturer shall afford the inspector, without charge, all reasonable facilities for determining whether the pipe meets the requirements of this Specification.

PART 3 - EXECUTION

3.01 PIPE UNLOADING AT THE SITE

- A. Inspect each shipment of pipe and fittings and make provision for a timely replacement of any damaged material. Unload by hand or use canvas slings to avoid scratching the pipe. Do not slide or drag pipe over an abrasive surface. Pipe with deep scratches shall be replaced with new pipe and removed from the site.
- B. Stack pipe no higher than four (4) feet and provide support for the pipe barrel to prevent bending of the pipe. Pipe stockpiled for more than thirty (30) days shall be covered to protect it from the sun's rays. Provide for air circulation through the stockpile.
- C. Store rubber rings in a cool, dark place out of the direct rays of the sun.

3.02 DISTRIBUTING PIPE ALONG THE TRENCH

A. Distribute pipe by hand. Do not drop or drag pipe. Distribute sufficient pipe for one day's work, and place with bell end in the direction of pipe laying. Prevent dirt and contaminants from entering the pipe.

3.03 ASSEMBLING THE PIPE

A. Closely follow the Manufacturer's recommended procedure for cleaning, setting the ring, lubricating the spigot end of pipe, and assembling.

3.04 MAKING SPECIAL JOINTS

A. Follow Manufacturer's recommended procedure, and use only the recommended tools for cutting and beveling.

3.05 PLACING PIPE IN TRENCH

A. Pipe that is assembled prior to placing in the trench shall be carefully fed by hand (or with the use of approved equipment) on the pipe bed.

B. Provide pockets in the pipe bed material to accommodate bell ends and eliminate a concentration of load at these points.

3.06 PREVENTING TRENCH WATER FROM ENTERING PIPE

A. When pipe laying is not in progress, close the open ends of pipe with a watertight plug and allow no water or other objectionable materials to enter the pipe.

3.07 WATER/SEWER CLEARANCE REQUIREMENTS

A. Vertical clearance at crossings and horizontal separation between parallel lines shall be provided in accordance with the detail on the Construction Plans and requirements of F.A.C Rule 62-555.314.

3.08 VALVES AND FITTINGS

- A. Valves, fittings, plugs and caps shall be set and jointed to pipe in the manner specified in Section 02660. Buried valves shall be installed in the manner specified in Section 02663. Valves shall be firmly set on a foundation or footing of solid concrete or stone, not less than one (1) cubic foot in volume, which shall have been placed on firmly compacted ground.
- B. The height of the valve and its supporting foundation shall conform to the height of the connecting pipe so there will be no strain on the joints.

3.10 THRUST BLOCKING

A. Install concrete thrust blocks at all fittings and other locations as indicated on the Construction Plans. Minimum bearing area shall be as shown in the Construction Plans. Joints shall be protected by felt roofing paper prior to placing concrete. Concrete shall be placed against undisturbed material, and shall not cover joints, bolts or nuts, or interfere with the subsequent removal of any fitting. Wooden side forms shall be provided for thrust blocks where trench conditions require. Thrust blocks shall be property set and adequately cured prior to pressurizing the system.

3.11 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.

3.12 HYDROSTATIC TESTS OF PRESSURE PIPE

- A. After the pipe has been laid, and after inspection by the City, all newly laid pipe shall be subjected to a hydrostatic pressure test in accordance with AWWA C600 Sec. 4. The Contractor shall perform a hydrostatic pre-test to provide reasonable assurance of acceptance prior to performance of the witnessed test. Upon accomplishing a successful pre-test, the Contractor shall contact the City at least 48 hours prior to the test. The City or the City's designated representative shall be present during all tests.
- B. Slowly fill the pipe with water and allow it to stand for 24 hours. Expel all air from the pipe. Apply and maintain the specified test pressure by continuous pumping if necessary for the entire test period. The test pressure shall be calculated for the point of lowest elevation, or as specified by the City. The pump suction shall be in a barrel or similar device, or metered so that the amount of water required to maintain the test pressure may be measured accurately.
- C. Tapping tees shall be tested at 150 psi for 15 minutes before the tap is made and separate from the testing of the main lines and service connections.
- D. Each pressure test shall be a minimum of two (2) hours according to the following, unless otherwise directed by the City:
 - 1. Leakage shall be defined as the quantity of water necessary to hold the specified test pressure for the duration of the test period. No pipe installation will be accepted if the leakage is greater than the number of gallons per hour as determined by the following formula:

$$L = \underline{SD\sqrt{P}}$$
133,200

L = allowable leakage, in gallons per hour.

S = length of pipe tested, in feet.

D = nominal pipe diameter, in inches.

P = average test pressure, in psi (gauge).

2. Allowable leakage in gallon per hour per 1,000 feet of pipeline can be determined from the following chart.

Allowable Leakage in Gallons Per Hour Per 1,000 Feet of Pipeline

Avg Test Pressure psi	Nominal Pipe Diameter - Inches										
	3	4	6	8	10	12	14	16	18	20	24
450	0.48	0.64	0.95	1.27	1.59	1.91	2.23	2.55	2.87	3.18	3.82
400	0.45	0.60	0.90	1.20	1.50	1.80	2.10	2.40	2.70	3.00	3.60
350	0.42	0.56	0.84	1.12	1.40	1.69	1.97	2.25	2.53	2.81	3.37
300	0.39	0.52	0.78	1.04	1.30	1.56	1.82	2.08	2.34	2.60	3.12
275	0.37	0.50	0.75	1.00	1.24	1.49	1.74	1.99	2.24	2.49	2.99
250	0.36	0.47	0.71	0.95	1.19	1.42	1.66	1.90	2.14	2.37	2.85
225	0.34	0.45	0.68	0.90	1.13	1.35	1.58	1.80	2.03	2.25	2.70
200	0.32	0.43	0.64	0.85	1.06	1.28	1.48	1.70	1.91	2.12	2.55
175	0.30	0.40	0.59	0.80	0.99	1.19	1.39	1.59	1.79	1.98	2.38
150	0.28	0.37	0.55	0.74	0.92	1.10	1.29	1.47	1.66	1.84	2.21
125	0.25	0.34	0.50	0.67	0.84	1.01	1.18	1.34	1.51	1.68	2.01
100	0.23	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.50	1.80

- 3. Test service connection pipe by either testing in conjunction with the main at the test pressure required for the main, or by testing at the normal hydrostatic main pressure after the main has been completely installed and tested. Inspect visually for leaks and repair any leaks before backfilling. Duration of the test shall be at 15 minutes.
- 4. Pressure pipe containing polyethylene piping in any section shall be tested as follows:
 - a. Test all pressure pipe sections (valve to valve) constructed of PVC and ductile iron piping at a 150 psi test pressure with the allowable loss as already described.
 - b. Sections (valve to valve) containing polyethylene piping shall be tested at a 150 psi test pressure. The test pressure shall initially be advanced to 50 psi. The pressure should then be advanced in gradual additions until the test pressure is achieved. The test pressure should be maintained for three hours to allow for pipe expansion, adding water as necessary. Immediately after the three hour expansion period, test pressure should be reduced to 140 psi and addition of water stopped. If the pressure remains steady (within 7 psi) for one hour, no leakage is indicated.

3.13 DISINFECTION (POTABLE WATER ONLY)

A. Following pressure testing and before water main disinfection, the water main shall be filled to eliminate air pockets and flushed to remove particulates. The flushing velocity in the main shall not be less than 2.5 ft/sec. unless the City determines that conditions do not permit the required flow.

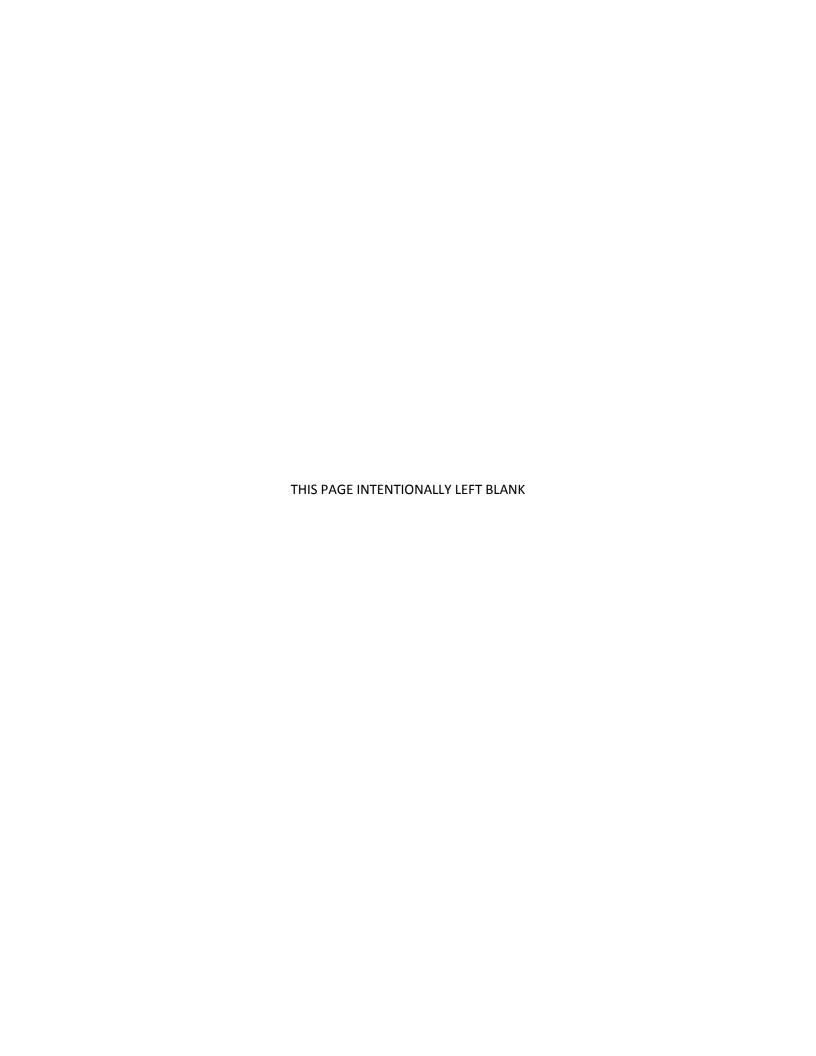
B. Water mains shall be disinfected in accordance with requirements of the City of North Port Utilities Standard Specifications, latest edition, and applicable Health Department standards and requirements.

3.14 BACTERIOLOGICAL TESTING (POTABLE WATER ONLY)

- A. The Contractor shall provide all labor, materials, equipment, and water necessary to complete disinfection the mains as specified herein. This shall include installation and removal (if required) of pipe taps necessary for chlorination or taking samples.
- B. Chlorinated water shall be flushed from the main until measured levels of chlorine leaving the main are no higher than background levels prevailing in the system.
- C. A neutralizing agent shall be applied to the chlorinated discharge if there is a question as to whether this discharge will damage the environment.
- D. Bacterial samples shall be collected at the end of each line and along the main as directed by the City. At least one sample shall be collected from each new main or branch.
- E. The Contractor shall contact the City minimum of two (2) business days prior to chlorination to coordinate witnessing chlorination by the City. The City must witness the chlorination.
- F. Bacteriological Reports will be handled directly by Sarasota County DOH or by the City.
- G. Sample collection and analyses will be handled by Sarasota County DOH or the City.
- H. The Contractor shall coordinate all Bacteriological testing with Sarasota County Department of Health personnel and guidance, Section 12.9 of the Sarasota County Uniform Water, Wastewater and Reuse Systems Code Manual, and the OWNER's project representative. CLEANING WATER LINES
- I. Bacteriological tests shall follow pressure testing. Sarasota County DOH or the City, if approved by DOH, will collect the samples in accordance with sampling plan approved by DOH.
 - 1. Fees for samples collected and analyzed by the Sarasota County DOH and associated laboratory shall be paid for by the Contractor.
 - 2. If the City collects to expedite the clearance process (e.g. City may collect samples at 11:45 PM and 6:00 AM), the City will pay for the fees associated with sample collection and analyses. If City collects and pays for sample analysis to expedite the clearance process, the Contractor shall credit the City for the amount that the Contractor would have paid to the Sarasota County DOH.
- J. Samples will be taken on two (2) consecutive days by a laboratory certified by the State of Florida in the presence of the City's representative in accordance with F.A.C. 17-555.

- K. If bacteriological results do not show an absence of total coliform at all sample stations for two (2) consecutive days, the Contractor will be required to rechlorinate and flush the line at no additional cost to the City.
- L. Following partial/final acceptance/certification by DOH, the Contractor shall remove the sample points.

END OF SECTION



SECTION 02660 DUCTILE IRON PIPE AND FITTINGS FOR PRESSURE PIPE

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Furnishing all labor, materials, equipment, and incidentals necessary to furnish, install, test, and disinfect (as required) all ductile iron pipe and appurtenances as shown in the Construction Plans and as specified herein.

1.02 REFERENCE STANDARDS

- A. American National Standards Institute (ANSI)/American Water Works Association (AWWA):
 - 1. ANSI A21.4/AWWA C104 Cement-Mortar Lining for Ductile Iron and Gray Iron Pipe and Fittings for Water and Other Liquids.
 - 2. ANSI A21.5/AWWA C105 American National Standard for Polyethylene Encasement for Ductile Iron Piping for Water and Other Liquids.
 - 4. ANSI A21.11/AWWA C111 Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings.
 - 4. ANSI A21.15/AWWA C115 Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.
 - 5 ANSI A21.51/AWWA C151 Ductile Iron Pipe, Centrifugally Cast in Metal Molds or Sand-Lined Molds for Water or Other Liquids.
 - 6. ANSI A21.53/AWWA C153 Ductile-Iron Compact Fittings.
- B. American Society of Mechanical Engineers (ASME):
 - 1. ASME B16.5 Pipe Flanges and Flanged Fittings.
- C. American Standard for Testing and Materials (ASTM):
 - 1. ASTM A536 Standard Specification for Ductile Iron Castings.
 - 2. ASTM D1248 Standard Specification for Polyethylene Plastics Extrusion Materials for Wire and Cable.
- D. American Water Works Association (AWWA):
 - 1. AWWA C600 Installation of Ductile Iron Water Mains and Their Appurtenances.

- E. National Science Foundation (NSF)/American National Standards Institute (ANSI):
 - 1. NSF/ANSI 61 Drinking Water System Components Health Effects.

1.03 SUBMITTALS

- A. General: Submit all submittals to the City in accordance with Section 01340.
- B. Required Submittals:
 - 1. Manufacturer's recommendations for pipe jointing and laying.
 - 2. Product Data: Product literature including detailed listing of materials and materials of construction for the following (as required):
 - a. Ductile Iron Pipe.
 - b. Fittings.
 - c. Flange Adapters.
 - d. Restraints.

1.04 QUALITY ASSURANCE

A. The Contractor shall provide thoroughly trained and experienced personnel who are completely familiar with and adequately equipped for the work in this Section. Follow the Manufacturer's recommendation and the requirements herein for standard installation procedures for ductile iron pipe and fittings.

PART 2 - PRODUCTS

2.01 DUCTILE IRON PIPE

- A. Size: As shown in the Construction Plans.
- B. Minimum Thickness Class: ANSI A21.51/AWWA C151 Class 52 and pressure rated 350 psi, unless otherwise shown in the Construction Plans. All flanged pipe shall be Class 53.
- C. Lining: Ceramic-lined, 1/8-inch thick, ANSI A21.4/AWWA C104.
- D. Coating: Seal coating inside and outside, ANSI A21.4/AWWA C104.
- E. Joint: Push-on unless otherwise shown in the Construction Plans, ANSI A21.51/AWWA C151.

- F. Gaskets: ANSI A21.11/AWWA C111.
- G. Maximum Length: 20 feet.

2.02 DUCTILE IRON/GRAY IRON FITTINGS

- A. Size: As shown in the Construction Plans.
- B. Minimum pressure rating: 350 psi, ANSI 21.53/AWWA C153.
- C. Lining: Ceramic-lined, 1/8-inch thick, ANSI A21.4/AWWA C104
- D. Coating: Seal coating inside and outside, ANSI A21.4/AWWA C104.
- E. Joint: Mechanical joint with retainer gland, unless otherwise shown in the Construction Plans, ANSI A21.51/AWWA C151.
- F. Gaskets: ANSI A21.11/AWWA C111.

2.03 FLANGED JOINTS

- A. All flanged joints shall be Class 125 standard per ASME B16.5 with neoprene rubber gaskets, minimum 1/8-inch thick. Gaskets shall be NSF/ANSI 61 certified for contact with potable water.
- B. Exposed joints and pipe shall be painted in accordance with Section 09902.

2.04 IDENTIFICATION

- A. Each pipe length and fitting shall be clearly marked with:
 - 1. Manufacturer's name and trademark.
 - 2. Nominal pipe size.
 - 3. Material designation.

2.05 POLYETHYLENE WRAP

A. Ductile iron pipe shall be fully encased in an 8-mil polyethylene sleeve, in accordance with ANSI A21.5/AWWA C105, Method A, at locations designated on the Construction Plans. Polyethylene material shall conform with the requirements of ASTM D1248. Contractor shall verify quantities to be ordered.

2.06 FLANGE ADAPTERS

- A. Restrained flange adapters shall be used in lieu of threaded or welded flanged spool pieces, unless specified otherwise.
- B. Flange adapters shall be made of ductile iron conforming to ASTM A536 and have flange bolt circles that are compatible with ANSI A21.15/AWWA C115.
- C. Restraint for the flange adapter shall consist of a plurality of individually actuated gripping wedges to maximize restraint capability. Torque limiting actuating screws shall be used to ensure proper initial set of the gripping wedges.
- D. The flange adapters shall be capable of deflection during assembly or permit lengths of pipe to be field cut to allow a minimum of 0.6 inch gap between the end of the pipe and the mating flange without affecting the integrity of the seal.
- E. For ductile iron pipe, the flange adapter shall have a safety factor of 2:1 minimum.
- F. Acceptable Products: Series 2100 MEGAFLANGE Restrained Flange Adapter produced by EBAA Iron Inc., or approved equal.

2.07 PIPE RESTRAINTS

A. Acceptable Products: Megalugs, Romac Gripper Rings, or approved equal.

2.08 THRUST BLOCKING MATERIALS

- A. The proportions and mix design shall be such that the concrete will develop a minimum compressive strength of 2,500 psi at 28 days.
- B. The use of high-early cement will be required to allow hydrostatic testing five (5) days following the installation of the thrust blocking.

PART 3 - EXECUTION

3.01 GENERAL

- A. Pipe and fittings shall be handled with care to ensure that the pipe and fittings are in sound, undamaged condition. Particular care shall be taken to prevent damage to pipe coating and lining.
- B. The Contractor shall furnish slings, straps, and/or other approved devices to support the pipe when it is lifted. Pipe and fittings shall not be dropped from trucks onto the ground or into the trench. Transporting pipe and fittings from storage areas shall be restricted to operations which will not cause damage to the pipe or lining.

- C. All pipe and fittings shall be examined before laying and no pipe or fittings shall be installed which are found to be defective. Damaged pipe coatings and/or lining, shall be repaired as approved or directed by the City.
- D. Any pipe showing a distinct crack with no evidence of incipient fracture beyond the limits of the visible crack, if approved, may have the cracked portion cut off, at no expense to the City, by the Contractor before the pipe is laid so that the pipe used is sound. The cut shall be made in the sound portion of the barrel at least 12 inches from the visible limit of the crack.
- E. If any defective pipe is discovered after it has been laid, the Contractor shall remove the defective pipe and replace it with sound pipe at no additional cost to the City.

3.02 CONTROL OF ALIGNMENT AND GRADE

- A. Easement and property and other control lines necessary for locating the Work as well as elevations and bench marks used in the design of the Work are shown in the Construction Plans. The Contractor shall use this information to set line and use a level or transit to set grade.
- B. The use of string levels, hand levels, carpenter's levels, or other similar devices for transferring grade or setting pipe are not permitted.
- C. At the request of the City, provide during construction all reasonable and necessary materials, opportunities, and assistance for setting stakes and making measurements, including the furnishing of one or two rodmen as needed at intermittent times.
- D. The Contractor shall not proceed until he/she has made timely request of the City for, and has received from him, such controls and instructions as may be necessary as Work progresses. Work shall be done in strict conformity with such controls and instructions.
- E. The Contractor shall carefully preserve bench marks, reference points and stakes, and in case of willful, careless, or accidental destruction by his own men, he will be responsible for the resulting expense to re-establish such destroyed control data and shall be responsible for any mistakes or delay that may be caused by the loss or disturbance of such control data.
- F. The Contractor shall maintain good alignment in laying pipe. The deflection at joints shall not exceed the Manufacturer's recommended limit. Provide fittings, if required, in addition to those shown in the Construction Plans when pipe crosses utilities encountered when excavating the trench. Use solid sleeves only where approved by the City.

3.03 INSTALLING PIPE AND FITTINGS

- A. The Contractor shall have on the job site with each pipe laying crew, all the proper tools to handle and cut the pipe.
- B. All pipe and fittings shall be thoroughly cleaned before laying and shall be kept clean until installed.

- C. Pipe shall be laid in the dry trench conditions. At no time shall water in the trench be permitted to flow into the pipe. At any time that Work is not in progress, or the trench is unattended, the end of the pipe shall be suitably closed to prevent the entry of animals, earth, water, etc., using watertight expandable plugs.
- D. Lay pipe and fittings in accordance with the requirements of AWWA C600, except as provided herein.
- E. Excavation shall conform to Section 02231.
- F. As soon as excavation has been completed to the proper depth the pipe bed shall be prepared as follows:
 - 1. Pipe Laid on Undisturbed Subgrade: Manually excavate for pipe bells and along the trench bottom as necessary to provide a uniform bearing surface along the entire length of the pipe barrels.
 - 2. Pipe Laid on Bedding Material: Place and compact bedding materials, as specified Section 02231, to the elevation necessary to bring the pipe to grade. The compacted material shall be shaped so that the bottom quadrant of the pipe rests firmly on the bedding for the entire length of pipe barrels. Suitable holes shall be dug for bells or couplings to provide ample space for jointing pipe.
- G. When ledge is encountered in the bottom of the trench, pipe shall be bedded on a layer of crushed gravel having a minimum thickness of six (6) inches. Blocking is not permitted.
- H. Each pipe section shall be placed into position on the pipe bed in such a manner and by such means required to avoid injury to persons, any property or the pipe.
- I. Permanent blocking under the pipe is not permitted except where a concrete cradle is required, in which case precast concrete blocks shall be used.
- J. Jointing shall conform to the Manufacturer's instructions and appropriate ASTM Standards.
- K. Any debris, tools, etc., shall be removed from the pipe.
- L. Place bedding material in accordance with Section 02231.
- M. After placement of the bedding material the pipe shall be checked for alignment and grade. If the pipe has been properly installed, the Contractor may refill or backfill the remainder of the trench in conformance with Section 02231 and details shown in the Construction Plans.
- N. At the end of each day's work or at other intervals, the City, with the Contractor will inspect the pipe installation. Unsatisfactory work shall be dug up and reinstalled to meet the requirements

of the Contract Documents with no additional time allowed for completion of the Work and at no additional cost to the City.

- O. When cutting of pipe is required, the cutting shall be done by machine (power cutter) without damage to the pipe or cement lining. Cut ends shall be smooth and at right angles to the axis of the pipe. Pipe ends to be used with a rubber gasket joint shall be beveled and filed or ground smoothly to conform to a manufactured spigot end.
- P. Install concrete thrust blocks at all fittings and other locations as indicated on the Construction Plans. Minimum bearing area shall be as shown in the Construction Plans. Joints shall be protected by felt roofing paper prior to placing concrete. Concrete shall be placed against undisturbed material, and shall not cover joints, bolts or nuts, or interfere with the subsequent removal of any fitting. Wooden side forms shall be provided for thrust blocks where trench conditions require. Thrust blocks shall be property set and adequately cured prior to pressurizing the system.
- Q. Valve and hydrant tees shall be utilized at all hydrant installations. Hydrant and valve tees shall have an integrally attached, rotatable gland which, after bolting to valve or adjoining fitting, the joint is effectively restrained from separation.

3.04 JOINTING DUCTILE IRON PIPE (PUSH-ON TYPE)

A. Make push-on joints in strict accordance with the Manufacturer's written instructions. Lay pipe with bell ends looking ahead. Insert a rubber gasket in the groove of the bell end of the pipe and clean and lubricate the joint surfaces. The plain end of the pipe to be entered shall then be inserted in alignment with the bell of the pipe to which it is to be jointed and pushed home with a bar and block. Two (2) continuity brass wedges shall be installed in each push-on joint.

3.05 JOINTING MECHANICAL JOINT FITTINGS

- A. Mechanical joints at valves, fittings, and where designated in the Construction Plans shall be in accordance with ANSI A21.11/AWWA C111, Appendix A Notes on Installation of Mechanical Joints, and the Manufacturer's written instructions.
- B. Field Installation: Thoroughly clean the joint surfaces and rubber gasket with soapy water before tightening the bolts. Tightening torque for bolts shall be 75 to 90 ft-lbs. Under no condition shall extension wrenches or pipe over handle or ordinary ratchet wrenches be used to secure greater leverage. After installation, apply a bituminous coating to bolts and nuts. A retainer gland (not a common follower gland) shall be used whenever mechanical joints are used.

3.06 FLANGED JOINTS

A. Tighten bolts in flanged joints alternately and evenly as specified for mechanical joints. Apply a bituminous coating to bolts and nuts for buried joints.

3.07 VALVES

A. Install valves in accordance with the requirements of Section 02663.

3.08 PRESSURE TESTING

A. General:

- Pressure/leakage tests shall be conducted on all pipes installed under this Section. The City shall witness all tests. The Contractor shall perform a hydrostatic pre-test to provide reasonable assurance of acceptance prior to performance of the City-witnessed test. Upon accomplishing a successful pre-test, the Contractor shall contact the City at least 48 hours prior to the test.
- 2. The Contractor shall supply all plugs, pipe taps, pumps, weirs, gauges, water, water trucks, etc., necessary to conduct the tests.
- 3. Flush all piping systems with water prior to testing.
- 4. Should the Work fail the leakage tests, corrective action shall be taken by the Contractor in a manner approved by the City. If directed by the City, the Contractor shall dig up and re-lay the failed section of pipe with no additional time allowed for completion of the Work and at no additional cost to the City.
- 5. The use of sealants, applied from the inside of the pipe, shall not be acceptable.
- B. Pressure Testing: All newly laid pipe shall be subjected to a hydrostatic pressure test in accordance with AWWA C600 Section 4.2.
 - Slowly fill the pipe with water and allow it to stand for 24 hours. Expel all air from the pipe.
 Apply and maintain the specified test pressure by continuous pumping if necessary for the
 entire test period. The test pressure shall be calculated for the point of lowest elevation, or
 as specified by the City. The pump suction shall be in a barrel or similar device, or metered
 so that the amount of water required to maintain the test pressure may be measured
 accurately.
 - 2. Each pressure test shall be a minimum of two (2) hours according to the following, unless otherwise directed by the City:
 - a. Leakage shall be defined as the quantity of water necessary to hold the specified test pressure for the duration of the test period. No pipe installation will be accepted if the leakage is greater than the number of gallons per hour as determined by the following formula:

 $L = \underline{SD\sqrt{P}}$ 133,200

Where:

L = allowable leakage, in gallons per hour,

S = length of pipe tested, in feet,

D = nominal pipe diameter, in inches, and

P = average test pressure, in psi (gauge).

b. Allowable leakage in gallon per hour per 1,000 feet maximum of pipeline shall be determined from the following table:

Average Test Allowable Leakage (gal/1,000 ft of pipe) for Nominal Pipe Diameter in Inches Pressure 3 12 4 6 8 10 14 16 18 20 24 (psi) 450 0.48 0.64 0.95 1.27 1.59 1.91 2.23 2.55 2.87 3.18 3.82 400 0.45 0.60 0.90 1.20 1.50 1.80 2.10 2.40 2.70 3.00 3.60 350 0.42 0.56 0.84 1.12 1.40 1.69 1.97 2.25 2.53 2.81 3.37 0.39 0.52 0.78 1.04 1.30 1.82 2.08 2.34 2.60 3.12 300 1.56 275 1.00 0.37 0.50 0.75 1.24 1.49 1.74 1.99 2.24 2.49 2.99 250 0.36 0.47 0.71 0.95 1.19 2.37 2.85 1.42 1.66 1.90 2.14 225 0.34 0.45 0.68 0.90 1.13 1.35 1.80 2.03 2.25 2.70 1.58 200 0.32 0.43 0.64 0.85 1.48 1.70 1.91 2.12 2.55 1.06 1.28 175 0.30 0.40 0.59 0.80 0.99 1.19 1.39 1.59 1.79 1.98 2.38 150 0.28 0.37 0.55 0.74 0.92 1.10 1.29 1.47 1.66 1.84 2.21 125 0.25 0.50 0.67 0.84 1.01 1.18 1.34 1.51 1.68 2.01 0.34 100 0.23 0.30 0.45 0.60 0.75 0.90 1.05 1.20 1.35 1.50 1.80

Table 1 – Allowable Leakage for Pressure Pipe

3.09 DISINFECTION (POTABLE WATER ONLY)

- A. Following pressure testing and before water main disinfection, the water main shall be filled to eliminate air pockets and flushed to remove particulates. The flushing velocity in the main shall not be less than 2.5 ft/sec. unless the City determines that conditions do not permit the required flow.
- B. Water mains shall be disinfected in accordance with requirements of the City of North Port Utilities Standard Specifications, latest edition, and applicable Health Department standards and requirements.

3.10 BACTERIOLOGICAL TESTING (POTABLE WATER ONLY)

A. The Contractor shall provide all labor, materials, equipment, and water necessary to complete

- disinfection the mains as specified herein. This shall include installation and removal (if required) of pipe taps necessary for chlorination or taking samples.
- B. Chlorinated water shall be flushed from the main until measured levels of chlorine leaving the main are no higher than background levels prevailing in the system.
- C. A neutralizing agent shall be applied to the chlorinated discharge if there is a question as to whether this discharge will damage the environment.
- D. Bacterial samples shall be collected at the end of each line and along the main as directed by the City. At least one sample shall be collected from each new main or branch.
- E. The Contractor shall contact the City minimum of two (2) business days prior to chlorination to coordinate witnessing chlorination by the City. The City must witness the chlorination.
- F. Bacteriological Reports will be handled directly by Sarasota County DOH or by the City.
- G. Sample collection and analyses will be handled by Sarasota County DOH or the City.
- H. The Contractor shall coordinate all Bacteriological testing with Sarasota County Department of Health personnel and guidance, Section 12.9 of the Sarasota County Uniform Water, Wastewater and Reuse Systems Code Manual, and the OWNER's project representative. CLEANING WATER LINES
- I. Bacteriological tests shall follow pressure testing. Sarasota County DOH or the City, if approved by DOH, will collect the samples in accordance with sampling plan approved by DOH.
 - 1. Fees for samples collected and analyzed by the Sarasota County DOH and associated laboratory shall be paid for by the Contractor.
 - 2. If the City collects to expedite the clearance process (e.g. City may collect samples at 11:45 PM and 6:00 AM), the City will pay for the fees associated with sample collection and analyses. If City collects and pays for sample analysis to expedite the clearance process, the Contractor shall credit the City for the amount that the Contractor would have paid to the Sarasota County DOH.
- J. Samples will be taken on two (2) consecutive days by a laboratory certified by the State of Florida in the presence of the City's representative in accordance with F.A.C. 17-555.
- K. If bacteriological results do not show an absence of total coliform at all sample stations for two (2) consecutive days, the Contractor will be required to rechlorinate and flush the line at no additional cost to the City.
- L. Following partial/final acceptance/certification by DOH, the Contractor shall remove the sample points.

END OF SECTION

SECTION 02661 PIPING SPECIALTIES

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Furnishing all labor, materials, equipment, and incidentals necessary to furnish and install valve boxes, flexible or transition couplings, and appurtenances as shown in the Construction Plans and as specified herein.

1.02 SUBMITTALS

- A. General: Submit all submittals to the City in accordance with Section 01340.
- B. Required Submittals:
 - 1. Product Data: Product literature including detailed listing of materials and materials of construction for the following (as required):
 - a. Valve Boxes.
 - b. Flexible Couplings.
 - c. Transition Couplings.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Valve Boxes: Tyler Corporation, or approved equal.
- B. Flexible Couplings: Dresser Company, or approved equal.
- C. Transition Couplings: Romac Industries, Inc., or approved equal. Hymax is not an approved equal.

2.02 VALVE BOXES

- A. Valve boxes shall be cast iron, heavy pattern, sliding adjustable type with cast iron cover.
- B. The upper section shall have a flange to prevent settling.
- C. Valve boxes shall have barrels not less than five (5) inches inside diameter and lengths adapted to valve depth. The barrels shall lap at least six (6) inches when in the most extended position.

D. The word "WATER", "SEWER", or "REUSE" shall be cast into the cover, as appropriate.

2.03 FLEXIBLE COUPLINGS FOR PRESSURE PIPE

- A. Couplings shall be used for joining two plain ends of ductile iron pipe, to connect to an existing line, or to provide flexibility.
- B. Approved Products: Dresser Company Style 38 Coupling, or approved equal.

2.04 TRANSITION COUPLINGS FOR PRESSURE PIPE

- A. Couplings shall be used for joining pipes of different diameters and/or different materials.
- B. Approved Products: Romac Industries, Inc. Style 501 Long Body Rough Barrel Sleeve Transition Coupling, or approved equal.

PART 3 - EXECUTION

3.01 INSTALLATION – COUPLINGS

- A. Couplings shall be installed in accordance with the Contract Documents and the Manufacturer's written instructions.
- B. All buried couplings shall be completely coated with two (2) coats of bituminous paint after installation.

3.02 VALVE BOXES

- A. All buried valves shall be provided with valve boxes.
- B. The bottom of the lower section shall enclose the valve bonnet and operating nut.
- C. Valve box shall be centered over the valve operating nut.
- D. Grade around valve box slab shall be level within a 4-foot square area. Soil surface shall slope uniformly from the level portion at 5 (H): 1 (V) until it shall meet existing or proposed grade.

END OF SECTION

SECTION 02663 VALVES

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, tools, and incidentals necessary for the manufacture and installation of all buried and non-buried valves, complete and properly operating, as shown on the Construction Plans and as specified herein.
- B. All items specified herein may not be included in the Work.

1.02 REFERENCES

- 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-in Through 48-in NPS, for Water and Sewage Systems.
 - 3. AWWA C504 Rubber-Seated Butterfly Valves.

- 4. AWWA C509 Resilient-Seated Gate Valves, 3-in Through 12-in NPS, for Water and Sewage Systems.
- 5. AWWA C511 Reduced Pressure Principle Backflow Prevention Assembly.
- 6. AWWA C540 Power-Actuating Devices for Valves and Sluice Gates.
- 7. AWWA C550 Protective Interior Coatings for Valves and Hydrants.
- 8. AWWA C800 Underground Service Line Valves and Fittings.
- D. 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.
 - 4. ANSI B16.104 Butterfly Valves.
- E. American Iron and Steel Institute (AISI).
- F. Manufacturer's Standardization Society of the Valve and Fittings Industry (MSS):
 - 1. MSS-SP-61 Pressure Testing of Steel Valves.
 - 2. MSS-SP-67 Butterfly Valves.
 - 3. MSS-SP-70 Cast Iron Gate Valves, Flanged and Threaded Ends.
 - 4. MSS-SP-82 Valve Pressure Testing Methods.
 - 5. MSS-SP-98 Protective Epoxy Coatings for Interior of Valves and Hydrants.
- G. National Electrical Manufacturers Association (NEMA).
- H. Underwriters Laboratories (UL).
- I. Factory Mutual Insurance (FM)
- J. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

1.03 SUBMITTALS

- A. General: Submit all submittals to the City in accordance with Section 01340.
- B. Required Submittals:
 - 1. Certified drawings showing all details of construction and dimensions.
 - 2. Product Data: Product literature including detailed listing of materials and materials of construction.
 - Test Reports: Provide certified hydrostatic test data per Manufacturer's standard procedure or MSS-SP-82.
 - 4. Certificates: 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.

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 shall furnish an affidavit of compliance with Standards referred to herein.
- 2. Inspection of the units may also be made by the City after delivery. The equipment shall be subject to rejection at any time due to failure to meet any of the requirements herein, 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.

1.05 SYSTEM DESCRIPTION

A. All of 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 in the Contract Documents.

B. Valves, appurtenances, and miscellaneous items shall be installed as shown in the Contract Documents so as to form complete workable systems.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Valves shall be stored and protected in accordance with the requirements of Section 01620.

B. Packing and Shipping:

- 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 City.
- 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 inches 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 inches 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 City shall be removed, or the valve shall be removed and replaced.

C. Storage and Protection:

 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.

1.07 MAINTENANCE

- A. Special tools and the Manufacturer's standard spare parts, if required for normal operation and maintenance, shall be supplied with the equipment.
- B. Provide all special tools required for normal maintenance. Tools shall be packaged in a steel case, clearly and indelibly marked on the exterior to indicate equipment for which tools are intended.

C. Provide a list of all spare and replacement parts with individual prices and location where they are available. Prices shall remain in effect for a period of not less than one (1) year after startup and final acceptance.

1.08 WARRANTY

A. Provide warranty in accordance with Section 01740.

PART 2 - PRODUCTS

2.01 MATERIALS AND EQUIPMENT – GENERAL

- A. Reference is made to Division 01 for additional requirements, including nameplates, provisions for temporary pressure gages, protection against electrolysis, and anchor bolts.
- 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.
 - 1. The City will not accept valves manufactured by DeZURIK.
- C. Valves and appurtenances shall be of the size shown on the Construction Plans and when 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:

- 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 be provided with joint ends as follows:
 - a. 3 inches and smaller: Threaded ends.
 - b. 4 inches 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. Comply with submergence requirements of previous Paragraph.
- B. 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.
- C. Unless otherwise noted, valves shall be manually actuated.
 - 1. Non-buried valves shall have an operating wheel, handle, or lever mounted on the operator.
 - 2. Buried valves and those with operating nuts shall have a non-rising stem with an AWWA 2 inch nut. At least two (2) tee handles shall be provided to the City for all operating nuts.
- D. Except as otherwise shown in the Construction Plans or specified herein, all valves three inches (3") diameter or larger with the valve center line located seven feet (7') 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 four feet (4') 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. In general, valves shall open by turning left/counterclockwise.
- G. Floor boxes for operating nuts recessed in concrete shall be standard cast iron type, cast-inplace, with fastening top by Clow Valve or approved equal.
- H. Stem guides shall be of the adjustable wall bracket type, bronze bushed, with maximum spacing of ten feet (10'), as manufactured by Mueller, M & H, or approved equal. Extended operating nuts and/or stems shall have universal joints and pin couplings if longer than ten feet (10') and a rating of at least five times the maximum operating torque. Stem adaptors shall be provided.

I. Gear Actuators:

- 1. Unless otherwise noted, gear actuators shall be provided for the following:
 - a. All valves of larger than eight inches (8") nominal diameter.

- b. All buried valves with operating shaft mounted horizontally (i.e., butterfly, plug, etc.).
- c. Where specified and/or indicated in the Construction Plans.
- d. Where manual operator effort is greater than 80 ft-lbs rim pull.
- 2. Gear actuators shall be of the worm or helical gear type with output shaft perpendicular to valve shaft, having a removable hand wheel mounted on the output shaft. Unless noted they shall conform to AWWA C504, but except with butterfly valves, need not be certified.
- 3. Actuators shall be capable of being removed from the valve without dismantling the valve or removing the valve from the line.
- 4. Gearing shall be machine-cut steel designed for smooth operation. Bearings shall be permanently lubricated, with bronze bearing bushings provided to take all thrusts and seals and to contain lubricants. Housings shall be sealed to exclude moisture and dirt, allow the reduction mechanisms to operate in lubricant, and be of the same material as the valve body.
- 5. Manual operator input effort to the handwheel shall be a maximum of 40 ft-lbs for operating the valve from full open to full close, under any conditions. Gear actuators shall indicate valve position and have adjustable stops. Maximum handwheel size shall be 24 inches diameter.
- J. Additional valve actuators are included with the individual valve types.
- K. All position indication and direction of opening arrows shall be embossed, stamped, engraved, etched, or raised decals.
- L. Unless otherwise noted, all valves larger than 3 inches nominal diameter shall be provided with position indicators at the point of operation.

2.03 GATE VALVES – 2-1/2 INCHES AND SMALLER

- A Gate valves 2-1/2 inches diameter and smaller shall have flanged, screwed, or solder ends as required and shall be brass, or bronze, or Type 304 stainless steel (SS) solid wedge, union bonnet, rising-stem gate valves such as Figures 47 and 48 as manufactured by Jenkins Brothers or equal products as manufactured by Crane, Lukenhiemer, or approved equal.
- B. All water valves 2-1/2 inches and 3 inches shall be brass body gates and shall be Jenkins No. 1240 or Hammond 1B-647, unless indicated otherwise.

2.04 GATE VALVES – 3 INCHES AND LARGER

A. General:

- 1. Unless otherwise specified herein, these requirements shall apply to all gate valves.
- 2. Gate valves shall meet the requirements of AWWA C500 and AWWA C509 as applicable to the type of valve specified.
- 3. Buried and submerged valves shall be furnished with mechanical joints and stainless steel hardware and be non-rising stem design.
- 4. Exposed valves shall be furnished with Class 125 flanged ends; provide valves with outside screw and yoke.
- 5. All-metal valves shall be manufactured of ASTM A126 Cast Iron, Class B, with bronze mounting design.
- 6. 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.
- 7. Non-rising stem valves shall use a double O-ring stem seal, except that packing shall be used where geared operators are required.
- 8. Unless as otherwise indicated, valves shall be rated for the following working water pressures:

a. 3 inches to 12 inches: 150 psig.

b. 14 inches to 20 inches: 150 psig.

c. 24 inches and greater: 150 psig.

- 9. All valve bodies shall be hydrostatically tested to at least twice the rated working water pressure. Valves shall be seat-tested, bi-directional at the rated working pressure, with seat leakage not to exceed one (1) fluid ounce per inch of valve diameter per hour. Certificates of testing shall be provided.
- 10. Flanged valves to have face-to-face dimensions per ANSI B16.1 and flanges per ANSI B16.10.
- 11. Exposed valves 16 inches and larger shall have a valve bypass.
- 12. All bonnet and packing gland bolts shall be zinc or cadmium electroplated steel. Packing gland bolts shall have bronze nuts.
- 12. Exposed valves 16 inches and greater indicated for horizontal stem installation shall be furnished with rollers, tracks, and scrapers and enclosed bevel gear grease case.

- 13. All valves shall be marked per AWWA Standards, including name of Manufacturer, valve size, working pressure, and year of manufacture.
- 15. Unless otherwise indicated, valves 12 inches and smaller shall be capable of installation in the vertical or horizontal position, sealing in both directions at the rated pressure.
- 16. Resilient wedge valves shall be coated, interior and exterior, with fusion bonded epoxy per AWWA C550.

B. Valve Applications:

- 1. Gate Valves for Wastewater Service: Resilient wedge design manufactured by Mueller Valve, M&H Valve, Clow Valve, or approved equal.
- 2. At the Contractor's option and unless otherwise indicated, any of the listed valve styles may be used, at no additional cost to the City.

C. Valve Requirements:

1. Resilient Wedge:

- a. Conform to AWWA C500.
- b. Tongue and grooved guides for wedges.

2. Resilient Seated:

- a. Conform to AWWA C509 and UL and FM approved.
- b. Internal and external epoxy coating of valve body, including bonnet, per AWWA C550.
- c. Gate shall be encapsulated with material which is designed for contact with liquid flowing through the valve. It shall be bonded and vulcanized in accordance with ASTM B429, Method B.
- d. No recesses in valve body.

D. Buried Valves:

- 1. Conform to the requirements above, except mechanical joint bell ends per AWWA C111.
- 2. All exposed valve hardware (i.e., nuts, bolts, washers, etc.) including bonnet, bonnet cover, stuffing box, gear adaptor, and joints shall be Type 304 stainless steel or better.
- 3. Non-rising stem design, double O-ring seals for non-geared valves. Shall incorporate packing for geared valves.

- 4. Provide valve box, two inch (2") operating nut and extension stem, and stem cover.
- 5. Buried valves shall be covered with sufficient soil to allow construction of a 2-foot X 2-foot X 6-inch concrete slab and valve box if indicated in the Construction Plans. Valve box base shall be cut off if required where clearance is insufficient. The cut off end of the valve box shall be coated with epoxy.
- 6. Grade around valve box slab shall be level within a 4 foot square area. Soil surface shall slope uniformly from the level portion at 5 (H): 1 (V) until it shall meet existing or proposed grade.
- 7. Buried valves in corrosive soils shall be fully encased with an 8-mil polyethylene wrap. Polyethylene material shall conform to ASTM D1248. Polyethylene wrap shall be a flat sheet passed under then over the valve and bringing it together around the body of the valve. Make seams by bringing the edges of the polyethylene sheet together, folding over twice, and taping them down. Tape the polyethylene securely at the valve stem. Care should be taken to prevent bolts from penetrating the wrap.

E. Tapping Valves and Sleeves:

- 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, four inches (4") and larger, shall be iron body gates, bronze trim, flanged ends, OS&Y pattern, solid wedge, rising spindle.
 - a. Acceptable Manufacturers: Mueller Co. or approved equal.
- 3. Installations shall be made under pressure and the flow of water through the existing main shall be maintained at all times.
- 4. Thrust blocks shall be provided behind all tapping sleeves. Proper tamping of supporting earth around and under the valve and sleeve is mandatory. After completing the tap, the valve shall be flushed to ensure that the valve seat is clean.
- 5. All exposed bolts, washers, and nuts shall be Type 304 stainless steel.
- 6. Buried valve body and sleeves shall be coated with bitumastic.

F. Linestops and Sleeves:

- 1. All linestop sleeves, outlet or nominal pipe size 14 inches and larger, shall be of carbon steel construction, ASTM A283 GR-C or ASTM A36 steel, with a Type 304 stainless steel cover and clamping bolts. Clamping nuts shall be coated to prevent galling of fasteners. All carbon steel materials shall have a fusion bonded epoxy coating in accordance with AWWA C213. Linestop completion plug shall be retained in the outlet by either threading it into place or by locking pins. The linestop completion plug shall be of carbon steel construction, ASTM A563 GR 65-45-12 or ASTM A36 or equal material.
- 2. Linestops shall be inserted in the direction of flow to provide drip tight stoppers.
- 3. Make connection to new pipe with permanent valves on same day as demolition to minimize spillage.

2.05 INSERTABLE VALVES

A. General Requirements.

- 1. Insertable valves shall meet the requirements of AWWA C509 as applicable to the Insta-Valve IVP 250 as manufactured by Hydra-Stop, or approved equal.
- 2. Valve shall be furnished with stainless steel hardware; non-rising stem design.
- 3. Valve body, body clamp, body flange, nuts, bolts, and washers shall be manufactured with Type 304 stainless steel or better.
- 4. Non-rising stem valves shall use a double O-ring stem seal.
- 5. Valves shall be rated for a maximum working water pressure of not less than 150 psi.
- 6. All valves shall be marked per AWWA Standards, including name of the manufacturer, valve size and working pressure, and year of manufacture.
- 7. Buna-N gasket shall be attached to the inside of the body clamp.

2.06 CORPORATION STOPS

- A. Corporation stops shall be of bronze or brass and shall be designed and manufactured in accordance with AWWA C800, except as modified herein.
- B. Corporation stops shall have Mueller inlet threads except that corporation stops for use with service clamps shall have Iron Pipe Straight (IPS) threads. Where corporation stops are used with plastic pipe, a brass companion flange shall be provided on the outlet of each corporation stop.
- C. Corporation stops for 2-inch air release assemblies shall be lockable type brass.

2.07 POTABLE AND RECLAIMED WATER AIR RELEASE ASSEMBLIES

- A. Air release assemblies shall utilize a lockable brass corporation stop and a brass street elbow in accordance with the detail on the Construction Plans.
- B. Air release assemblies shall be housed in an Oldcastle Enclosure Solutions, Carson model 1419, or approved equal. Air release assembly enclosures shall have flush, solid, hinged covers with a bolt-down feature.

2.08 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.

2.09 SURFACE PREPARATION AND SHOP COATINGS

- A. Notwithstanding any of other requirements of this Section, all coatings and lubricants in contact with potable water shall be NSF certified as acceptable for use with that fluid.
- B. 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 City.
- C. Unless the body is stainless steel, 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 (1) 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.
- D. 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. (except cast stainless steel body valves).
- E. Ferrous surfaces obviously not to be painted shall be given a shop coat of grease or other suitable rust-resistant coating. Mounting surfaces shall be especially coated with a rust preventative.
- F. Special care shall be taken to protect uncoated items and plastic items, especially from environmental damage.

2.10 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. In addition to all tests required by the referenced standards, the following shall also be factory tested:
 - 1. Pressure regulating valves shall be factory tested at the specified pressures and flows.
 - 2. The non-cavitating butterfly valves, to demonstrate its non-cavitating capabilities.
 - 3. All types of air and vacuum valves.

PART 3 - EXECUTION

3.01 INSTALLATION – GENERAL

- A. All valves and appurtenances shall be installed per the Manufacturer's written instructions in the locations indicated in the Construction Plans, true to alignment, and rigidly supported. Any damage to the above items shall be repaired to the satisfaction of the City before they are installed.
- B. Install all brackets, extension rods, guides, the various types of operators and appurtenances as shown on the Construction Plans. Before setting these items, the Contractor shall check all drawings and figures which have a direct bearing on their location. The Contractor shall be responsible for the proper location of valves and appurtenances during the construction of the Work.
- C. All materials shall be carefully inspected for defects in construction and materials. All debris and foreign material shall be cleaned out of openings, etc. All valve flange covers shall remain in place until connected piping is in place. All operating mechanisms shall be operated to check their proper functioning and all nuts and bolts checked for tightness. Valves and other equipment which do not operate easily, or are otherwise defective, shall be repaired or replaced at no additional cost to the City.
- D. 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.
- E. 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. Contractor shall be responsible for verifying Manufacturer's torqueing 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 in the Construction Plans or as acceptable to the City to allow accessibility to operate and maintain the item and to prevent interference with other piping, valves, and appurtenances.

- B. For manually operated valves three inches (3") in diameter and smaller, valve operators and indicators shall be rotated to display toward normal operation locations.
- C. Floor boxes, valve boxes, and extension stems 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. Boxes and stem guides shall be adequately supported during concrete pouring to maintain vertical alignment.

3.03 INSPECTION, TESTING, AND CORRECTION OF DEFICIENCIES

- A. See also Division 01. Take care not to over pressure valves or appurtenances during pipe testing. If any unit proves to be defective, it shall be replaced or repaired to the satisfaction of the City.
- B. Functional Test: Prior to lift station startup, all items shall be inspected for proper alignment, quite operation, proper connection, and satisfactory performance. All units shall be operated continuously while connected to the attached piping for at least eight (8) hours, without vibration, jamming, leakage, or overheating and perform the specified function.
- C. The various pipe lines in which the valves and appurtenances are to be installed are specified to be field tested. During these tests any defective valve or appurtenance shall be adjusted, removed and replaced, or otherwise made acceptable to the City.
- D. 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 City.

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). 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).
- B. Each valve identification tag to be minimum 19 gauge polished brass, two inches (2") diameter. Each tag shall designate appropriate service in 1/4 inch stamped black-filled characters and appropriate valve number in 1/2 inch stamped black-filled characters.
- C. 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.
- D. The Contractor shall prepare piping flow diagrams (or re-use those in the Construction Drawings) indicating valve numbers, service, normal position, etc., of each valve. Diagrams shall be mounted on an ornamental iron frame with hinged plexiglass face for wall mounting in each room or area.

E. The requirements for valve identification specified above apply equally to all valves installed under this and under other sections of these specifications.

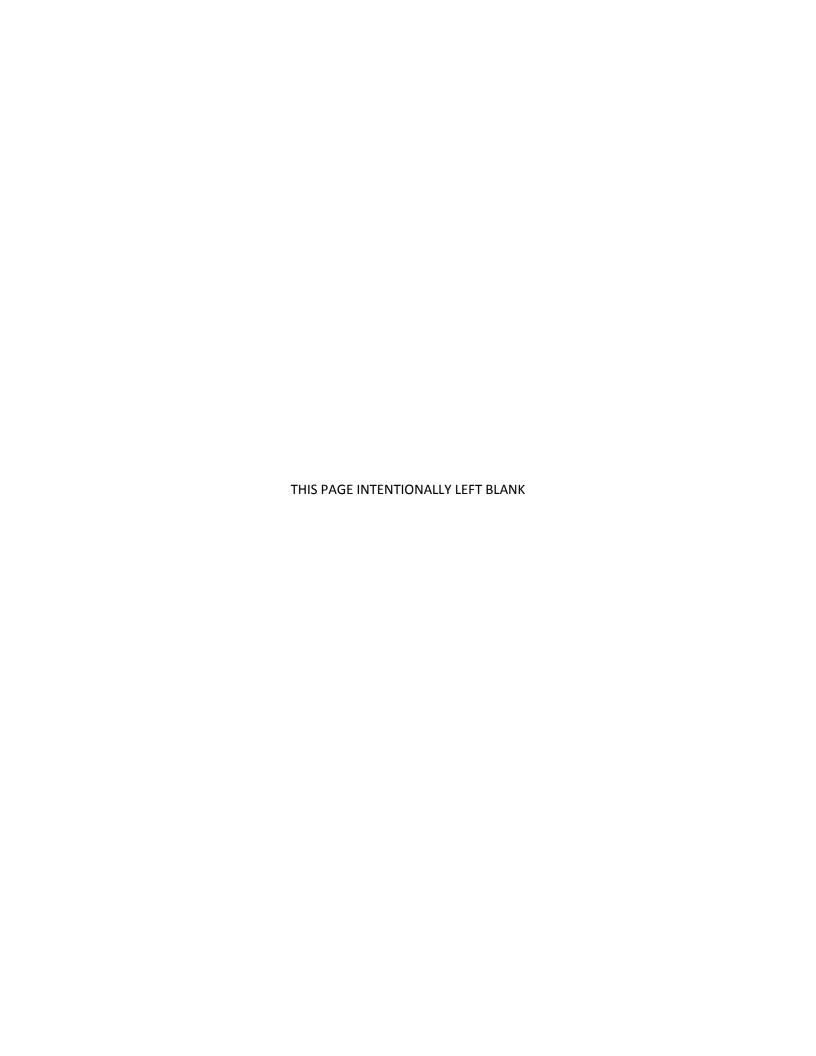
3.05 CLEANING

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 on all potable water lines and where otherwise noted, shall be as specified for adjacent piping.

END OF SECTION



SECTION 02932 TOPSOIL

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Furnishing all labor, materials, equipment, and incidentals necessary to furnish, prepare, and spread topsoil, fertilizer, lime and mulch as shown in the Construction Plans and as specified herein.

1.02 REFERENCE STANDARDS

- A. Florida Department of Transportation (FDOT):
 - 1. Standard Specifications for Road and Bridge Construction (Standard Specifications), latest edition.
 - 2. FDOT FM 1-T 267 Florida Method of Test of Determination of Organic Content in Soils by Loss on Ignition.

1.03 SUBMITTALS

- A. General: Submit all submittals to the City in accordance with Section 01340.
- B. Required Submittals:
 - 1. Product Data: Product literature showing compliance with the requirements herein and including source/supplier information (as required):
 - a. Topsoil.
 - b. Lime.
 - c. Fertilizer.
 - d. Mulch

PART 2 - PRODUCTS

2.01 TOPSOIL

A. Topsoil shall comply with the requirements of Section 162 – Prepared Soil Layer of the FDOT Standard Specifications for "Finish Soil Layer" and those requirements herein.

- B. Topsoil shall be reasonably free from subsoil, stumps, roots, brush, rock or stones exceeding two inches (2") in diameter, clay lumps, trash, or other similar objects.
- C. Topsoil shall have a pH between 4.5 and 8.5 and shall have an organic content of 2.5 to 10 percent in accordance with FDOT FM 1-T 267.

2.02 LIME

A. Lime shall be ground dolomite limestone, designated for agricultural use.

2.03 FERTILIZER

- A. Fertilizer shall comply with the requirements of Section 982 Fertilizer of the FDOT Standard Specifications and those requirements herein.
- B. Fertilizer shall be a standard commercial fertilizer containing 12 percent nitrogen, 8 percent phosphoric acid, and 8 percent potassium.
- C. Fertilizer shall comply with the requirements of applicable state and federal laws and Code of the City of North Port Chapter 22 – Environmental and Natural Resources, Article II – Fertilizer and Landscape Management.

2.04 MULCH

A. Mulch shall comply with the requirements of Section 981 – Turf Materials of the FDOT Standard Specifications.

PART 3 - EXECUTION

3.01 PREPARATION OF AREA

A. Clear stones larger than 2 inches in diameter, sticks, and other debris which might interfere with the establishment, growth, or maintenance of acceptable turf and roller the area before applying fertilizer and limestone.

3.02 PLACING TOPSOIL

- A. Evenly spread topsoil prepared area to a uniform depth of 4 inches, after compaction. Spreading shall not be done when the ground or topsoil is excessively wet or otherwise in a condition detrimental to the work. Spreading shall be carried on so that sodding operations can proceed with a minimum of soil preparation or tilling.
- B. After spreading, any large stiff clods and hard lumps shall be broken with a pulverizer or by other effective means and any subsoil, stumps, roots, brush, rock or stones exceeding 2 inches in diameter, clay lumps, trash, or other similar objects shall be removed.

- C. The final topsoil surface shall conform to the required lines, grades, and cross sections.
- D. Any topsoil or other dirt falling upon pavements as a result of hauling or handling of topsoil shall be promptly removed.

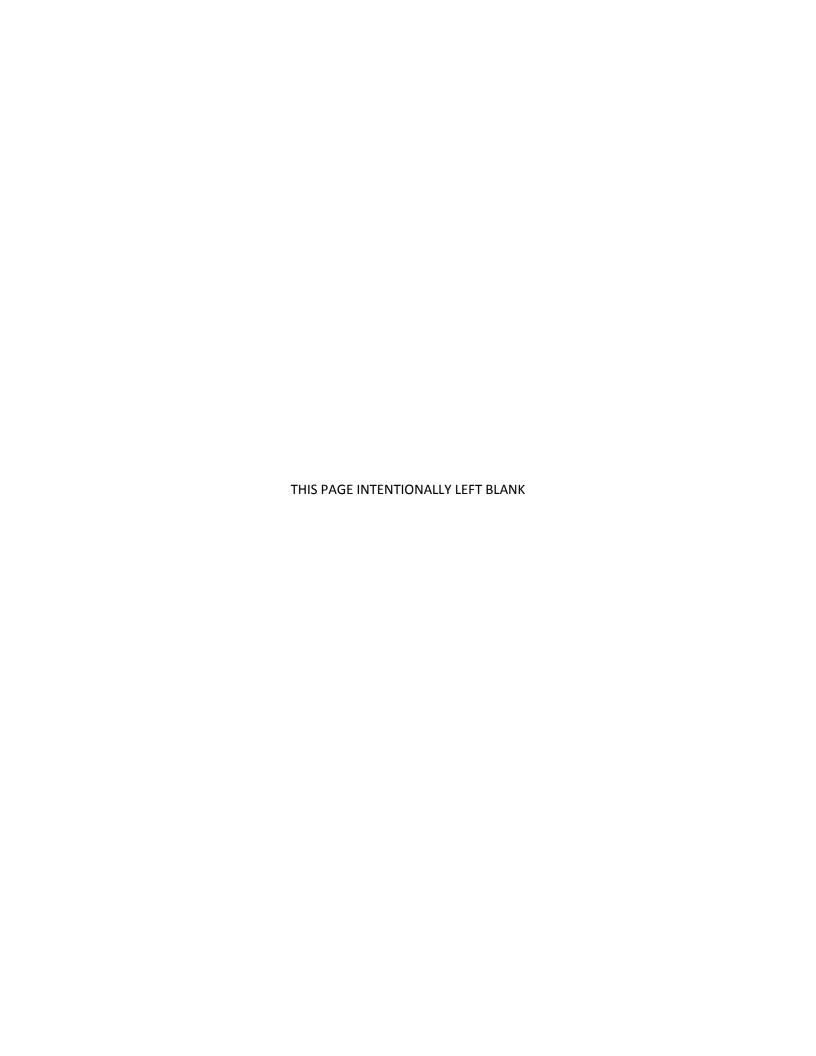
3.03 PLACING LIME, FERTILIZER, AND MULCH

A. The rate and method of application of lime, fertilizer, and mulch shall comply with the recommendations of the supplier and the requirements of Code of the City of North Port Chapter 22 — Environmental and Natural Resources, Article II — Fertilizer and Landscape Management

3.04 DISPOSAL OF WASTE MATERIALS

A. The Contractor shall dispose of all material and debris generated by hauling such material and debris away to an approved facility.

END OF SECTION



SECTION 02933 SODDING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Furnishing all labor, materials, equipment, and incidentals necessary to furnish, haul, place, and establish sod on prepared topsoil as shown in the Construction Plans and as specified herein.

1.02 DEFINITIONS

A. Satisfactory Turf: A healthy, well-rooted, even colored, viable turf, free of open joints, bare areas, and surface irregularities.

1.03 SUBMITTALS

- A. General: Submit all submittals to the City in accordance with Section 01340.
- B. Required Submittals:
 - 1. Product Data: Product literature showing compliance with the requirements herein and including source/supplier information (as required):
 - a. Sod.

PART 2 - PRODUCTS

2.01 SOD

- A. General: Sod shall have a good cover of living or growing grass. All sod shall be obtained from areas where the soil is reasonably fertile and contains a high percentage of loamy topsoil. Sod shall be cut or stripped from living, thickly matted turf relatively free of weeds or other undesirable foreign plants, large stones, roots, or other materials which might be detrimental to the establishment, growth, or maintenance of acceptable turf.
- B. Where replacing existing sod, the new sod shall match the existing sod, unless otherwise directed by the City.
- C. Where not replacing existing sod, sod shall be Argentine Bahia, unless otherwise directed by the City.

2.02 LIME AND FERTILIZER

A. Shall comply with the requirements of Section 02932.

2.03 WATER

- A. Water shall be sufficiently free from oil, acid, alkali, salt, or other harmful materials that would inhibit the growth of satisfactory turf.
- B. The Contractor shall supply all necessary water.

2.04 SOIL FOR REPAIRS

A. Topsoil complying with the requirements of Section 02932.

PART 3 - EXECUTION

3.01 PREPARATION OF GROUND SURFACE

A. Prepare the final topsoil surface and apply lime and fertilizer in accordance with the requirements of Section 02932.

3.02 OBTAINING AND DELIVERING SOD

- A. After inspection and approval of the sod by the City, the sod shall be cut with approved sod cutters to such a thickness that after it has been transported and placed on the prepared bed but before it has been compacted, it shall have a uniform thickness of not less than two inches (2"). Sod sections or trips shall be cut in uniform widths, not less than 10 inches, and in lengths of not less than 18 inches, but of such length as may be readily lifted without breaking, tearing, or loss of soil. Sod shall be cut and moved only when the soil moisture conditions are such that favorable results can be expected. Where the soil is too dry, permission to cut sod may be granted only after it has been watered sufficiently to moisten the soil to the depth the sod is to be cut.
- B. The sod shall be transplanted with 24 hours from the time it is stripped, unless circumstances beyond the Contractor's control make storing necessary. In such cases, sod shall be stacked, kept moist, the protected from exposure to the air and sun and shall be kept from freezing.

3.03 LAYING SOD

- A. Sodding shall be performed only during the seasons when satisfactory results can be expected. Frozen sod shall not be used and sod shall not be placed upon frozen soil. Sod may be transplanted during periods of drought with the approval of the city, provided the sod bed is watered to moisten the soil to a depth of at least four inches (4") immediately prior to laying the sod.
- B. Pitch forks shall not be used to handle sod. Dumping from vehicles shall not be permitted.
- C. The sod shall be moist and shall be placed on a moist earth bed. The sod shall be carefully placed by hand, edge to edge, and with staggered joints, in rows at right angles to the slopes,

commencing at the base of the area to be sodded and working upward. The sod shall immediately be pressed firmly into contact with the sod bed by tamping or rolling with approved equipment to provide a true and even surface, and insure knitting without displacement of the sod or deformation of the surfaces of sodded areas.

- 1. Where the sod may be displaced during sodding operations, the workmen when replacing it shall work from ladders or treaded planks to prevent further displacement.
- 2. Soil for repairs shall be used to fill all cracks between sods; the quantity of the soil shall not cause smothering of the grass.
- 3. Where the grades are such that the flow of water will be from paved surfaces across sodded areas, the surface of the soil in the sod after compaction shall be set approximately 1 inch below the pavement edge. Where the flow will be over the sodded areas and onto the paved surfaces around manholes and inlets, the surface of the soil in the sod after compaction shall be placed flush with pavement edges.
- 4. On slopes steeper than 2.5 (H): 1 (V) and in V-shaped or flat-bottom ditches or gutters, the sod shall be pegged with wooden pegs not less than 12 inches in length and have a cross-sectional area of not less than 3/4 square inch. The pegs shall be driven flush with the surface of the sod.

3.05 WATERING

- A. Adequate water and watering equipment must be on hand before sodding begins.
- B. Sod shall be saturated with fine water spray within two (2) hours of laying and soil shall be kept moist to a minimum depth of 1-1/2 inches below the sod until it has become established and its continued growth assured.
- C. In all cases, watering shall be done in a manner which will avoid erosion from the application of excessive quantities and will avoid damage to the finished surface.

3.06 ESTABLISHING TURF

A. The Contractor shall provide general care for the sodded areas as soon as the sod has been laid and shall continue until final inspection and acceptance of the work. All sodded areas shall be protected against traffic or other use by warning signs or barricades approved by the City.

3.07 REPAIRING

A. When the surface has become disturbed or otherwise damaged during the period covered by this contract, the Contractor shall repair the affected area to re-establish the grade and the condition of the topsoil, as directed by the City, and shall then be re-sod the area in accordance with the requirements of this Section.

3.08 DISPOSAL OF WASTE MATERIALS

A. The Contractor shall dispose of all material and debris generated by hauling such material and debris away to an approved facility.

END OF SECTION

SECTION 02990 MISCELLANEOUS WORK AND CLEANUP

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals necessary for completing all miscellaneous work and cleanup not specified elsewhere, including but not limited to:
 - 1. Cleaning up the construction site.
 - 2. Disposing of waste material and debris.
 - 3. The extra work of crossing existing sewers, drains, electrical and telephone conduits, and water mains.
 - 4. Miscellaneous work associated with connecting to existing piping.
 - 5. Disconnecting, plugging, and abandoning the existing piping including all excavation, backfill, concrete plugs, and surface restoration items.
 - 6. Repair building components damaged during construction.
 - 7. All other work incidental to completing the project.

PART 2 - PRODUCTS (NOT USED)

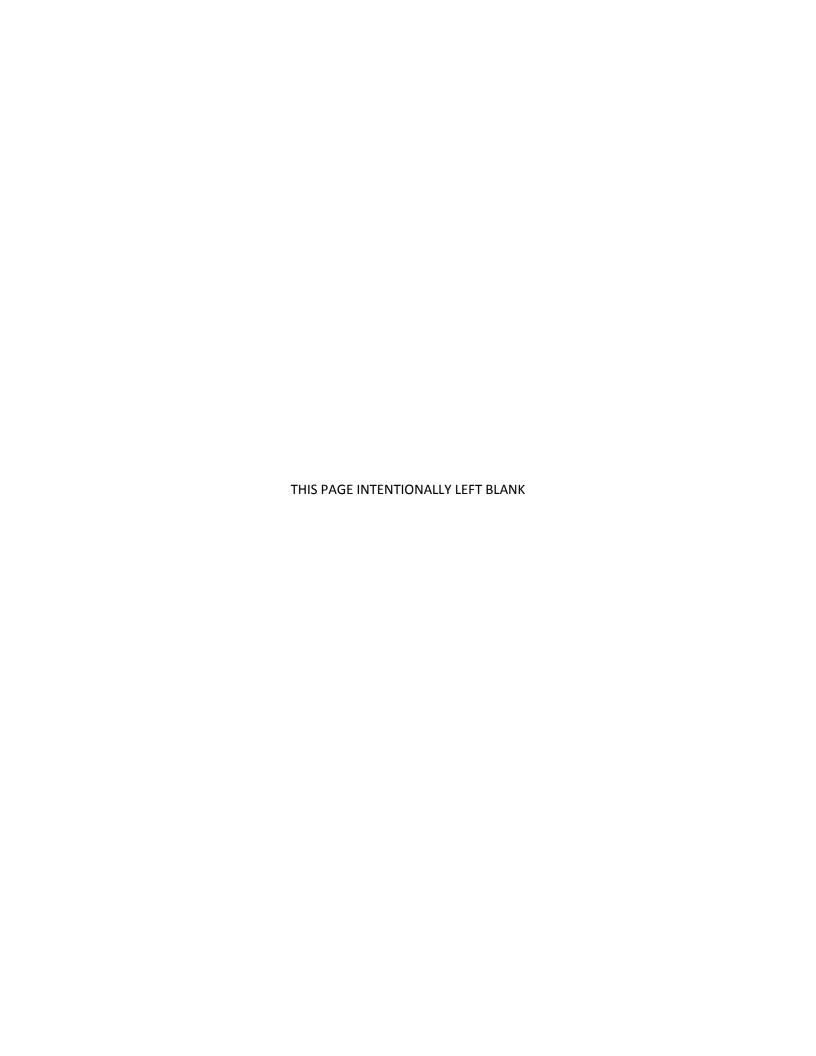
PART 3 - EXECUTION

3.01 CLEANUP

- A. Remove all construction material, excess excavation, equipment, or other debris remaining on the Site as a result of construction operations and render the Site in a neat and orderly condition equal to or better than which existed prior to the start of Work.
- B. The Contractor shall dispose of all material and debris by hauling such material and debris away to an approved facility. The cost of hauling and disposal shall be considered a subsidiary obligation of the Contractor and the cost shall be included in the Contract prices.

3.02 INCIDENTAL WORK

A. All incidental work not otherwise specified but necessary to the proper completion of the Contract as specified and as shown in the Contract Documents shall be completed.



SECTION 03315 NONSTRUCTURAL CONCRETE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing and placing of all nonstructural concrete, including thrust blocks, pipe encasement, and pipe support.
- B. Furnishing and placing steel reinforcement.
- C. Furnishing, installing, and removing formwork.

1.02 REFERENCE STANDARDS

- A. American Concrete Institute (ACI):
 - 1. ACI 301 Specifications for Structural Concrete.
- B. American Society of Testing and Materials (ASTM):
 - 1. ASTM A185 Welded Steel Wire Fabric for Concrete Reinforcement.
 - 2. ASTM A615 Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
 - 3. ASTM C33 Concrete Aggregates.
 - 4. ASTM C94 Ready-Mixed Concrete.
 - 5. ASTM C150 Portland Cement.

1.03 QUALITY ASSURANCE

A. Concrete work shall conform to all requirements of ACI 301, except as modified herein.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Cement: ASTM C150, Portland Type II.
- B. Fine and Coarse Aggregates: ASTM C33, 3/4-inch maximum size.
- C. Water: Fresh, clean, potable water.

- D. Reinforcing Steel: ASTM A615, Grade 60.
- E. Stirrups and Ties: ASTM A615, Grade 40.
- E. Welded Wire Fabric: ASTM A185.
- F. No chemical admixtures shall be used.

2.02 CONCRETE

- A. Concrete placement exceeding 1 cubic yard shall be transit mixed conforming to ASTM C94.
- B. Concrete shall have a minimum compressive strength of 2,500 psi at 28 days, unless specified otherwise.
- C. Slump: 5 inches maximum.

PART 3 - EXECUTION

3.01 PREPARATION

A. General:

- 1. Thoroughly clean all areas to ensure proper placement and bonding of concrete. Remove all wood scraps and debris from the areas in which concrete will be placed.
- 2. Thoroughly oil or wet (except in freezing weather) the forms; remove all standing water.
- 3. Earth subgrades to receive concrete shall be clean, undisturbed surfaces, free from mud, debris, and standing or running water.

3.02 FORMS

A. Forms shall be soundly built, tied, and properly aligned.

3.03 NOTIFICATION

A. Notify the City at least 24 hours before placing concrete.

3.04 THRUST BLOCKS

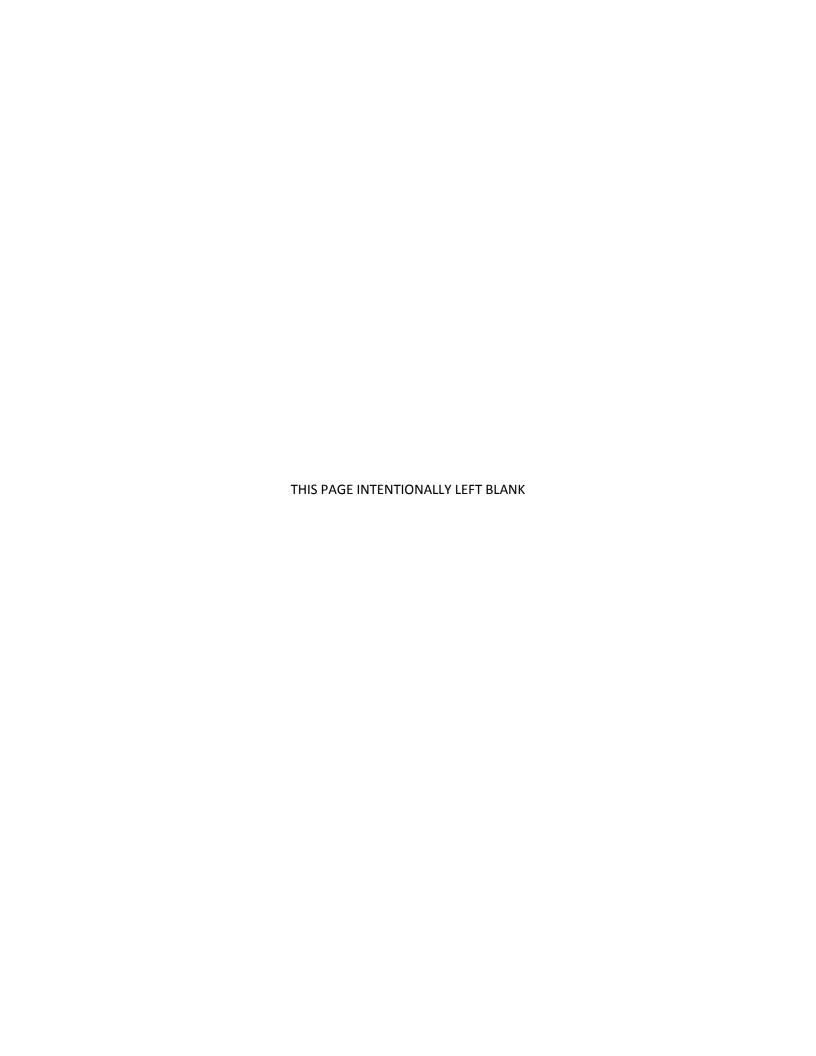
A. Thrust blocks shall be formed and cast in place in accordance with details shown in the Construction Plans.

APPENDIX "A"

City of North Port

Geotechnical Engineer Study

[Prepared by Tierra]



Tierra

September 14, 2017

Stantec Consulting Services, Inc. 5172 Station Way Sarasota, Florida 34233

Attn: Mr. Stephen MacEachern, P.E.

RE: Report of Geotechnical Engineering Services

S. Salford Water Pipeline Replacement

Sarasota County, Florida

Tierra Project Number: 6511-17-145

Mr. MacEachern:

Tierra, Inc. (Tierra) has performed a geotechnical study to evaluate the subsurface conditions for the Horizontal Directional Drilling (HDD) associated with the construction of a new water pipeline along S. Salford Boulevard. Based on the provided information, the HDD with be completed under the existing drainage canal within the existing right-of-way of S. Salford Boulevard between Barbary Lane and US 41. It is anticipated that the HDD will extend within the depths of the borings completed for this study. This letter report presents the subsurface conditions encountered at the boring locations and depths explored as part of this study.

Soil Boring and General Soil Conditions

To support the design of the HDD, Tierra performed two (2) Standard Penetration Test (SPT) borings to depths of 35 feet below the existing grade at the approximate locations requested by Stantec.

The borings were located in the field by a representative of Tierra using Garmin eTrex hand held Global Positioning System (GPS) equipment with a reported accuracy of ±10 feet. The approximate boring locations and soil profiles are shown on the attached **Boring Location Plan and Soil Profiles** sheet. Utility clearances were coordinated by Tierra via Sunshine State One Call as required prior to performing the soil borings.

The SPT borings were performed with the use of a drill rig using Bentonite Mud drilling procedures. The soil sampling was performed in general accordance with American Society for Testing and Materials (ASTM) Test Designation D-1586 titled "Penetration Test and Split-Barrel Sampling of Soils." The initial 4 feet of the SPT borings were manually augered to verify utility clearance. Thereafter, SPT resistance N-values were recorded and soil samples were collected continuously from a depth of 4 feet to a depth of 10 feet and at intervals of 5 feet thereafter. The soil samples were classified in the field and transported to our laboratory for review.

Report of Geotechnical Engineering Services S. Salford Water Pipeline Replacement Sarasota County, Florida

Tierra Project Number: 6511-17-145

Page 2 of 4

The soil strata encountered in the borings performed are summarized in the following table:

Stratum Number	Soil Description	USCS Symbol
1	Pale Brown to Brown Fine SAND to SAND with Silt	SP/SP-SM
2	Gray to Dark Gray Silty SAND	SM

Soil stratification was determined based on a review of recovered samples and interpretation of the field boring logs. Stratification lines represent approximate boundaries between soil layers of different engineering properties; however, actual transitions between layers may be gradual. In some cases, small variations in properties that were not considered pertinent to our engineering evaluation may have been abbreviated or omitted for clarity. The soil profiles represent the conditions at the particular boring location and variations in soil conditions should be anticipated along the HDD alignment. Specific details about subsurface conditions and materials encountered at the boring locations can be obtained from the soil profiles presented on the Boring Location Plan and Soil Profiles sheet.

Groundwater Information

The groundwater table was measured at depths ranging from approximately 9 to 10 feet below the existing ground surface. The encountered groundwater levels are presented adjacent to the soil profiles on Boring Location Plan and Soil Profiles sheet.

It should be noted that groundwater levels tend to fluctuate during periods of prolonged drought and extended rainfall and may be affected by man-made influences. In addition, a seasonal effect will also occur in which higher groundwater levels are normally recorded in rainy seasons.

Evaluations and Recommendations

The borings generally encountered loose sandy soils with shell fragments to depths of approximately 13 feet below grade. This was underlain very loose to dense silty sands with phosphate pebbles to approximately 28 feet below grade. This was underlain by very dense sand to refusal material sand with shell fragments and phosphate pebbles to the boring termination depth of approximately 35 feet below the existing grade.

Very dense sands to refusal material sand with shell fragments and phosphate pebbles were encountered within the borings. Drilling and reaming within this material will be difficult. If the horizontal directional drilling operations extend into this stratum, the Contractor should anticipate difficult drilling conditions in and through these layers and Report of Geotechnical Engineering Services S. Salford Water Pipeline Replacement Sarasota County, Florida Tierra Project Number: 6511-17-145

Page 3 of 4

should be prepared to utilize specialized equipment to facilitate drilling and reaming within these stratums.

Additionally, due to the loose soil conditions and typically high permeability rates of the sand with shell soil mixtures, the Contractor should anticipate higher than normal circulation losses of drilling fluid during the HDD operations. Additionally, if this material is encountered during pipe trench excavations, dewatering will be difficult and may require non-conventional dewatering methods.

Based on a review of the "Potentiometric Surface of the Upper Floridan Aquifer, West-Central Florida" maps published by the USGS; the potentiometric surface elevation of the upper Floridan Aquifer in the project vicinity ranges from approximately +30 to +40 feet, NGVD 1929. The project site elevations range from approximately +10 to +15 feet NGVD 1929. Artesian conditions were not encountered at the time of our field activities; however, the Contractor should be prepared to handle artesian conditions, if encountered.

Report Limitations

This report was prepared for the exclusive use of Stantec and their client for evaluating the design of the HDD as it relates to the geotechnical aspects discussed herein. The conclusions and recommendations contained in this report are professional opinions based on the site conditions and project layout described herein and further assumes that the conditions observed in the exploratory borings are representative of the subsurface conditions throughout the site, i.e., the subsurface conditions elsewhere on the site are the same as those disclosed by the boring. If, during construction, subsurface conditions different from those encountered in the exploratory borings are observed or appear to be present beneath excavations, we should be advised at once so that we can review these conditions and reconsider our recommendations where necessary.

Report of Geotechnical Engineering Services S. Salford Water Pipeline Replacement Sarasota County, Florida Tierra Project Number: 6511-17-145

Page 4 of 4

Tierra has completed the geotechnical engineering study for the above referenced project. The results of the study are provided herein.

Should there be any questions regarding the report, please do not hesitate to contact our office at (813) 989-1354. Tierra would be pleased to continue providing geotechnical services throughout the implementation of the project. We look forward to working with you and your organization on this and future projects.

Respectfully Submitted,

TIERRA, INC.

Susan E. Fries, E.I.

Geotechnical Engineer Intern

Michael T. Jordan P.E.

Senior Project Manager

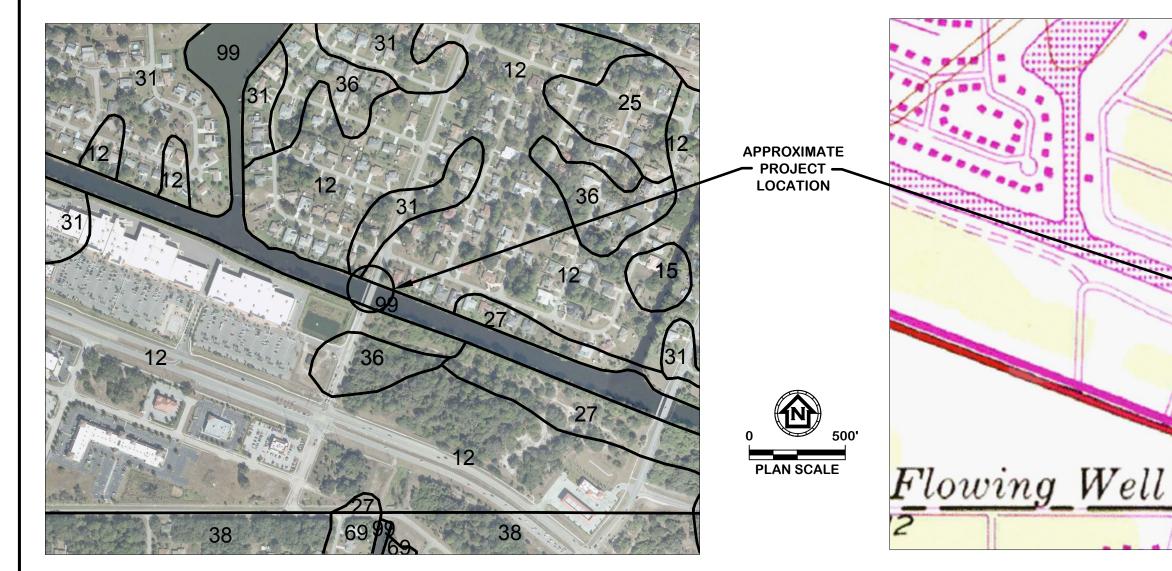
Florida License No. 56102

Attachments: USDA and USGA Site Vicinity Map

Boring Location Plan and Soil Profiles

USDA SOIL SURVEY MAP

USGS QUADRANGLE MAP



REFERENCE: "MURDOCK, FLORIDA" USGS QUADRANGLE MAP

REFERENCE: USDA SOIL SURVEY OF SARASOTA COUNTY, FLORIDA

TOWNSHIP: 39 S RANGE: 21 E SECTION: 33

DRAWN BY:

CHECKED BY:

MTJ
DATE:
SEP 2017

ENGINEER OF RECORD:

MICHAEL T. JORDAN, P.E.
FLORIDA LICENSE NO.:
56102



NOTED

PROJECT NUMBER: 6511-17-145

GEOTECHNICAL ENGINEERING SERVICES

SOUTH SALFORD WATER PIPELINE REPLACEMENT

SARASOTA COUNTY, FLORIDA

SHEET 1

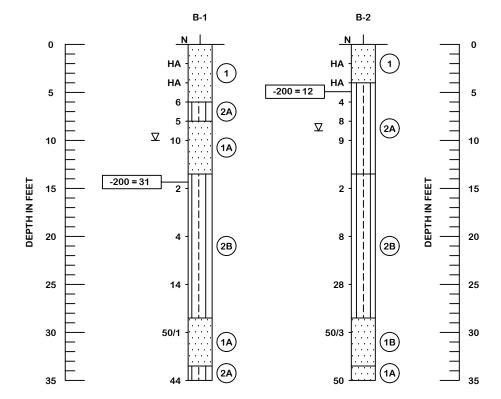
BORING LOCATION PLAN

0 100
PLAN SCALE



BARBARY LN.

SOIL PROFILES



LEGEND

1

PALE BROWN TO BROWN FINE SAND TO SAND WITH SILT(SP/SP-SM)

2

GRAY TO DARK GRAY SILTY SAND (SM)

A - WITH SHELL FRAGMENTS

B - WITH PHOSPHATE PEBBLES

- AP

APPROXIMATE LOCATION OF SPT BORING

Z GROUNDWATER LEVEL ENCOUNTERED DURING INVESTIGATION

SPT N-VALUE IN BLOWS/FOOT FOR 12 INCHES
OF PENETRATION (UNLESS OTHERWISE NOTED)

SP UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2488)
GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW
AND LABORATORY TESTING ON SELECTED SAMPLES
FOR CONFIRMATION OF VISUAL REVIEW

NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

HA HAND AUGERED TO VERIFY UTILITY CLEARANCES

-200 PERCENT PASSING #200 SIEVE

NOTES:

- 1. VERY DENSE SANDS TO REFUSAL MATERIAL SAND WITH SHELL FRAGMENTS AND PHOSPHATE PEBBLES WERE ENCOUNTERED WITHIN THE BORINGS. DRILLING AND REAMING WITHIN THIS MATERIAL WILL BE DIFFICULT. IF THE HORIZONTAL DIRECTIONAL DRILLING OPERATIONS EXTEND INTO THIS STRATUM, THE CONTRACTOR SHOULD ANTICIPATE DIFFICULT DRILLING CONDITIONS IN AND THROUGH THESE LAYERS AND SHOULD BE PREPARED TO UTILIZE SPECIALIZED EQUIPMENT TO FACILITATE DRILLING AND REAMING WITHIN THESE STRATUMS.
- VERY DENSE SANDS TO REFUSAL MATERIAL SAND WITH SHELL FRAGMENTS AND PHOSPHATE PEBBLES WERE ENCOUNTERED WITHIN THE BORINGS. DRILLING AND REAMING WITHIN THIS MATERIAL WILL BE DIFFICULT. IF THE HORIZONTAL DIRECTIONAL DRILLING OPERATIONS EXTEND INTO THIS STRATUM, THE CONTRACTOR SHOULD ANTICIPATE DIFFICULT DRILLING CONDITIONS IN AND THROUGH THESE LAYERS AND SHOULD BE PREPARED TO UTILIZE SPECIALIZED EQUIPMENT TO FACILITATE DRILLING AND REAMING WITHIN THESE STRATUMS.
- 3. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS; THE POTENTIOMETRIC SURFACE ELEVATION OF THE UPPER FLORIDAN AQUIFER IN THE PROJECT VICINITY RANGES FROM APPROXIMATELY +30 TO +40 FEET, NGVD 1929. THE PROJECT SITE ELEVATIONS RANGE FROM APPROXIMATELY +10 TO +15 FEET NGVD 1929. ARTESIAN CONDITIONS WERE NOT ENCOUNTERED AT THE TIME OF OUR FIELD ACTIVITIES; HOWEVER, THE CONTRACTOR SHOULD BE PREPARED TO HANDLE ARTESIAN CONDITIONS, IF ENCOUNTERED.

AUTOMATIC HAMMER

GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 3
LOOSE	3 TO 8
MEDIUM	8 TO 24
DENSE	24 TO 40
VERY DENSE	GREATER THAN 40
SILTS AND CLAYS	SPT N-VALUE
CONSISTENCY	(BLOWS/FT.)
VERY SOFT	LESS THAN 1
SOFT	1 TO 3
FIRM	3 TO 6
STIFF	6 TO 12
VERY STIFF	12 TO 24
HARD	GREATER THAN 24

DRAWN BY:

CHECKED BY:

MTJ
DATE:
SEP 2017

APPROVED BY:

ENGINEER OF RECORD:

MICHAEL T. JORDAN, P.E. FLORIDA LICENSE NO.: 56102



SCALE: NOTED

6511-17-145

PROJECT NUMBER

GEOTECHNICAL ENGINEERING SERVICES
SOUTH SALFORD WATER PIPELINE REPLACEMENT
SARASOTA COUNTY, FLORIDA

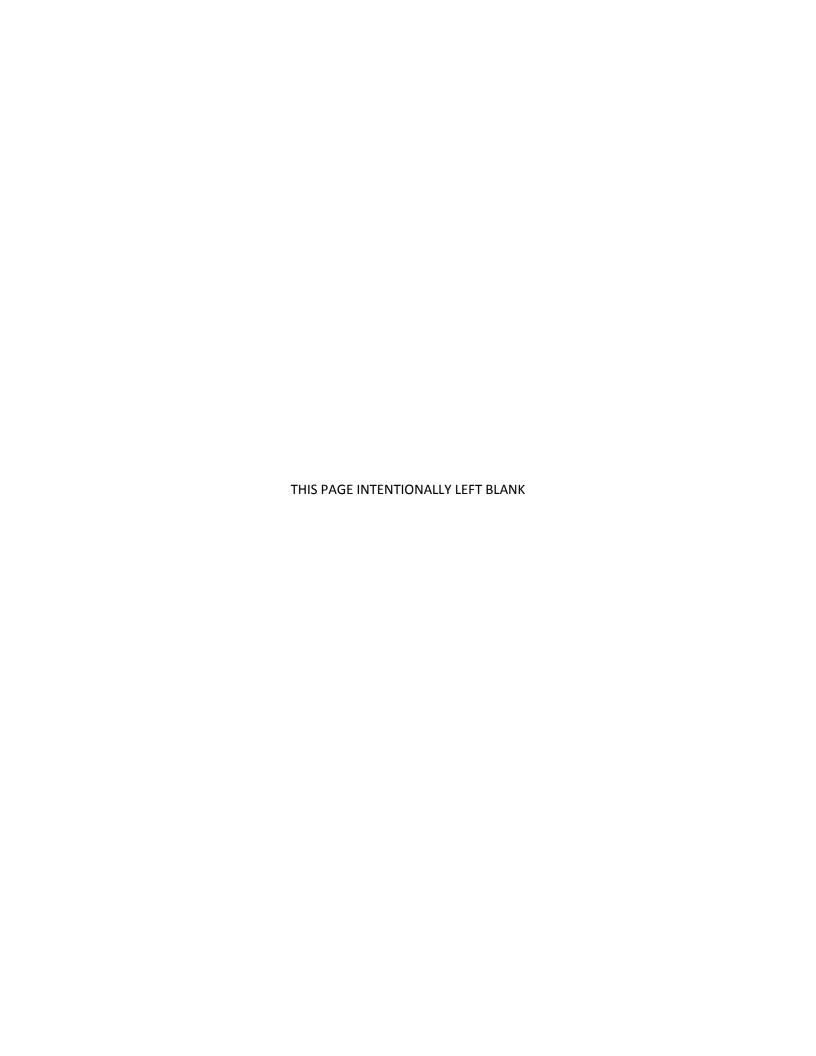
SHEET 2

APPENDIX "B"

City of North Port

DOH - Notification of Acceptance of Use of a General Permit for Construction of Water Main Extensions for PWS's

[Permit No. 0208589-162]



To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.

Rick Scott Governor

Celeste Philip, MD, MPH

State Surgeon General

November 13, 2017

Notification of Acceptance of Use of a General Permit

Permittee:

City of North Port Utilities Rick Newkirk, Utilities Director 6644 West Price Boulevard North Port, FL 34291

rnewkirk@cityofnorthport.com

Permit Number: 0208589-162

Issue Date: 11/13/2017 WD: 0651-17-010

Expiration Date: 11/12/2022

County: Sarasota

Project Name: Bridge Water Main Replacement-South Salford Boulevard/Cocoplum Waterway Water Supplier: North Port Utilities

PWS ID: 6580651

Dear Mr. Newkirk:

On November 8, 2017, the Florida Department of Health received a "Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs" [DEP Form No. 62-555.900(7)], under the provisions of Rule 62-4.530 and Chapter 62-555, Florida Administrative Code (F.A.C.). The proposed project includes Install approximately 380 LF WM. Main will be installed by open cut and HDD of 10-inch WM (12-inch Diameter HDD) from the existing main on the north side of the bridge over the Cocoplum Waterway to the south side of the bridge. The new main will replace the existing 10-inch water main attached to the side of the bridge

Based upon the submitted Notice and accompanying documentation, this correspondence is being sent to advise that the Department does not object to the use of such general permit at this time. Please be advised that the permittee is required to abide by Rule 62-555.405, F.A.C., all applicable rules in Chapters 62-4, 62-550, 62-555, F.A.C., and the General Conditions for All General Drinking Water Permits (found in 62-4.540, F.A.C.).

The permittee shall comply with all sampling requirements specific to this project. These requirements are attached for review and implementation.

Pursuant to Rule <u>62-555.345</u>, F.A.C., the permittee shall submit a certification of construction completion [DEP Form No. <u>62-555.900(9)</u>] to the Department and obtain approval, or clearance, from the Department before placing any water main extension constructed under this general permit into operation for any purpose other than disinfection or testing for leaks.

Within 30 days after the sale or legal transfer of ownership of the permitted project that has not been cleared for service in total by the Department, both the permittee and the proposed permittee shall sign and submit an application for transfer of the permit using Form 62-555.900(8), F.A.C., with the



DEP File No.:0208589-162 WD:0651-17-010

appropriate fee. The permitted construction is not authorized past the 30-day period unless the permit has been transferred.

This permit will expire five years from the date of issuance. If the project has been started and not completed by that time, a new permit must be obtained before the expiration date in order to continue work on the project, per Rule 62-4.030, F.A.C.

Paul B. Penumudi, P.E.

Professional Engineer I

Sincerel

cc: Stephen MacEachern, P.E./Stantec Consulting Services, Inc.

DEP File No.:0208589-162 WD:0651-17-010

A Civil Penalty May Be Incurred if this project is placed into operation before obtaining a clearance from this office.

Requirements for clearance upon completion of projects are as follows:

1) Clearance Form

Submission of a fully completed Department of Environmental Protection (DEP) Form 62-555.900(9) Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components into Operation.

2) Record Drawings

Submission of the portion of record drawings showing deviations from the DEP construction permit, including preliminary design report or drawings and specifications.

3) Bacteriological Results

Copies of satisfactory bacteriological analysis (a.k.a. Main Clearance), taken within sixty (60) days of completion of construction, from locations within the distribution system or water main extension to be cleared, in accordance with Rules 62-555.315(6), 62-555.340, and 62-555.330, F.A.C. and American Water Works Association (AWWA) Standard C 651-92, as follows:

• Connection to an existing system (2)

Each location shall be sampled on two consecutive days, with sample points and chlorine residual readings clearly indicated on the report. A sketch or description of all bacteriological sampling locations must also be provided.

For further clarification contact:
Paul B. Penumudi, P.E.
Florida Department of Health in Sarasota County
1001 Sarasota Center Blvd
Sarasota, FL 34240
941-861-6133

Paul.penumudi@flhealth.gov

DEP File No.:0208589-162 WD:0651-17-010

All main clearances are to be scheduled with the Sarasota County Health Department, Office of Environmental Health per Florida Statutes 403.862. Sample points will be reviewed prior to main clearances.

All water lines will be disinfected in accordance with AWWA C651-99 with the chlorinated water being sampled by a utility inspector. Introduction of the disinfection shall be witnessed by a utility inspector. All sample taps shall be non-threaded. Any sampling location that is a fire hydrant requires prior approval by this Department and the Utility.

All water mains will be pressure-tested in accordance with AWWA C600 Pipe Laying Section and test being witnessed by the Utility.

City of North Port Utilities Rick Newkirk, Utilities Director 6644 West Price Boulevard North Port, FL 34291 Permit/Cert. Site: 0208589-162 WD: 0651-17-010 Date of Issue: November 13, 2017 Expiration Date: November 12, 2022 Project: Bridge Water Main Replacement-South Salford Boulevard/Cocoplum Waterway

GENERAL CONDITIONS

- 1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727 or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, or its agent, employees, servants or representatives.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by this department.
- 3. As provided is in Subsections 403.08(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state of local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.
- This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the internal Improvement Trust Fund may express state opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution or contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.
- The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
 - a. Having access to and copying any records that must be kept under the conditions of the permittee;
 - b. Inspecting the facility, equipment, practices, or operations regulated or require under this permit; and
 - c. Sampling or monitoring any substances or parameters at any locations reasonably necessary to assure compliance with this permit or department rules.
- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:
 - a. a description of and cause of non-compliance; and
 - b. the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

City of North Port Utilities Rick Newkirk, Utilities Director 6644 West Price Boulevard North Port, FL 34291

Permit/Cert. Site: 0208589-162 WD: 0651-17-010

Date of Issue: November 13, 2017 Expiration Date: November 12, 2022 Project: Bridge Water Main Replacement-South

Salford Boulevard/Cocoplum Waterway

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, and may be used by the department as evidence in any enforcement case arising; under the Florida Statutes or department rules, except where such use is prescribed by Section 403.73 and 403.111, Florida Statutes.

- 10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.
- 11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.
- This permit is required to be kept at the work site of the permitted activity during the entire 12. period of construction or operation.
- 13. This permit also constitutes:
 - *Determination of Best Available Control Technology (BACT)
 - *Determination of Prevention of Significant Deterioration (PSD)
 - *Certification of Compliance with State Water Quality Standards
 - *Compliance with New Source Performance Standards
- 14. The permittee shall comply with the following monitoring and record keeping requirements:
 - Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.
 - The permittee shall retain at the facility or other location designated by this permit, records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample measurement, report or application unless otherwise specified by department rule.
 - Records of monitoring information shall include:
 - *the date, exact place, and time of sampling or measurements;
 - *the person responsible for performing the sampling or measurements;
 - *the date(s) analyses were performed;
 - *the person responsible for performing the analyses;
 - *the analytical techniques or methods used; and *the results of such analyses.
- 15. When requested by the department, the permittee shall within a reasonable time furnished any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SHEET INDEX

1 COVER SHEET

5-6 STANDARD DETAILS

- 2 GENERAL NOTES AND LEGEND
- 3 PLAN
- 4 PROFILE
- 7 BEST MANAGEMENT PRACTICES

CITY OF NORTH PORT

CONSTRUCTION DRAWINGS FOR

BRIDGE WATER MAIN REPLACEMENT S. SALFORD BOULEVARD



UTILITIES
TELEPHONE CONTACT NUMBERS

ENGINEERING PHONE: (941) 240-8000

OPERATIONS PHONE: (941) 240-8000

NORTH PORT CITY COMMISSION

VANESSA CARUSONE...... SEAT 1 (VICE-MAYOR) CHRISTOPHER HANKS..... SEAT 2

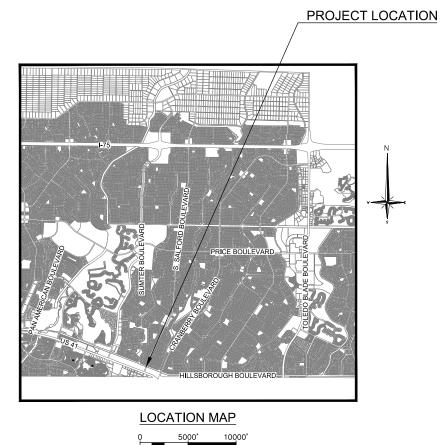
DEBBIE MCDOWELL..... SEAT 3
JILL LUKE..... SEAT 4

LINDA YATES...... SEAT 5 (MAYOR)
PETER LEAR..... CITY MANAGER

PROJECT VICINITY
CITY OF NORTH PORT, FL

GULF OF MEXICO

VICINITY MAP



PLANS PREPARED BY



Stantec Consulting Services Inc.

5172 Station Way Sarasota, FL U.S.A. 34233

Tel. 941.365.5500 Fax. 941.366.1922 www.stantec.com Florida Certification No. 27013

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

100% PLANS

NORTH PORT UTILITIES

RICK NEWKIRK......UTILITIES DIRECTOR
MICHAEL ACOSTA, P.E.....UTILITIES ENGINEERING MANAGER
DARRELL SMITH......CONSTRUCTION COORDINATOR

STANTEC PROJECT NO. 177310918 **NOVEMBER 2017**

STEPHEN C. MACEACHERN, P.E. #76020

_____ day of _____ 2017

Legend EXISTING TOPOGRAPHIC SYMBOLS

- -DENOTES SPOT FLEVATION
- DENOTES PALM TREE
- -DENOTES GRATE INLET
- ക -DENOTES CABLE TELEVISION RISER
- -DENOTES ELECTRIC SERVICE
- DENOTES TELEPHONE RISER
- □ -DENOTES TELEPHONE VAULT
- DENOTES BACK FLOW PREVENTER
- □ −DENOTES WATER GATE VALVE
- → −DENOTES FIRE HYDRANT
- W -DENOTES WATER METER
- -DENOTES MITERED END SECTION
- D -DENOTES CATCH BASIN -DENOTES MAIL BOX
- → DENOTES STREET SIGN
- → DENOTES GUY ANCHOR
- Ø -DENOTES UTILITY POLE
- -DENOTED CAPPED IRON ROD FOUND (AS NOTED)
- DENOTES CAPPED IRON ROD SET (AS NOTED)
- → -DENOTES NAIL & DISK FOUND (AS NOTED)
- DENOTES NAIL FOUND (AS NOTED)
- -DENOTES BENCHMARK (AS NOTED)

=	PROPERTY LINE
=	EDGE OF PAVEMENT
=	CONCRETE SIDEWALK
TOB =	TOP OF SWALE
=	RIGHT OF WAY
SD =	STORM DRAIN
———— оє —— =	OVERHEAD WIRE
wm =	WATER MAIN

PROPOSED SYMBOLS

MANUAL PRESSURE TESTING STATION / AIR RELEASE
IN-LINE GATE VALVE W/ BOX
FIRE HYDRANT ASSEMBLY, COMPLETE
BLOW-OFF
PIPE PLUG
WATER METER
IRRIGATION METER
REDUCER
CAP
CAP AND FLUSHING VALVE OUTLET
BACKFLOW PREVENTER/ABOVE GROUND METER
SANITARY SEWER MANHOLE
SANITARY SEWER LATERAL & CLEAN-OUT
DIRECTIONAL BORE WATE MAIN
OPEN CUT WATER MAIN
SOIL BORING

LEGEND

SIDEWALK RESTORATION



EXISTING PIPE TO BE GROUTED



EXISTING PIPE TO BE REMOVED FROM BRIDGE

CONSTRUCTION NOTES:

- THE HORIZONTAL DATUM USED FOR THIS PROJECT IS NAD 1983. THE BENCHMARK DATUM USED FOR THIS PROJECT IS NAVD 1988.
- 2 THE CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ALL FENCING SIGNAGE, MAILBOXES OR OTHER IMPROVEMENTS DISTURBED BY CONSTRUCTION.
 CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH PROPERTY OWNERS AND
- 3. THE CONTRACTOR SHALL CONFIRM THE HORIZONTAL AND VERTICAL LOCATIONS OF POTENTIAL UTILITY CONFLICTS AND TRANSMIT TO THE ENGINEER OF RECORD AND NORTH PORT UTILITIES DEPARTMENT (NPU) A MINIMUM OF THREE (3) BUSINESS DAYS AHEAD OF THE PIPE LAYING TO FACILITATE DESIGN MODIFICATIONS WHICH MAY BE NECESSARY, WITHOUT DELAYS TO THE
- 4. THE CONTRACTOR SHALL TEST WATER MAIN PER CITY STANDARDS USING AWWA METHODS. FOR PVC, THE HOPE PIPING SHALL BE ISOLATED AND TESTED AS DESCRIBED LATER IN THIS PARAGRAPH, AND THE PVC/DIP PIPING SHALL BE TESTED SEPARATELY. DIRECTIONAL BORE HYDROSTATIC TESTING SHALL BE COMPLETED IN ACCORDANCE WITH PROJECT SPECIFICATIONS, OR AS APPROVED BY CITY UTILITIES." THESE GUIDELINES, INCLUDING PRETEST PROCEDURES, SHALL BE DOCUMENTED. THE DIP/PVC PIPES AND FITTINGS IN THE HDPE SEGMENTS SHALL BE VISUALLY VERIFIED TO NOT LEAK UNDER TEST
- ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH HEALTH DEPARTMENT AND LOCAL GOVERNMENT RULES AND REGULATIONS.
- 6. NOTIFY THE FIRE CHIEF AT firemarshall@citvofnorthport.com AND COPY TO NORTH PORT UTILITY DEPARTMENT REGULARLY TO ADVISE OF ROAD/LANE CLOSURES AND OTHER TRAFFIC IMPEDIMENTS.
- 7. CONTRACTOR SHALL OBTAIN RIGHT-OF-WAY PERMIT PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES.
- 8. THE CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO BE APPROVED BY THE ENGINEER OF RECORD AND NPU PRIOR TO THE START OF
- 9. ALL SWALES, DRIVEWAY CULVERTS, AND/OR DRIVEWAY INVERTS IMPACTED BY CONSTRUCTION SHALL BE REPLACED IN-KIND BY THE CONTRACTOR USING THE ELECTRONIC SURVEY DATA PROVIDED FOR STAKEOUT TO MAINTAIN EXISTING
- 10. CONCRETE SIDEWALK & DRIVEWAY RESTORATION SHALL INCLUDE REPLACEMENT REINFORCED CONCRETE UP TO NEAREST SAW CUT.
- 11. THE CONTRACTOR SHALL INVESTIGATE AND VERIFY (OR HAVE VERIFIED) THE LOCATION OF EXISTING UTILITIES AND ANY OTHER SUBSURFACE FACILITIES BEFORE STARTING WORK. THE CONTRACTOR SHALL BE LIABLE FOR ANY EXPENSE RESULTING FROM DAMAGE TO SAME. ANY CONFLICTS WITH EXISTING UTILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND NPU
- 12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE CITY. AND THE ENGINEER 48 HOURS (TWO (2) BUSINESS DAYS) PRIOR TO ANY WORK AT SITE & 48 HOURS (TWO (2) BUSINESS DAYS) PRIOR TO ANY
- 13. THE CONTRACTOR SHALL COORDINATE HOLDING OF POLES WITH UTILITY COMPANIES IN ADVANCE SO UNNECESSARY DELAYS OF PROJECT SHALL NOT BE INCURRED. THE COST FOR THE HOLDING OF THE POWER POLES SHALL BE INCLUDED IN THE PIPELINE UNIT COST ITEMS CONTAINED IN THE BID.

- 1. CONTRACTOR SHALL FOLLOW F.A.C. 62-555.314 FOR HORIZONTAL AND VERTICAL SEPARATION OF THE WATER MAIN WITH OTHER UTILITY MAIN.
- 2. TRENCH SHALL BE BRACED OR SHORED IN ACCORDANCE WITH THE "FLORIDA TRENCH & SAFETY ACT".
- CONTRACTOR SHALL PLACE METALLIC BURIAL IDENTIFICATION TAPE DIRECTLY ABOVE DIRECT BURY WATER LINES IN CONFORMANCE WITH CITY STANDARDS. 4. ALL WELL POINT HOLES SHALL BE FILLED WITH COARSE SAND OR OTHER

SATISFACTORY GRANULAR MATERIAL AT TIME WELL POINTS ARE PULLED

OBTAIN A DEWATERING PERMIT IF DEWATERING IS TO BE PERFORMED.

- 5. DISCHARGE FROM DE-WATERING OPERATIONS SHALL BE DISPOSED OF IN SUCH DISCHARGE FROM DE-WATERING OPERATIONS SHALL BE DISPOSED OF IN SU A MANNER THAT IT SHALL NOT INTERFERE WITH THE NORMAL DRAINAGE OF THE AREA IN WHICH THE WORK IS BEING PERFORMED OR CREATE A PUBLIC NUISANCE FROM PONDING. THE OPERATIONS SHALL NOT CAUSE DAMAGE TO ANY PORTION OF THE WORK COMPLETED, OR IN PROGRESS, OR TO THE SURFACE OF STREETS, OR TO PRIVATE PROPERTY. THE CONTRACTOR SHALL
- 6. THE CONTRACTOR SHALL PAY FOR AND PROVIDE SOIL COMPACTION TESTING IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. ALL SOIL COMPACTION TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AND NPU.

WATER MAIN NOTES:

- 1. ELEVATIONS SHOWN ON THE PLANS FOR FLOWLINES OF PROPOSED WATER MAINS SHALL BE ADHERED TO. IN MOST CASES THE DESIGN GRADES ARE CRITICAL, AND ADJUSTMENTS CAUSED BY MISALIGNMENT OR IMPROPER GRADES ARE IMPRACTICAL. COSTS TO RE-LAY MAIN, IF NECESSARY, SHALL BE BORNE BY THE
- 2. THE CONTRACTOR SHALL LOCATE WATER MAINS AT PROPOSED TIE—IN LOCATIONS TO VERIFY THE ACTUAL LOCATION, SIZE, ELEVATION, AND MATERIALS PRIOR TO ORDERING MATERIALS. THE CONTRACTOR SHALL NOTIFY THE CITY OF ANY DISCREPANCIES PRIOR TO COMMENCING CONSTRUCTION OR ORDERING
- 3. THE CONTRACTOR SHALL MAINTAIN MINIMUM SEPARATION BETWEEN UTILITIES AS SHOWN ON THE CONSTRUCTION PLANS AND IN ACCORDANCE WITH F.A.C. RULE 62-555.314 AND OTHER APPLICABLE REQUIREMENTS OF UTILITY OWNERS.
- THE MINIMUM DEPTH OF COVER FOR ALL WATER MAINS SHALL BE 36 INCHES. UNLESS SHOWN ON THE PLANS, COVER GREATER THAN FIVE (5) FEET BELOW FINISHED GRADE SHALL REQUIRE APPROVAL BY CITY PRIOR TO CONSTRUCTION, UNLESS PIPE IS INSTALLED VIA DIRECTIONAL DRILL.
- 5. ALL PRESSURIZED MAINS SHALL BE RESTRAINED JOINT IN ACCORDANCE WITH THE CONSTRUCTION PLANS UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL ABIDE BY THE RESTRAINED JOINT PIPE LENGTHS LISTED IN THE RESTRAINED JOINTS TABLE UNLESS OTHERWISE INDICATED IN THE CONSTRUCTION PLANS OR DIRECTED BY THE CITY.
- THE CONTRACTOR SHALL PRESSURE TEST WATER MAINS IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS AND ANY PERMIT REQUIREMENTS. THE CONTRACTOR SHALL DOCUMENT ALL TESTING, INCLUDING PRE-TEST PROCEDURES.
- THE CONTRACTOR SHALL NOTIFY THE CITY A MINIMUM OF TWO (2) BUSINESS DAYS IN ADVANCE OF LINE FLUSHING AND PRESSURE TESTING. A REPRESENTATIVE OF THE CITY MUST BE PRESENT TO WITNESS LINE FLUSHING AND PRESSURE
- THE CONTRACTOR SHALL NOT CONNECT THE NEW WATER MAIN TO THE EXISTING UNTIL BACTERIOLOGICAL TESTING HAS PASSED AND THE MAIN HAS BEEN
- ALL RECLAIMED WATER MAINS SHALL BE BLUE IN COLOR IN ACCORDANCE WITH AWWA AND CITY STANDARDS.

DIRECTIONAL DRILL NOTES:

- 1. THE CONTRACTOR SHALL SUBMIT A WORK PLAN TO THE CITY FOR APPROVAL, DESCRIBING THE SEQUENCING AND PROPOSED STAGING AREA FOR DIRECTIONAL DRILLING TASKS, INCLUDING SUPPLEMENTAL OF A MAINTENANCE OF TRAFFIC PLAN. THE CONTRACTOR SHALL ALSO PREPARE A HORIZONTAL DIRECTIONAL DRILL PLAN FOR CITY REVIEW AND APPROVAL
- THE CONTRACTOR SHALL UTILIZE EROSION CONTROL AND BEST MANAGEMENT PRACTICES (TO BE APPROVED BY THE CITY) FOR DIRECTIONAL DRILL FLUID CONTAINED WITHIN SUMP PITS TO AVOID CONTAMINATION OF DOWNSTREAM WATER
- THE CONTRACTOR SHALL DETERMINE WHERE ADDITIONAL DIRECTIONAL BORE ENTRANCE/EXIT LOCATIONS ARE REQUIRED, BASED ON THEIR SPECIFIC EQUIPMENT TO BE UTILIZED. AN AIR RELEASE ASSEMBLY IS REQUIRED AT EACH HIGH POINT SO CREATED. IF MORE AIR RELEASE ASSEMBLIES ARE REQUIRED THAN ARE INDICATED ON THE CONSTRUCTION PLANS, THE COST SHALL BE INCLUDED IN THE DIRECTIONAL DRILL UNIT COST.
- HORIZONTAL DIRECTIONAL DRILL GEOMETRY OF ENTRANCE AND EXIT ANGLES AND BENDING RADIUS SHOWN FOR REFERENCE ONLY, VERTICAL AND HORIZONTAL CLEARANCES SHALL BE STRICTLY OBSERVED. THE CONTRACTOR MAY ADJUST THE CLEARANCES SHALL BE STRICLET OBSERVED. THE CONTRACTOR MAT ADJUST THE ENTRY AND EXIT ANGLES AND RADIUS OF CURYATURE AS REQUIRED BASED ON FIELD CONDITIONS ENCOUNTERED AT THE TIME OF CONSTRUCTION AND THE CAPABILITIES OF THE EQUIPMENT UTILIZED. ANY MODIFICATIONS SHALL BE COORDINATED WITH THE CITY PRIOR TO CONSTRUCTION
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT HORIZONTAL AND VERTICAL TRANSITION OF WATER MAINS USING NO MORE THAN 75 PERCENT OF THE MAXIMUM ALLOWABLE DEFLECTION RECOMMENDED BY THE PIPE MANUFACTURER, SHOP DRAWINGS SHALL BE FURNISHED TO THE CITY FOR APPROVAL OF ALL PIPE CONNECTIONS, TRANSITIONS, ETC., PRIOR TO FABRICATION
- ALL HDPE JOINTS ARE TO BE CONNECTED BY BUTT FUSION, ALLOWING TWO (2) HOURS CURE TIME (MINIMUM) BEFORE PIPE PULLBACK BEGINS.
- DRILLING AND PULLBACK MUST BE TIMED SO THAT ACCESS IS MAINTAINED. FOR RESIDENTIAL DRIVEWAYS BETWEEN 4:00 PM AND 9:00 AM UNLESS OTHER ACCOMMODATIONS CAN BE AGREED UPON WITH INDIVIDUAL RESIDENTS. ALL COORDINATION WITH RESIDENTS WILL BE HANDLED BY THE CITY. THE CONTRACTOR SHALL COORDINATE WITH THE CITY FOR ALL NECESSARY COMMUNICATION WITH
- 8. NO. 10 COPPER TRACER WIRE SHALL BE PULLED WITH HDPE WATER MAINS INSTALLED BY DIRECTIONAL DRILL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL WASTE MATERIAL TO INCLUDE EXCESS SPOILS, DRILLING FLUID, DEMOLITION DEBRIS, AND ROCK. CONTRACTOR SHALL TRANSPORT AND DISPOSE OF ALL MATERIAL AT AN OFF-SITE FACILITY MEETING ALL LOCAL, STATE, AND FEDERAL
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL ENVIRONMENTAL RESOURCE PERMIT REQUIREMENTS INCLUDING IMPLEMENTATION OF THE PERMITTED FRAC-OUT CONTINGENCY PLAN, IF NEEDED.

AS-BUILTS:

- THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS THAT MEET OR EXCEED THE CITY OF NORTH PORT STANDARDS, LATEST EDITION.
- TOP OF PIPE ELEVATIONS FOR ALL MAINS ARE REQUIRED EVERY ONE HUNDRED FEET (100'), ON EACH FITTING, AND AT CHANGE IN GRADE.
- AS-BUILT DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR'S SURVEYOR. DRAFT COPIES SHALL BE SUBMITTED ELECTRONICALLY TO THE ENGINEER PRIOR TO FINALIZING THE AS-BUILT DRAWINGS. ONCE ACCEPTABLE TO THE ENGINEER, THE CONTRACTOR/SURVEYOR WILL PROVIDE ELECTRONIC SIGNED AND SEALED FINALIZED DRAWINGS TO THE ENGINEER IN ACAD FORMAT. AS-BUILT INFORMATION SHALL BE ON UNIQUE LAYER(S), NAD 1983 HORIZONTAL DATUM, NAVD 1988 VERTICAL DATUM, NORTHING/EASTING, AND TWO POINT SWING TIES.
- 4. AS-BUILT DRAWINGS SHALL INCLUDE DIRECTIONAL BORE LOGS SHOWING THE TOP OF HDPE PIPE ELEVATIONS.

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RIDGE WAT SALFORD E Р CII

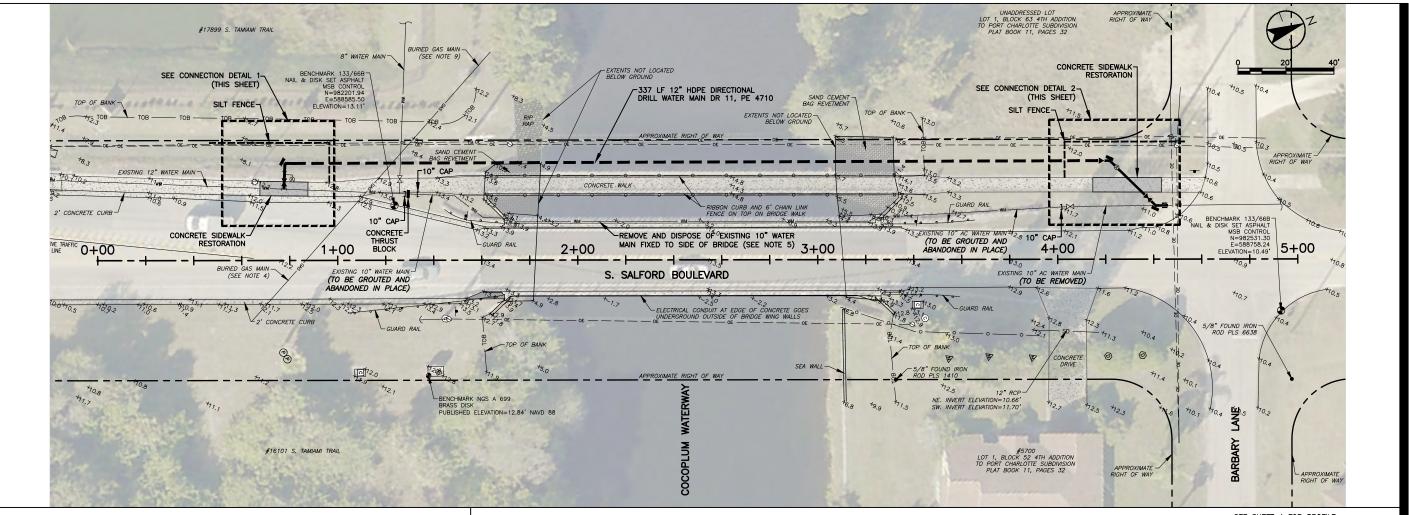
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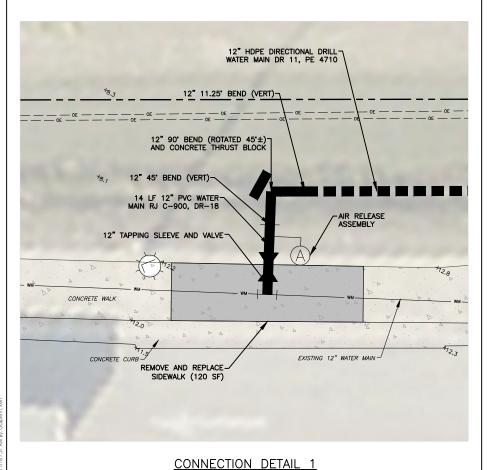
STEPHEN C. MACEACHERN, P.E FLORIDA LICENSE No. 76020 Project Number: 177310918

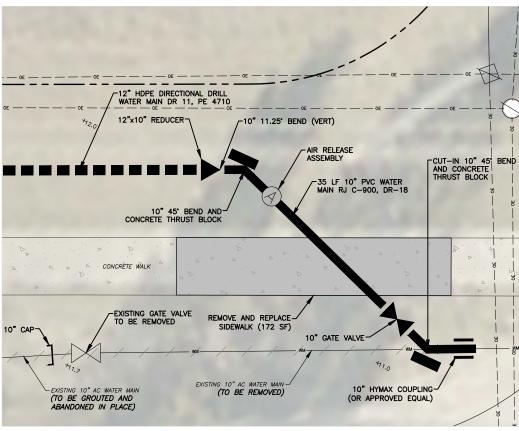
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Drawing No. Revision Sheet

2 of 7







- THE 12" HDPE SHALL BE FLUSHED, PRESSURE TESTED, DISINFECTED, BACTERIOLOGICALLY TESTED AND CLEARED BY DOH PRIOR TO BEING CONNECTED TO THE EXISTING WATER MAIN.
- 2. DURING DIRECTIONAL DRILLING OPERATIONS, THE CONTRACTOR SHALL TAKE CARE TO PROTECT THE EXISTING WATER MAIN AND AND STORM SEWER SYSTEM FROM DAMAGE. ANY DAMAGE TO THE EXISTING WATER MAIN OR STORM SEWER SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO ADDITIONAL COST TO NORTH PORT UTILITY DEPARTMENT.
- 3. EXISTING WATER MAIN IDENTIFIED TO BE ABANDONED IN PLACE SHALL BE CAPPED AND FILLED WITH FLOWABLE FILL ONCE THE NEW MAIN IS IN SERVICE.
- 4. CONTRACTOR SHALL LOCATE THE HORIZONTAL AND VERTICAL LOCATION OF THE EXISTING GAS MAIN AT THE WATER MAIN CROSSING. THE EXISTING LOCATION SHALL BE PROVIDED TO NORTH PORT UTILITIES AND THE ENGINEER TO DETERMINE WHETHER THERE IS A CONFLICT.
- REMOVE EXISTING 10" WATER MAIN, BRACKETS, HANGERS, ETC FROM SIDE OF BRIDGE. CUT PIPE 3" FROM BRIDGE ABUTMENTS AND FILL BURIED PORTIONS WITH FLOWABLE FILL. MORTAR SMOOTH AT SAW CUT ENDS AT BRIDGE ABUTMENTS.
- 6. SAFE PEDESTRIAN PASSAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY SHELL SIDEWALK IN AREAS WHERE THE EXISTING SIDEWALK IS REMOVED TO FACILITATE CONSTRUCTION OF THE NEW
- CONTRACTOR SHALL COORDINATE WITH NORTH PORT UTILITIES ON WHICH EXISTING GATE VALVES NEED TO BE USED TO ISOLATE THE EXISTING WATER MAIN FOR CONNECTIONS.
- 8. SILT FENCE LOCATIONS ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL ADJUST LOCATION IF NEEDED TO ACCOMMODATE THEIR CONSTRUCTION ACTIVITIES. SEE SHEET 7 FOR BEST MANAGEMENT PRACTICES.
- 9. THE CONTRACTOR SHALL FIELD LOCATE (HORIZONTAL AND VERTICAL) THE EXISTING GAS MAIN AT THE WATER MAIN HDD CROSSING TO ENSURE THE GAS MAIN IS NOT DAMAGED DURING DRILLING AND PULL BACK OPERATIONS.

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SEE SHEET 4 FOR PROFILE

IDGE WATER MAIN REP SALFORD BOULEVARD

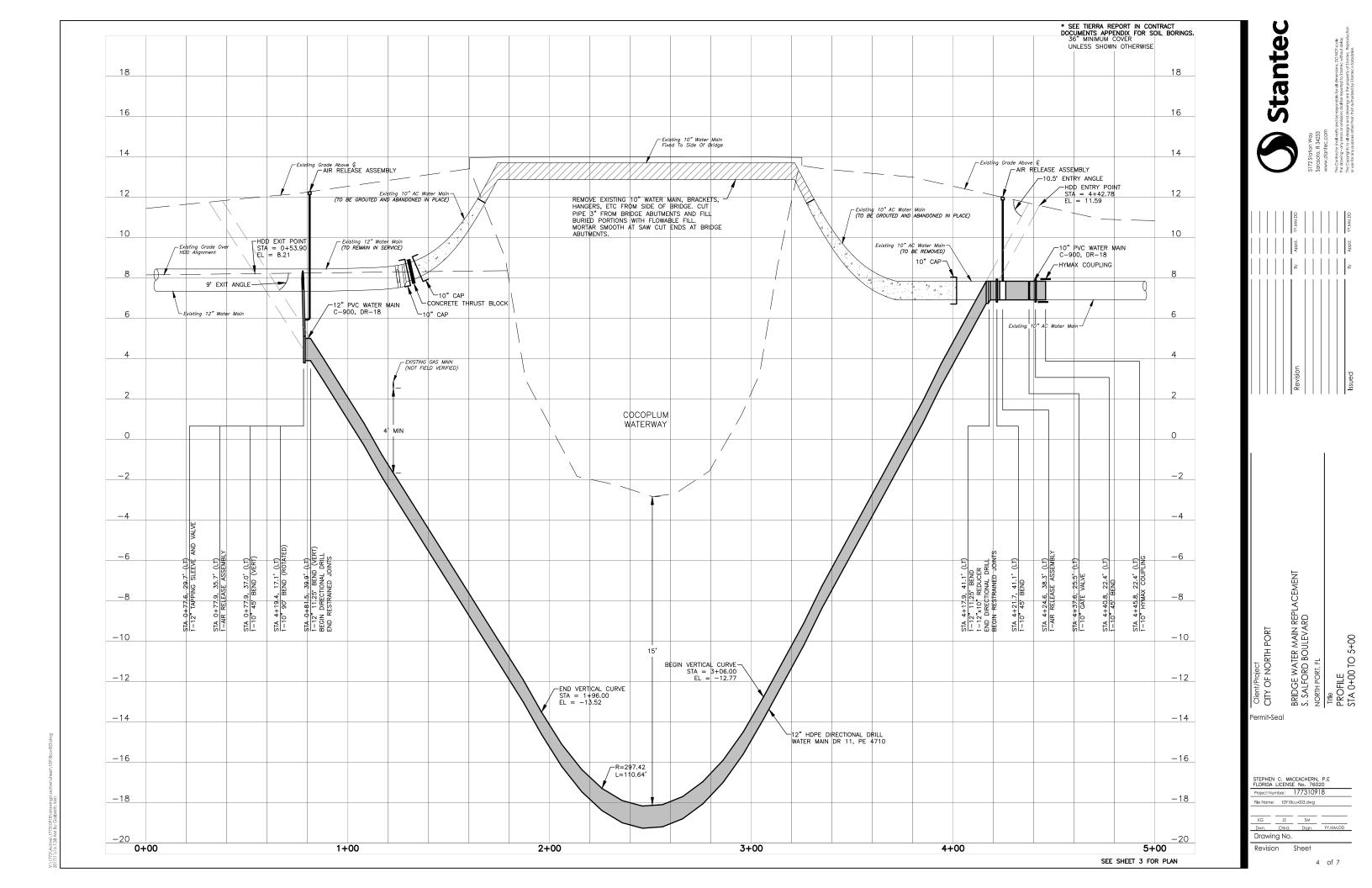
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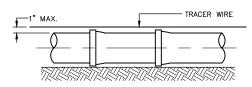
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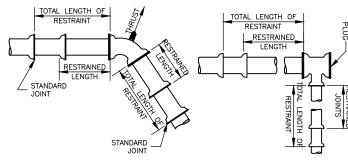
CONNECTION DETAIL 2



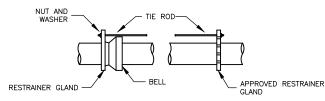


1. ALL WATER MAINS, FORCE MAINS, AND REUSE MAINS SHALL REQUIRE ALL WAIER MAINS, FORCE WAINS, AND REUSE MAINS SHALL REQUIRE INSULATED METALLIC TRACER WIRE (12 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE. TRACER WIRE SHALL TERMINATE AT THE TOP OF TRACER WIRE ACCESS BOXES AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX. USE DUCT TAPE AS NECESSARY TO HOLD WIRE DIRECTLY ON THE TOP OF THE PIPE.

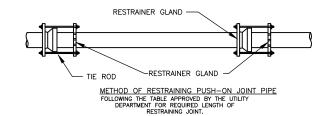
PVC PIPE LOCATING WIRE/TAPE DETAIL N.T.S.



RESTRAINED JOINTS STANDARD

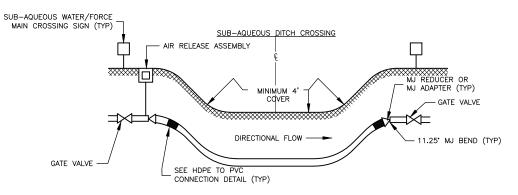


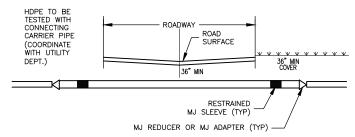
NOTE: TIE RODS TO BE FIELD COATED WITH BITUMINOUS COATING. DETAIL PUSH-ON JOINT



* ALL PVC PIPE SHALL BE RESTRAINED JOINTS

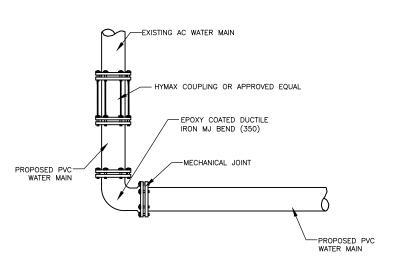
RESTRAINED JOINTS





- 1. HIGH DENSITY POLYETHYLENE PIPE IS TO BE CONNECTED TO THE CARRIER PIPE WITH A RESTRAINED MJ SLEEVE (OR MJ FITTING) AND BEFORE RESTRAINED REDUCER OR ADAPTER TO CARRIER PIPE.
- 2. HIGH DENSITY POLYETHYLENE PIPE IS TO BE BLACK WITH A COLOR CODED STRIPING: BLUE-WATER, GREEN-SEWER/FORCE MAIN, PURPLE-REUSE.
- 3. GATE VALVES ARE TO BE USED ON WATER MAINS AND FORCE MAINS, UNLESS NOT SHOWN ON PLANS.
- 4. TRACER WIRE TO BE PULLED WITH HIGH DENSITY POLYETHYLENE SHALL BE INSULATED WITH 10 GAUGE COPPER CAPABLE OF DETECTION BY A CABLE LOCATOR.

HIGH DENSITY POLYETHYLENE PIPE DIRECTIONAL BORES N.T.S.



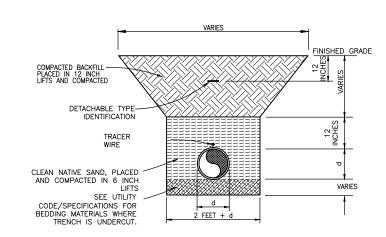
- ALL JOINTS TO BE RESTRAINED WITH MEG-A-LUG, GRIP RINGS OR APPROVED EQUAL
- 2. CONTRACTOR TO VERIFY EXISTING AC WATER MAIN OUTSIDE DIAMETER PRIOR TO ORDERING

CUT-IN BEND N.T.S.



- BACKGROUND OF SIGN SHALL BE WHITE, BORDER AND LETTERS SHALL BE BLACK HELVETICA, WITH THE EXCEPTION OF THE WORD WARNING WHICH SHALL BE IN RED REFLECTIVE PAINT MATERIAL AND THE NORTH PORT LOGO WHICH SHALL BE ONE COLOR BLACK WILL BE PROVIDED.
- 2. ENGINEERING GRADE REFLECTIVE MATERIALS SHALL BE
- 3. SIGN MATERIAL SHALL BE OF 14 GAUGE ANODIZED

SUB-AQUEOUS WATER MAIN CROSSING SIGN DETAIL



NOTES:

- TRENCH WIDTH SHALL BE APPROX. EQUAL TO THE PIPE DIA. + 2 FEET OR AS PER AWWA AND THE MANUFACTURERS RECOMMENDATIONS.
- 2. PROVIDE SHEETING AND SHORING AS NECESSARY IN ACCORDANCE WITH OSHA
- 3. BACKFILL MATERIALS SHALL BE APPROVED BY THE ENGINEER WHERE THE PIPE IS
- 4. WATER, SEWER, AND REUSE MAINS TO BE INSTALLED WITH A MINIMUM 36 INCHES OF
- FOR COUNTY RIGHT-OF-WAY, REFER TO LAND DEVELOPMENT REGULATIONS FOR ROADWAY REPLACEMENT, PAVEMENT OVERLAY, AND DENSITY REQUIREMENTS.
- FOR STATE RIGHT-OF-WAY, REFER TO F.D.O.T. REGULATIONS FOR ROADWAY REPLACEMENT, PAVEMENT OVERLAY, AND DENSITY REQUIREMENTS.
- 7. A MINIMUM OF ONE DENSITY TEST PER LIFT PER 300 LINEAR FEET OF PIPE SHALL BE PERFORMED AND RECORDED.

TRENCH DETAIL

Stantec

IDGE WATER MAIN SALFORD BOULEVA

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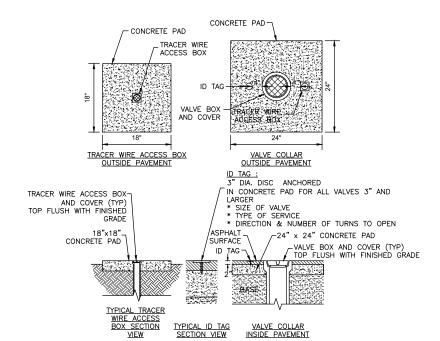
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Revision Sheet

NOTES

- 1. PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
- THE ACTUATING NUT FOR VALVES 48" DEEP AND DEEPER SHALL BE EXTENDED TO WITHIN 6" OF FINAL GRADE.
- 3. LOOP #12 GAUGE TRACER WIRE UP THRU TRACER WIRE ACCESS BOX.
- 4. NO VALVES SHALL BE MORE THAN 48" DEEP UNLESS APPROVED BY N.P. UTILITIES.
- 5. FOR INSERTION VALVE, THE EXISTING TRACER WIRE SHALL BE SPLICED WITH WIRE TO ACCESS BOX.

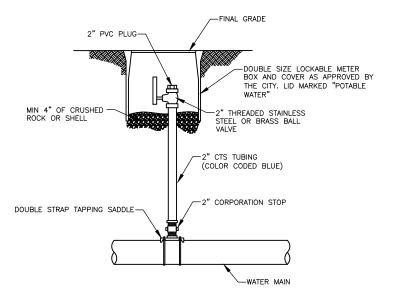
GATE VALVE AND CONCRETE COLLAR DETAIL N.T.S.



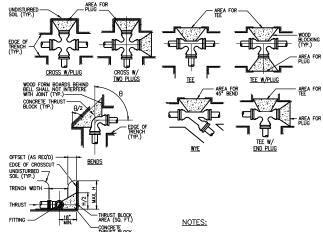
NOTES:

- BRASS IDENTIFICATION DISC AND VALVE COLLAR SHALL BE REQUIRED FOR ALL VALVES LOCATED OUTSIDE OF ROADWAY PAVEMENT.
- IN ROADWAYS, SET ID TAG IN TOP OF CURB AND TRACER WIRE ACCESS BOX WITHIN 3 FEET OF NEAREST EDGE OF PAVEMENT OR BACK OF CURB.
- 3. CONCRETE PADS SHALL BE 6" THICK 3000 PSI CONCRETE REINFORCED W/FIBER MESH SET ON 98% T-180 COMPACTED

VALVE COLLAR DETAIL N.T.S



MANUAL PRESSURE TESTING STATION / AIR RELEASE



RUST BLOCK

TYPICAL SECTION

SCHEDULE FOR THRUST BLOCK AREAS

10 17 9 5 3 12 150

THRUST BLOCK AREAS TO BE COMPUTED ON BASIS OF LISS. PER SQ. FT. SOIL RESTRAINT SEE NOTE 5

- THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL.

 EXTEND THRUST BLOCK FULL LENGTH OF FITTINGS. JOINTS SHALL NOT BE COVERED BY THRUST BLOCKS. FITTINGS SHALL BE PROTECTED BY POLYETHYLENE FILM (8 MIL.) PRIOR TO PLACING CONCRETE THRUST BLOCKS.
- 3. ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS, AS REQUIRED.
- 4. THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED, TO SUIT THE SPECIFIC FITTING ARRANGEMENT.
- 5. ALTERNATE DESIGNED RESTRAINING SYSTEMS SHALL BE PROVIDED WHERE STANDARD THRUST BLOCKING IS NOT SUITABLE AND/OR SOIL RESISTANCE BEARING IS LESS THAN 1500 PSF.
- 6. ALL WOOD BLOCKING SHALL BE PRESSURE TREATED WITH PRESERVATIVE.

THRUST BLOCK DETAIL N.T.S.

Revision 8y Appd

R MAIN REPLACEMENT DULEVARD

dge water main re Alford Boulevari th port, fl

Sermit-Seal

. Б

STEPHEN C. MACEACHERN, P FLORIDA LICENSE No. 76020 Project Number: 177310918

File Name: 10918cu-005.dwg

KG 1S SM

Drawing No.

Revision Shee

sheet

MOLDED DIPS DR11 HDPEXMJ ADAPTER
(EQUAL TO DRISCO PLEX OR INDEPENDENT PIPE PRODUCTS)

WELDED HDPE CONNECTION

DIPS DR11
HDPE TO PVC CONNECTION

TRACING WIRE

MJ COUPLING OR MJ FITTING

PVC C900, DR-18

MEGALUG RESTRAINT

HDPE TO PVC CONNECTION

N.T.S.

6 of 7

EROSION CONTROL NOTES

1. GENERAL

THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, TOOLS, MATERIALS AND SERVICES NEEDER TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES. THESE MEASURES SHALL CONFORM TO THE PLANS AND SPECIFICATIONS AND ALL APPLICABLE STATE AND LOCAL REQUIREMENTS.

2. WETLAND PROTECTION

- IN AREAS OF CONSTRUCTION ADJACENT TO WETLANDS, THE FOLLOWING SHALL BE PERFORMED:
- d) THE ACTUAL WETLAND AND REQUIRED BUFFERS, AS SHOWN ON THE PLANS, MUST BE ESTABLISHED AND ROPED OFF PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY ADJACENT TO SAID AFFAS.
- PRIOR TO THE PLACEMENT OF ANY FILL MATERIAL ADJACENT TO WETLANDS OR BUFFER AREAS, A SILTATION BARRIER SHALL BE CONSTRUCTED.
- c) NO RIM DITCHING OF THE WETLANDS SHALL BE PERFORMED. WATER LEVELS IN THE WETLANDS SHALL BE MAINTAINED ACCORDING TO LEVELS EXISTING PRIOR TO SITE DISTURBANCE.
- d) IN AREAS OF WETLANDS IN WHICH WORK IS TO BE PERFORMED, SUCH AREAS MUST BE CLEARLY STAKED AND ROPED OFF. ALONG SUCH LIMITS, A SILTATION BARRIER MUST BE CONSTRUCTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF BARRIERS.
 BARRIERS SHALL REMAIN IN PLACE UNTIL ALL AREAS ARE STABILIZED.
- f) THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON DISTURBANCE OF WETLAND AREAS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ALL PROTECTED AREAS.
- g) AREAS WHERE IMPACTS WILL BE PERFORMED SHALL BE STRIPPED OF EXISTING MATERIAL AND STOCKPILED FOR USE IN THE RE-CREATION OF THE DISTURBED AREAS OR IN LITTORAL ZONES.

3. EARTH MOVING ACTIVITIES

- THE FIRST STAGE OF THE EARTH MOVING ACTIVITY SHALL BE CONFINED TO THE EXCAVATION OF THE STORMWATER FACILITY.
- GRADED AREAS SHALL BE SEEDED AND/OR SODDED WITHIN THIRTY (30) DAYS FOLLOWING EARTH MOVING PROCEDURES. IF THE TIME OF YEAR IS NOT CONDUCIVE FOR PERMANENT SEEDING, A TEMPORARY MULCH AND/OR SEEDING SHALL BE USED.
- TEMPORARY DIVERSION BERMS AND/OR BARRIERS SHALL BE REMOVED ONLY AFTER THE CONSTRUCTION OF THOSE AREAS DIRECTED TO THE BERMS AND/OR BARRIERS HAVE BEEN COMPLETED.

4. FILLS

- a) LAND TO BE CUT OR FILLED SHALL BE CLEARED OF TREES, STUMPS, ROOTS, BRUSH, BOULDERS, SOD AND DEBRIS.
- b) FILL AREAS SHALL BE SCARIFIED, KEYED AND DRAINED.
- c) FILL MATERIAL SHALL BE FREE OF SOD, ROOTS, OR OTHER DECOMPOSABLE MATERIAL
- d) THE PLACING AND SPREADING OF FILL MATERIAL SHALL BE STARTED AT THE LOWEST
- GENERALLY, A 6:1 SLOPE SHALL BE USED UNLESS SPECIFIC ENGINEERING DATA SHOWS A STEEPER SLOPE IS STABLE. SLOPES OF 4:1 OR FLATTER ARE DESIRABLE FOR EROSION CONTROL AND MAINTENANCE.
- FILLS SHALL BE SEEDED AND/OR MULCHED IMMEDIATELY UPON COMPLETION OF EARTH PLACEMENT.
- 9) WATER MANAGEMENT SYSTEMS SHALL BE PROVIDED TO PREVENT WATER CONCENTRATION AND ERODING THE FACE OF THE SLOPE. KEEP SURFACE WATER OFF THE FACE OF THE SLOPE
- DIVERSIONS SHALL BE CONSTRUCTED AT TOP OF THE SLOPES PRIOR TO CUTTING OPERATION TO CONVEY WATER FROM FACE OF SLOPE.
- STEEPNESS OF CUTS WILL DEPEND ON SOIL TYPE AND DESIGN; HOWEVER, CUT SLOPES OF 4:1 OR FLATTER ARE DESIRABLE FOR EROSION CONTROL AND STABILITY.
- d) CUT SLOPES SHALL BE SEEDED AND/OR MULCHED IMMEDIATELY AFTER REMOVAL OF EARTH. 6. TEMPORARY SEDIMENT BASIN AND PERMANENT STORMWATER BASINS

b) CUT-OFF TRENCH

A CUT-OFF TRENCH, WHICH POWD DETH'S ARE, IN EXCESS OF THEEL FEET, SHALL BE DECOMINED ALONG THE CENTREIN OF CRAFT HELL BRANNMENTS. THE MAINING DEPTH SHALL BE WON FEET. THE CUT-OFF TRENCH SHALL EXTEND UP BOTH ABUTHENTS TO THE RISER RESET ELEVATION. THE MAINING BOTTOM DETH'S MALL BE FOUR FEET, BUT WERE DEVOUD TO FERMIT OFFERENCE PROFILED TO THE WORLD FOR THE PROFILED THE THE PROFILED THE SHALL BE THE SAME AS THOSE FOR THE BURNMENT. THE TRENCH SHALL BE CHEMISTED DURING THE BOXYFILLING-COMPACTION OFFERENCE DURING THE SHALL BE CHEMISTED DURING THE BOXYFILLING-COMPACTION OFFERENCE THE SHALL BE CHEMISTED DURING THE BOXYFILLING-COMPACTION OFFERENCE SHALL BE CHEMISTED DURING THE BOXYFILLING-COMPACTION OFFERENCE SHALL BE CHEMISTED DURING THE SOMETHING.

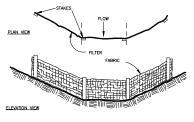
d) PIPE SPILLWAYS

e) EROSION POLLUTION CONTROL

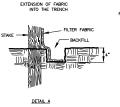
CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED, STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPUED WITH.

7. MAINTENANCE

- REPAIR ALL DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION EQUIPMENT BEFORE THE END OF EACH WORK DAY.
- c) AFTER CONSTRUCTION IS COMPLETED AND AREAS ARE SEEDED AND/OR SODDED, MAINTENANCE IS LIMITED TO VISUAL INSPECTIONS ON A ROUTINE BASIS, ANY DAMAGE TO THE BERN SHALL BE REPARRED AT ONCE AND RE-SODDED AND/OR RE-SEEDED. THE LEVEL OF WATER IS BEING MAINTAINED OVER THE EXPECTED DRAW DOWN TIME, THE OUTTAIL SYSTEM SHALL BE CLEANED AND REPARRED.



NOTE: SUMP DESIGNED TO USE A 4" DIESEL PUMP @ 200 G.P.M.



1. FILTER BARRIERS MUST BE INSTALLED, AS INDICATED HEREIN, PRIOR TO CONSTRUCTION.

FILTER BARRIERS SHALL NOT BE INSTALLED IN ANY CONFIGURATION THAT BLOCKS THE THROAT OF ANY STORMWATER INLET.

PROTECTION OF INLETS

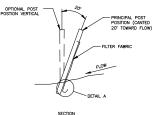
SILTATION POND DETAILS

(REQUIRED DURING DEWATERING FOR SUMP EXCAVATION ONLY)

3. INSPECTIONS AND REPAIRS TO BARRIERS SHALL BE MADE DAILY.

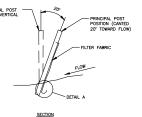
STAKED SILT BARRIER (DURING CONSTRUCTION ONLY)

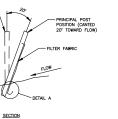
4. FILTER BARRIERS SHALL BE REMOVED UNTIL APPROVED BY ENGINEER

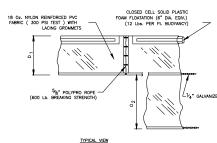


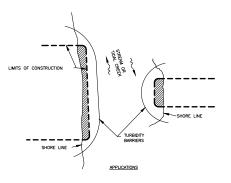
SOD 2' MINIMUM ALL AROUND INLET

STAKED FILTER FABRIC (USE STAKED HAY BALES AS ALTERNATE)



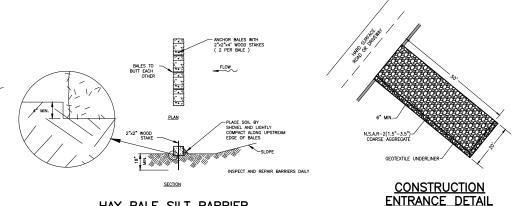




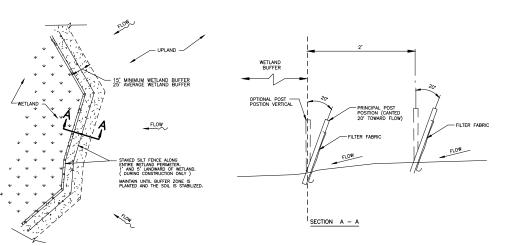


- 1. D₁ = 5' STANDARD (SINGLE PANEL FOR DEPTH 5' OR LESS). Q = 5' STANDARD (ADDITIONAL PANEL FOR DEPTHS >5'). CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIAL DEPTH CURTAINS SPECIAL PORT IN THE PLANS OR AS DETERMINED BY THE ENGINEER.
- 2. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH WHEN ADJACENT TO CONSTRUCTION ACTIVITIES.
- 3. NUMBER AND SPACING OF ANCHORS DEPENDENT ON WATER VELOCITIES.
- 4. BARRIERS TO REMAIN IN PLACE UNTIL APPROVED FOR REMOVAL BY ENGINEER

FLOATING TURBIDITY BARRIER



HAY BALE SILT BARRIER



FLOW

WETLAND PROTECTION



SALFORD BOULEVARD

CII Permit-Seal

P.

Drawing No.

Revision Sheet

7 of 7

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.

Rick Scott Governor

Celeste Philip, MD, MPH

State Surgeon General

November 13, 2017

Notification of Acceptance of Use of a General Permit

Permittee:

City of North Port Utilities Rick Newkirk, Utilities Director 6644 West Price Boulevard North Port, FL 34291

rnewkirk@cityofnorthport.com

Permit Number: 0208589-162

Issue Date: 11/13/2017 WD: 0651-17-010

Expiration Date: 11/12/2022

County: Sarasota

Project Name: Bridge Water Main Replacement-South Salford Boulevard/Cocoplum Waterway Water Supplier: North Port Utilities

PWS ID: 6580651

Dear Mr. Newkirk:

On November 8, 2017, the Florida Department of Health received a "Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs" [DEP Form No. 62-555.900(7)], under the provisions of Rule 62-4.530 and Chapter 62-555, Florida Administrative Code (F.A.C.). The proposed project includes Install approximately 380 LF WM. Main will be installed by open cut and HDD of 10-inch WM (12-inch Diameter HDD) from the existing main on the north side of the bridge over the Cocoplum Waterway to the south side of the bridge. The new main will replace the existing 10-inch water main attached to the side of the bridge

Based upon the submitted Notice and accompanying documentation, this correspondence is being sent to advise that the Department does not object to the use of such general permit at this time. Please be advised that the permittee is required to abide by Rule 62-555.405, F.A.C., all applicable rules in Chapters 62-4, 62-550, 62-555, F.A.C., and the General Conditions for All General Drinking Water Permits (found in 62-4.540, F.A.C.).

The permittee shall comply with all sampling requirements specific to this project. These requirements are attached for review and implementation.

Pursuant to Rule <u>62-555.345</u>, F.A.C., the permittee shall submit a certification of construction completion [DEP Form No. <u>62-555.900(9)</u>] to the Department and obtain approval, or clearance, from the Department before placing any water main extension constructed under this general permit into operation for any purpose other than disinfection or testing for leaks.

Within 30 days after the sale or legal transfer of ownership of the permitted project that has not been cleared for service in total by the Department, both the permittee and the proposed permittee shall sign and submit an application for transfer of the permit using Form 62-555.900(8), F.A.C., with the



DEP File No.:0208589-162 WD:0651-17-010

appropriate fee. The permitted construction is not authorized past the 30-day period unless the permit has been transferred.

This permit will expire five years from the date of issuance. If the project has been started and not completed by that time, a new permit must be obtained before the expiration date in order to continue work on the project, per Rule 62-4.030, F.A.C.

Paul B. Penumudi, P.E.

Professional Engineer I

Sincerel

cc: Stephen MacEachern, P.E./Stantec Consulting Services, Inc.

DEP File No.:0208589-162 WD:0651-17-010

A Civil Penalty May Be Incurred if this project is placed into operation before obtaining a clearance from this office.

Requirements for clearance upon completion of projects are as follows:

1) Clearance Form

Submission of a fully completed Department of Environmental Protection (DEP) Form 62-555.900(9) Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components into Operation.

2) Record Drawings

Submission of the portion of record drawings showing deviations from the DEP construction permit, including preliminary design report or drawings and specifications.

3) Bacteriological Results

Copies of satisfactory bacteriological analysis (a.k.a. Main Clearance), taken within sixty (60) days of completion of construction, from locations within the distribution system or water main extension to be cleared, in accordance with Rules 62-555.315(6), 62-555.340, and 62-555.330, F.A.C. and American Water Works Association (AWWA) Standard C 651-92, as follows:

• Connection to an existing system (2)

Each location shall be sampled on two consecutive days, with sample points and chlorine residual readings clearly indicated on the report. A sketch or description of all bacteriological sampling locations must also be provided.

For further clarification contact:
Paul B. Penumudi, P.E.
Florida Department of Health in Sarasota County
1001 Sarasota Center Blvd
Sarasota, FL 34240
941-861-6133

Paul.penumudi@flhealth.gov

DEP File No.:0208589-162 WD:0651-17-010

All main clearances are to be scheduled with the Sarasota County Health Department, Office of Environmental Health per Florida Statutes 403.862. Sample points will be reviewed prior to main clearances.

All water lines will be disinfected in accordance with AWWA C651-99 with the chlorinated water being sampled by a utility inspector. Introduction of the disinfection shall be witnessed by a utility inspector. All sample taps shall be non-threaded. Any sampling location that is a fire hydrant requires prior approval by this Department and the Utility.

All water mains will be pressure-tested in accordance with AWWA C600 Pipe Laying Section and test being witnessed by the Utility.

City of North Port Utilities Rick Newkirk, Utilities Director 6644 West Price Boulevard North Port, FL 34291 Permit/Cert. Site: 0208589-162 WD: 0651-17-010 Date of Issue: November 13, 2017 Expiration Date: November 12, 2022 Project: Bridge Water Main Replacement-South Salford Boulevard/Cocoplum Waterway

GENERAL CONDITIONS

- 1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727 or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, or its agent, employees, servants or representatives.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by this department.
- 3. As provided is in Subsections 403.08(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state of local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.
- This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the internal Improvement Trust Fund may express state opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution or contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.
- The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
 - a. Having access to and copying any records that must be kept under the conditions of the permittee;
 - b. Inspecting the facility, equipment, practices, or operations regulated or require under this permit; and
 - c. Sampling or monitoring any substances or parameters at any locations reasonably necessary to assure compliance with this permit or department rules.
- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:
 - a. a description of and cause of non-compliance; and
 - b. the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

City of North Port Utilities Rick Newkirk, Utilities Director 6644 West Price Boulevard North Port, FL 34291

Permit/Cert. Site: 0208589-162 WD: 0651-17-010

Date of Issue: November 13, 2017 Expiration Date: November 12, 2022 Project: Bridge Water Main Replacement-South

Salford Boulevard/Cocoplum Waterway

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, and may be used by the department as evidence in any enforcement case arising; under the Florida Statutes or department rules, except where such use is prescribed by Section 403.73 and 403.111, Florida Statutes.

- 10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.
- 11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.
- This permit is required to be kept at the work site of the permitted activity during the entire 12. period of construction or operation.
- 13. This permit also constitutes:
 - *Determination of Best Available Control Technology (BACT)
 - *Determination of Prevention of Significant Deterioration (PSD)
 - *Certification of Compliance with State Water Quality Standards
 - *Compliance with New Source Performance Standards
- 14. The permittee shall comply with the following monitoring and record keeping requirements:
 - Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.
 - The permittee shall retain at the facility or other location designated by this permit, records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample measurement, report or application unless otherwise specified by department rule.
 - Records of monitoring information shall include:
 - *the date, exact place, and time of sampling or measurements;
 - *the person responsible for performing the sampling or measurements;
 - *the date(s) analyses were performed;
 - *the person responsible for performing the analyses;
 - *the analytical techniques or methods used; and *the results of such analyses.
- 15. When requested by the department, the permittee shall within a reasonable time furnished any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.



Florida Department of Environmental Protection

Carlos Lopez-Cantera Lt. Governor

South District
Post Office Box 2549
Fort Myers, Florida 33902-2549
SouthDistrict@dep.state.fl.us

Noah Valenstein Secretary

Rick Scott

Governor

November 29, 2017

City of North Port Utilities
Richard Newkirk
c/o Stephen MacEachern, Stantec Consulting Services, Inc.
5172 Station Way
Sarasota, Flroida 34233
Stephen.MacEachern@stantec.com

File No.: 0358769-001-EG, Sarasota County

Dear Mr. Newkirk:

On November 7, 2017, we received your notice of intent to use a General Permit (GP), pursuant to Rule 62-330.457, Florida Administrative Code to perform the following activities:

To replace an existing potable water main affixed to the bridge with a 12-inch diameter HDPE water main via HDD under the Cocoplum Canal at South Salford Boulevard, North Port, Florida 34291 in Cocoplum Canal, Class III Waters, Section 33, Township 39 South, Range 21 East, Sarasota County.

Your intent to use a general permit has been reviewed by Department staff for three types of authorizations: (1) regulatory authorization, (2) proprietary authorization (related to state-owned submerged lands), and (3) federal authorization. The authority for review and the outcomes of the reviews are listed below. Please read each section carefully.

Your project either qualifies or was not applicable for all three authorizations types. However, this letter does not relieve you from the responsibility of obtaining other federal, state, or local authorizations that may be required for the activity.

If you change the project from what you submitted, the authorization(s) granted may no longer be valid at the time of commencement of the project. Please contact us prior to beginning your project if you wish to make any changes.

File No: 0358769-001-EG

Page 2 of 5

1. Regulatory Review – APPROVED

Based on the forms, drawings, and documents submitted with your notice, it appears that the project meets the requirements for the general Permit under Rule 62-330.457, Florida Administrative Code. Any activities performed under a general permit are subject to general conditions required in Rule 62-330.405, Florida Administrative Code (attached), and the specific conditions of Rule 62-330.457, Florida Administrative Code (attached). Any deviations from these conditions may subject the permittee to enforcement action and possible penalties.

Please be advised that the construction phase of the GP must be completed within five years from the date the notice to use the GP was received by the Department. IF you wish continue this GP beyond the expiration date, you must notify the Department at least 30 days before its expiration.

Authority for review – Part IV of Chapter 373 of the Florida Statutes, Title 62, Florida Administrative Code, and in accordance with the operating agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, Florida Administrative Code.

2. Proprietary Review – NOT REQUIRED

The activity does not appear to be located on sovereign submerged lands, and does not require further authorization under Chapter 253 of the Florida Statutes, or Chapters 18-20 or 18-21 of the Florida Administrative Code.

3. Federal (SPGP) Review – APPROVED

Your proposed activity, as outlined in your application and attached drawings, qualifies for Federal authorization pursuant to the State Programmatic General Permit V, and a **SEPARATE permit** or authorization **will not be required** from the Corps. Please note that the Federal authorization expires on July 26, 2021. However, your authorization may remain in effect for up to 1 additional year, if provisions of Special Condition B. 27 of the SPGP V permit instrument are met. You, as permittee, are required to adhere to all General Conditions and Special Conditions that may apply to your project." Special conditions required for your project are attached. A copy of the SPGP V with all terms and conditions and the General Conditions may be found at http://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/."

Authority for review – an agreement with the USACOE entitled "Coordination Agreement Between the U.S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection, or Duly Authorized Designee, State Programmatic General Permit," Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

Additional Information

Please retain this general permit. The activities may be inspected by authorized state personnel in the future to ensure compliance with appropriate statutes and administrative codes. If the

File No: 0358769-001-EG

Page 3 of 5

activities are not in compliance, you may be subject to penalties under Chapter 373, Florida Statutes, and Chapter 18-14, Florida Administrative Code.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rule 28-106.201, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, any email address, any facsimile number, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section

File No: 0358769-001-EG

Page **4** of **5**

120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or by email at Agency clerk@dep.state.fl.us before the applicable deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this action is filed with the Clerk of the Department.

File No: 0358769-001-EG

Page **5** of **5**

Thank you for applying to the Submerged Lands and Environmental Resource Permit Program. If you have any questions regarding this matter, please contact Megan Mills by telephone at (239) 344-5670 or by e-mail at Megan.Mills@dep.state.fl.us. When referring to this project, please reference the file number listed above.

Executed in Lee County, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Sincerely,

Megan Mills

Permitting Program Administrator

South District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document, including all copies, were sent to the addressee and to the following listed persons:

None

FILING AND ACKNOWLEDGMENT

daleng Kedusy

FILED, on this date, pursuant to Section 120.52(7), F.S., with the designated Department clerk, receipt of which is hereby acknowledged.

November 29, 2017

Enclosures:

7 Project drawings

62-330.405, Florida Administrative Code

62-330.457, Florida Administrative Code

General Conditions for Federal Authorization for SPGP V

Special Conditions for Use of the SPGP V

Sea Turtle and Smalltooth Sawfish Construction Conditions

Standard Manatee Conditions for In-water Work 2011

Manatee ACOEKey Sarasota County

SHEET INDEX

- COVER SHEET
- GENERAL NOTES AND LEGEND
- 3 PLAN
- 4 PROFILE
- STANDARD DETAILS BEST MANAGEMENT PRACTICES

CITY OF NORTH PORT

CONSTRUCTION DRAWINGS FOR





BRIDGE WATER MAIN REPLACEMENT S. SALFORD BOULEVARD





UTILITIES
TELEPHONE CONTACT NUMBERS

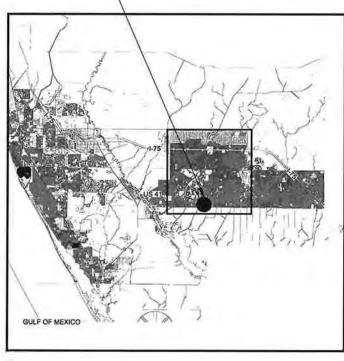
ENGINEERING PHONE: (941) 240-8000

OPERATIONS PHONE: (941) 240-8000

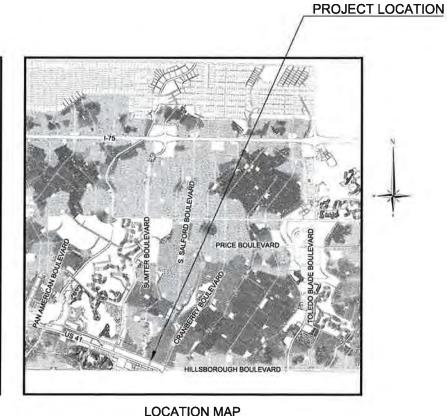
NORTH PORT CITY COMMISSION

VANESSA CARUSONE...... SEAT 1 (VICE-MAYOR) CHRISTOPHER HANKS...... SEAT 2 DEBBIE MCDOWELL..... SEAT 3 JILL LUKE..... SEAT 4 LINDA YATES..... SEAT 5 (MAYOR) PETER LEAR...... CITY MANAGER

PROJECT VICINITY CITY OF NORTH PORT, FL



VICINITY MAP



PLANS PREPARED BY:



Stantec Consulting Services Inc. 5172 Station Way Sarasota, FL U.S.A. 34233

Tel. 941.365.5500 Fax. 941.366.1922 www.slantec.com Florida Certification No. 27013

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA

PERMIT PLANS



STEPHEN C. MACEACHERN, P.E. #76020







NORTH PORT UTILITIES

RICK NEWKIRK..... .UTILITIES DIRECTOR MICHAEL ACOSTA, P.E....UTILITIES ENGINEERING MANAGER DARRELL SMITH.....CONSTRUCTION COORDINATOR

STANTEC PROJECT NO. 177310918 **NOVEMBER 2017**

Legend EXISTING TOPOGRAPHIC SYMBOLS

- DENOTES SPOT ELEVATION
- P -DENOTES PALM TREE
- □ −DENOTES GRATE INLET
- -DENOTES CABLE TELEVISION RISER
- DENOTES ELECTRIC SERVICE
- D -DENOTES LAMP POST
- © -DENOTES TELEPHONE RISER
- □ −DENOTES TELEPHONE VAULT
- - DENOTES BACK FLOW PREVENTER
- M -DENOTES WATER GATE VALVE
- -DENOTES FIRE HYDRANT ₩ -DENOTES WATER METER
- -DENOTES MITERED END SECTION
- D -DENOTES CATCH BASIN
- -DENOTES MAIL BOX
- -) -DENOTES GUY ANCHOR
- Ø -DENOTES UTILITY POLE
- DENOTED CAPPED IRON ROD FOUND (AS NOTED)
- DENOTES CAPPED IRON ROD SET (AS NOTED)
- → -DENOTES NAIL & DISK FOUND (AS NOTED)
- → DENOTES NAIL FOUND (AS NOTED)
- -DENOTES BENCHMARK (AS NOTED)

_	— n	PROPERTY LINE
		EDGE OF PAVEMENT
	- 10	CONCRETE SIDEWALK
	— TOB ——— =	TOP OF SWALE
_		RIGHT OF WAY
	— SD — =	STORM DRAIN
		OVERHEAD WIRE
_	_ w =	WATER MAIN

PROPOSED SYMBOLS

	(A)
MANUAL PRESSURE TESTING STATION / AIR RELEASE	
IN-LINE GATE VALVE W/ BOX	-H
FIRE HYDRANT ASSEMBLY, COMPLETE	·₩ ₡ /₽₩ ⋒
BLOW-OFF	P
PIPE PLUG	- 1 -
WATER METER	100
IRRIGATION METER	
REDUCER	
CAP]
CAP AND FLUSHING VALVE OUTLET	· -
BACKFLOW PREVENTER/ABOVE GROUND METER	
SANITARY SEWER MANHOLE	
SANITARY SEWER LATERAL & CLEAN-OUT	
DIRECTIONAL BORE WATE MAIN	
OPEN CUT WATER MAIN	
SOIL BORING	• -

LEGEND



SIDEWALK RESTORATION



FXISTING PIPE TO BE GROUTED



EXISTING PIPE TO BE REMOVED FROM BRIDGE

CONSTRUCTION NOTES:

- THE HORIZONTAL DATUM USED FOR THIS PROJECT IS NAD 1983. THE BENCHMARK DATUM USED FOR THIS PROJECT IS NAVD 1988.
- 2. THE CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ALL FENCING, SIGNAGE, MAILBOXES OR OTHER IMPROVEMENTS DISTURBED BY CONSTRUCTION. CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH PROPERTY OWNERS AND
- 3. THE CONTRACTOR SHALL CONFIRM THE HORIZONTAL AND VERTICAL LOCATIONS OF POTENTIAL UTILITY CONFLICTS AND TRANSMIT TO THE ENGINEER OF RECORD AND NORTH PORT UTILITIES DEPARTMENT (NPU) A MINIMUM OF THREE (3) BUSINESS DAYS AHEAD OF THE PIPE LAYING TO FACILITATE DESIGN MODIFICATIONS WHICH MAY BE NECESSARY, WITHOUT DELAYS TO THE
- THE CONTRACTOR SHALL TEST WATER MAIN PER CITY STANDARDS USING AWWA METHODS. FOR PVC, THE HDPE PIPING SHALL BE ISOLATED AND TESTED AS DESCRIBED LATER IN THIS PARAGRAPH, AND THE PVC/DIP PIPING SHALL BE TESTED SEPARATELY, DIRECTIONAL BORE HYDROSTATIC TESTING SHALL BE COMPLETED IN ACCORDANCE WITH PROJECT SPECIFICATIONS, OR AS APPROVED BY CITY UTILITIES." THESE GUIDELINES, INCLUDING PRETEST PROCEDURES, SHALL BE DOCUMENTED, THE DIP/PVC PIPES AND FITTINGS IN THE HDPE SEGMENTS SHALL BE VISUALLY VÉRIFIED TO NOT LEAK UNDER TEST
- ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH HEALTH DEPARTMENT AND LOCAL GOVERNMENT RULES AND REGULATIONS.
- 6. NOTIFY THE FIRE CHIEF AT firemarshall@cityofnorthport.com AND COPY TO NORTH PORT UTILITY DEPARTMENT REGULARLY TO ADVISE OF ROAD/LANE CLOSURES AND OTHER TRAFFIC IMPEDIMENTS
- CONTRACTOR SHALL OBTAIN RIGHT-OF-WAY PERMIT PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES.
- 8. THE CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO BI APPROVED BY THE ENGINEER OF RECORD AND NPU PRIOR TO THE START OF
- ALL SWALES, DRIVEWAY CULVERTS, AND/OR DRIVEWAY INVERTS IMPACTED BY CONSTRUCTION SHALL BE REPLACED IN-KIND BY THE CONTRACTOR USING THE ELECTRONIC SURVEY DATA PROVIDED FOR STAKEOUT TO MAINTAIN EXISTING
- 10. CONCRETE SIDEWALK & DRIVEWAY RESTORATION SHALL INCLUDE REPLACEMENT OF REINFORCED CONCRETE UP TO NEAREST SAW CUT.
- 11. THE CONTRACTOR SHALL INVESTIGATE AND VERIFY (OR HAVE VERIFIED) THE LOCATION OF EXISTING UTILITIES AND ANY OTHER SUBSURFACE FACILITIES
 BEFORE STARTING WORK. THE CONTRACTOR SHALL BE LIABLE FOR ANY
 EXPENSE RESULTING FROM DAMAGE TO SAME. ANY CONFLICTS WITH EXISTING UTILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND NPL
- 12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE CITY. AND THE ENGINEER 48 HOURS (TWO (2) BUSINESS DAYS) PRIOR TO ANY WORK AT SITE & 48 HOURS (TWO (2) BUSINESS DAYS) PRIOR TO ANY
- 13. THE CONTRACTOR SHALL COORDINATE HOLDING OF POLES WITH UTILITY COMPANIES IN ADVANCE SO UNICCESSARY DELAYS OF PROJECT SHALL NOT BE INCURRED. THE COST FOR THE HOLDING OF THE POWER POLES SHALL BE INCLUDED IN THE PIPELINE UNIT COST ITEMS CONTAINED IN THE BID.

- 1. CONTRACTOR SHALL FOLLOW F.A.C. 62-555.314 FOR HORIZONTAL AND VERTICAL SEPARATION OF THE WATER MAIN WITH OTHER UTILITY MAIN.
- 2. TRENCH SHALL BE BRACED OR SHORED IN ACCORDANCE WITH THE "FLORIDA
- 3. CONTRACTOR SHALL PLACE METALLIC BURIAL IDENTIFICATION TAPE DIRECTLY ABOVE DIRECT BURY WATER LINES IN CONFORMANCE WITH CITY STANDARDS.
- 4. ALL WELL POINT HOLES SHALL BE FILLED WITH COARSE SAND OR OTHER SATISFACTORY GRANULAR MATERIAL AT TIME WELL POINTS ARE PULLED
- 5. DISCHARGE FROM DE-WATERING OPERATIONS SHALL BE DISPOSED OF IN SUCH A MANNER THAT IT SHALL NOT INTERFERE WITH THE NORMAL DRAINAGE OF THE AREA IN WHICH THE WORK IS BEING PERFORMED OR CREATE A PUBLIC NUISANCE FROM PONDING. THE OPERATIONS SHALL NOT CAUSE DAMAGE TO ANY PORTION OF THE WORK COMPLETED, OR IN PROGRESS, OR TO THE SURFACE OF STREETS, OR TO PRIVATE PROPERTY. THE CONTRACTOR SHALL OBTAIN A DEWATERING PERMIT IF DEWATERING IS TO BE PERFORMED.
- THE CONTRACTOR SHALL PAY FOR AND PROVIDE SOIL COMPACTION TESTING IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, ALL SOIL COMPACTION TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AND NPU.



WATER MAIN NOTES:

- 1. ELEVATIONS SHOWN ON THE PLANS FOR FLOWLINES OF PROPOSED WATER MAINS SHALL BE ADHERED TO. IN MOST CASES THE DESIGN GRADES ARE CRITICAL, AND ADJUSTMENTS CAUSED BY MISALIGNMENT OR IMPROPER GRADES ARE IMPRACTICAL. COSTS TO RE-LAY MAIN, IF NECESSARY, SHALL BE BORNE BY THE
- 2. THE CONTRACTOR SHALL LOCATE WATER MAINS AT PROPOSED TIE—IN LOCATIONS TO VERIFY THE ACTUAL LOCATION, SIZE, ELEVATION, AND MATERIALS PRIOR TO ORDERING MATERIALS. THE CONTRACTOR SHALL NOTIFY THE CITY OF ANY DISCREPANCIES PRIOR TO COMMENCING CONSTRUCTION OR ORDERING
- 3. THE CONTRACTOR SHALL MAINTAIN MINIMUM SEPARATION BETWEEN UTILITIES AS SHOWN ON THE CONSTRUCTION PLANS AND IN ACCORDANCE WITH F.A.C. RULE 62-555.314 AND OTHER APPLICABLE REQUIREMENTS OF UTILITY OWNERS.
- THE MINIMUM DEPTH OF COVER FOR ALL WATER MAINS SHALL BE 36 INCHES. UNLESS SHOWN ON THE PLANS, COVER GREATER THAN FIVE (5) FEET BELOW FINISHED GRADE SHALL REQUIRE APPROVAL BY CITY PRIOR TO CONSTRUCTION, UNLESS PIPE IS INSTALLED VIA DIRECTIONAL DRILL.
- ALL PRESSURIZED MAINS SHALL BE RESTRAINED JOINT IN ACCORDANCE WITH THE CONSTRUCTION PLANS UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL ABIDE BY THE RESTRAINED JOINT PIPE LENGTHS LISTED IN THE RESTRAINED JOINTS TABLE UNLESS OTHERWISE INDICATED IN THE CONSTRUCTION PLANS OR
- THE CONTRACTOR SHALL PRESSURE TEST WATER MAINS IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS AND ANY PERMIT REQUIREMENTS. THE CONTRACTOR
- 7. THE CONTRACTOR SHALL NOTIFY THE CITY A MINIMUM OF TWO (2) BUSINESS DAYS IN ADVANCE OF LINE FLUSHING AND PRESSURE TESTING. A REPRESENTATIVE OF THE CITY MUST BE PRESENT TO WITNESS LINE FLUSHING AND PRESSURE
- 8. THE CONTRACTOR SHALL NOT CONNECT THE NEW WATER MAIN TO THE EXISTING UNTIL BACTERIOLOGICAL TESTING HAS PASSED AND THE MAIN HAS BEEN
- ALL RECLAIMED WATER MAINS SHALL BE BLUE IN COLOR IN ACCORDANCE WITH AWWA AND CITY STANDARDS.

DIRECTIONAL DRILL NOTES:

- 1. THE CONTRACTOR SHALL SUBMIT A WORK PLAN TO THE CITY FOR APPROVAL, DESCRIBING THE SEQUENCING AND PROPOSED STAGING AREA FOR DIRECTIONAL DRILLING TASKS, INCLUDING SUPPLEMENTAL OF A MAINTENANCE OF TRAFFIC PLAN. THE CONTRACTOR SHALL ALSO PREPARE A HORIZONTAL DIRECTIONAL DRILL PLAN
- THE CONTRACTOR SHALL UTILIZE EROSION CONTROL AND BEST MANAGEMENT PRACTICES (TO BE APPROVED BY THE CITY) FOR DIRECTIONAL DRILL FLUID CONTAINED WITHIN SUMP PITS TO AVOID CONTAMINATION OF DOWNSTREAM WATER
- THE CONTRACTOR SHALL DETERMINE WHERE ADDITIONAL DIRECTIONAL BORE ENTRANCE/EXIT LOCATIONS ARE REQUIRED. BASED ON THEIR SPECIFIC EQUIPMENT TO BE UTILIZED. AN AIR RELEASE ASSEMBLY IS REQUIRED AT EACH HIGH POINT SO CREATED. IF MORE AIR RELEASE ASSEMBLIES ARE REQUIRED THAN ARE INDICATED ON THE CONSTRUCTION PLANS, THE COST SHALL BE INCLUDED IN THE DIRECTIONAL DRILL UNIT COST.
- 4. HORIZONTAL DIRECTIONAL DRILL GEOMETRY OF ENTRANCE AND EXIT ANGLES AND BENDING RADIUS SHOWN FOR REFERENCE ONLY. VERTICAL AND HORIZONTAL CLEARANCES SHALL BE STRICTLY OBSERVED. THE CONTRACTOR MAY ADJUST THE ENTRY AND EXIT ANGLES AND RADIUS OF CURVATURE AS REQUIRED BASED ON FIELD CONDITIONS ENCOUNTERED AT THE TIME OF CONSTRUCTION AND THE CAPABILITIES OF THE EQUIPMENT UTILIZED. ANY MODIFICATIONS SHALL BE COORDINATED WITH THE CITY PRIOR TO CONSTRUCTION.
- 5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT HORIZONTAL AND VERTICAL TRANSITION OF WATER MAINS USING NO MORE THAN 75 PERCENT OF THE MAXIMUM ALLOWABLE DEFLECTION RECOMMENDED BY THE PIPE MANUFACTURER. SHOP DRAWINGS SHALL BE FURNISHED TO THE CITY FOR APPROVAL OF ALL PIPE CONNECTIONS, TRANSITIONS, ETC., PRIOR TO FABRICATION OR DELIVERY TO JOB SITE.
- ALL HOPE JOINTS ARE TO BE CONNECTED BY BUTT FUSION, ALLOWING TWO (2) HOURS CURE TIME (MINIMUM) BEFORE PIPE PULLBACK BEGINS.
- DRILLING AND PULLBACK MUST BE TIMED SO THAT ACCESS IS MAINTAINED 7. DRILLING AND POLLDACK MUST IS IMMED SO THAT ACCESS IS MAINTAINED FOR RESIDENTIAL DRIVEWAYS BETWEEN 4:00 PM AND 9:00 AM UNLESS OTHER ACCOMMODATIONS CAN BE AGREED UPON WITH INDIVIDUAL RESIDENTS. ALL COORDINATION WITH RESIDENTS WILL BE HANDLED BY THE CITY. THE CONTRACTOR SHALL COORDINATE WITH THE CITY FOR ALL NECESSARY COMMUNICATION WITH
- 8. NO. 10 COPPER TRACER WIRE SHALL BE PULLED WITH HDPE WATER MAINS INSTALLED BY DIRECTIONAL DRILL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL WASTE MATERIAL TO INCLUDE EXCESS SPOILS, DRILLING FLUID, DEMOLITION DEBRIS, AND ROCK. CONTRACTOR SHALL TRANSPORT AND DISPOSE OF ALL MATERIAL AT AN OFF-SITE FACILITY MEETING ALL LOCAL, STATE, AND FEDERAL
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL ENVIRONMENTAL RESOURCE PERMIT REQUIREMENTS INCLUDING IMPLEMENTATION OF THE PERMITTED FRAC-OUT CONTINGENCY PLAN, IF NEEDED.

AS-BUILTS:

- 1. THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS THAT MEET OR EXCEED THE CITY OF NORTH PORT STANDARDS, LATEST EDITION.
- 2. TOP OF PIPE ELEVATIONS FOR ALL MAINS ARE REQUIRED EVERY ONE HUNDRED FEET (100'), ON EACH FITTING, AND AT CHANGE IN GRADE.
- AS-BUILT DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR'S SURVEYOR. DRAFT COPIES SHALL BE SUBMITTED ELECTRONICALLY TO THE ENGINEER PRIOR TO FINALIZING THE AS-BUILT DRAWINGS. ONCE ACCEPTABLE TO THE ENGINEER, THE CONTRACTOR/SURVEYOR WILL PROVIDE ELECTRONIC SIGNED AND SEALED FINALIZED DRAWINGS TO THE ENGINEER IN ACAD FORMAT. AS-BUILT INFORMATION SHALL BE ON UNIQUE LAYER(S), NAD 1983 HORIZONTAL DATUM. NAVD 1988 VERTICAL DATUM, NORTHING/EASTING, AND TWO POINT SWING TIES.
- 4. AS-BUILT DRAWINGS SHALL INCLUDE DIRECTIONAL BORE LOGS SHOWING THE TOP OF HDPE PIPE ELEVATIONS.

CYRUS Mack No.76020 STATE OF CORIDA SONAL ENGIN MAN SIONAL 11 07 17

ceived Electronically
November 7, 2017 n District

DIS Manning

FLORIDA LICENSE No. 76020 lle Name: 10918cu-002.dwa

SALFORD BOULEYA

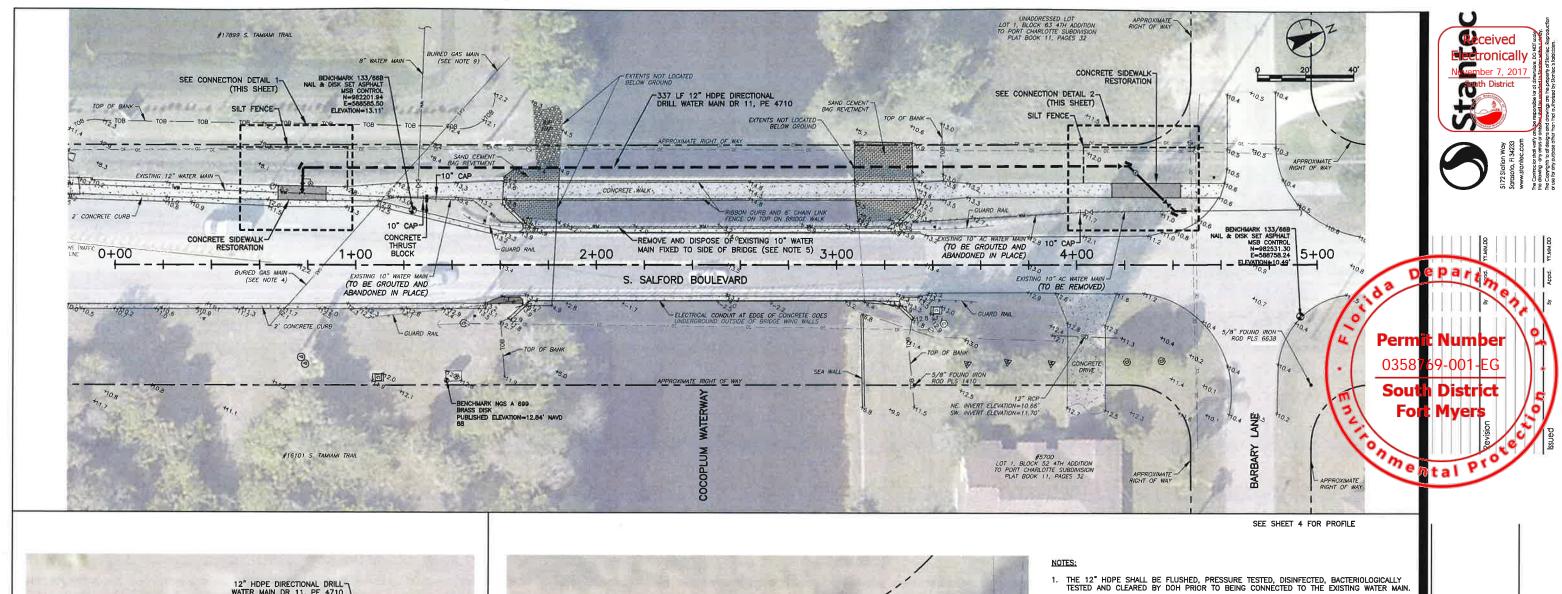
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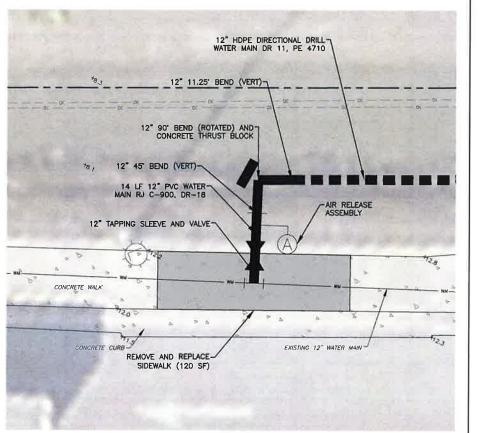
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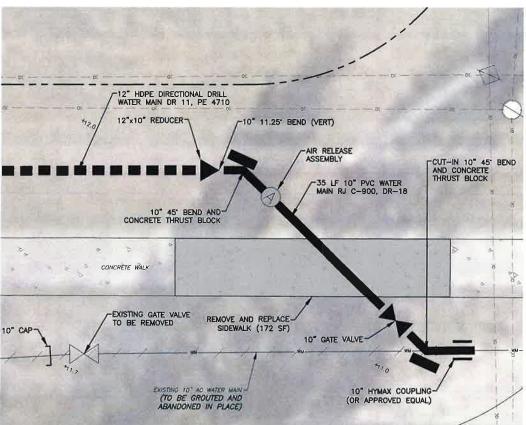
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Sheet 2 of 7





CONNECTION DETAIL 1



- 2. DURING DIRECTIONAL DRILLING OPERATIONS, THE CONTRACTOR SHALL TAKE CARE TO PROTECT THE EXISTING WATER MAIN AND AND STORM SEWER SYSTEM FROM DAMAGE. ANY DAMAGE TO THE EXISTING WATER MAIN OR STORM SEWER SYSTEM FROM DAMAGE. ANY BY THE CONTRACTOR AT NO ADDITIONAL COST TO NORTH PORT UTILITY DEPARTMENT.
- 3. EXISTING WATER MAIN IDENTIFIED TO BE ABANDONED IN PLACE SHALL BE CAPPED AND FILLED WITH FLOWABLE FILL ONCE THE NEW MAIN IS IN SERVICE.
- CONTRACTOR SHALL LOCATE THE HORIZONTAL AND VERTICAL LOCATION OF THE EXISTING GAS MAIN AT THE WATER MAIN CROSSING. THE EXISTING LOCATION SHALL BE PROVIDED TO NORTH PORT UTILITIES AND THE ENGINEER TO DETERMINE WHETHER THERE IS A CONFLICT.
- REMOVE EXISTING 10" WATER MAIN, BRACKETS, HANGERS, ETC FROM SIDE OF BRIDGE. CUT PIPE 3" FROM BRIDGE ABUTMENTS AND FILL BURIED PORTIONS WITH FLOWABLE FILL. MORTAR SMOOTH AT SAW CUT ENDS AT BRIDGE ABUTMENTS.
- 6. SAFE PEDESTRIAN PASSAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY SHELL SIDEWALK IN AREAS WHERE THE EXISTING SIDEWALK IS REMOVED TO FACILITATE CONSTRUCTION OF THE NEW
- CONTRACTOR SHALL COORDINATE WITH NORTH PORT UTILITIES ON WHICH EXISTING GATE VALVES NEED TO BE USED TO ISOLATE THE EXISTING WATER MAIN FOR CONNECTIONS.
- SILT FENCE LOCATIONS ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL ADJUST LOCATION IF NEEDED TO ACCOMMODATE THEIR CONSTRUCTION ACTIVITIES. SEE SHEET 7 FOR BEST MANAGEMENT PRACTICES.
- 9. THE CONTRACTOR SHALL FIELD LOCATE (HORIZONTAL AND VERTICAL) THE EXISTING GAS MAIN AT THE WATER MAIN HDD CROSSING TO ENSURE THE GAS MAIN IS NOT DAMAGED DURING DRILLING AND PULL BACK OPERATIONS.



STEPHEN C. MACEACHERN, P.E. LORIDA LICENSE No. 76020 Project Number: 17731091

Drawing No. Revision Sheet

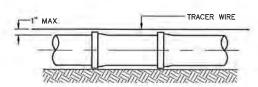
CONNECTION DETAIL 2

BRIDGE WATER MAIN F. S. SALFORD BOULEVAF. NORTH PORT, FL.

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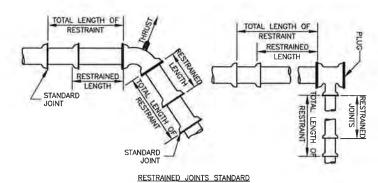
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NOTES:

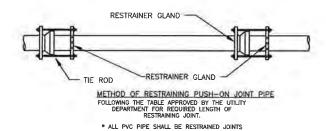
ALL WATER MAINS, FORCE MAINS, AND REUSE MAINS SHALL REQUIRE INSULATED METALLIC TRACER WIRE (12 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE, TRACER WIRE SHALL TERMINATE AT THE TOP OF TRACER WIRE ACCESS BOXES AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX. <u>USE DUCT TAPE AS NECESSARY TO HOLD WIRE DIRECTLY ON THE TOP OF THE PIPE.</u>

PVC PIPE LOCATING WIRE/TAPE DETAIL N.T.S.

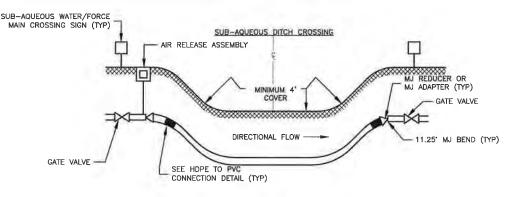


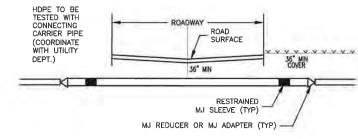
NUT AND WASHER APPROVED RESTRAINER RESTRAINER GLAND GLAND

NOTE: TIE RODS TO BE FIELD COATED WITH BITUMINOUS COATING DETAIL PUSH-ON JOINT



RESTRAINED JOINTS N.T.S

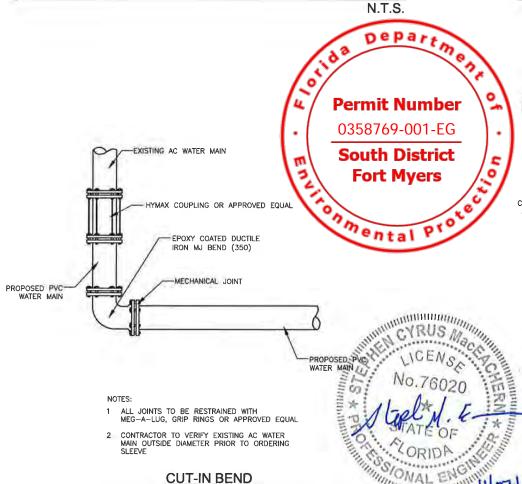




NOTES:

- 1. HIGH DENSITY POLYETHYLENE PIPE IS TO BE CONNECTED TO THE CARRIER PIPE WITH A RESTRAINED MJ SLEEVE (OR MJ FITTING) AND BEFORE RESTRAINED REDUCER OR ADAPTER TO CARRIER PIPE.
- $\mathbf{2}_{\text{I}}$ HIGH DENSITY POLYETHYLENE PIPE IS TO BE BLACK WITH A COLOR CODED STRIPING: BLUE-WATER, GREEN-SEWER/FORCE MAIN, PURPLE-REUSE.
- 3. GATE VALVES ARE TO BE USED ON WATER MAINS AND FORCE MAINS, UNLESS NOT
- 4. TRACER WIRE TO BE PULLED WITH HIGH DENSITY POLYETHYLENE SHALL BE INSULATED WITH 10 GAUGE COPPER CAPABLE OF DETECTION BY A CABLE LOCATOR.

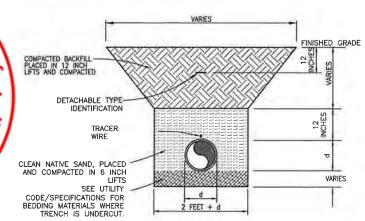
HIGH DENSITY POLYETHYLENE PIPE DIRECTIONAL BORES





- BACKGROUND OF SIGN SHALL BE WHITE, BORDER AND LETTERS SHALL BE BLACK HELVETICA, WITH THE EXCEPTION OF THE WORD WARNING WHICH SHALL BE IN RED REFLECTIVE PAINT MATERIAL. AND THE NORTH PORT LOGO WHICH SHALL BE ONE COLOR BLACK WILL BE PROVIDED
- ENGINEERING GRADE REFLECTIVE MATERIALS SHALL BE USED.
- 3. SIGN MATERIAL SHALL BE OF 14 GAUGE ANODIZED ALUMINUM.

SUB-AQUEOUS WATER MAIN CROSSING SIGN DETAIL N.T.S.



- TRENCH WIDTH SHALL BE APPROX EQUAL TO THE PIPE DIA. \pm 2 FEET OR AS PER AWWA AND THE MANUFACTURERS RECOMMENDATIONS.
- 2. PROVIDE SHEETING AND SHORING AS NECESSARY IN ACCORDANCE WITH OSHA STANDARDS
- 3. BACKFILL MATERIALS SHALL BE APPROVED BY THE ENGINEER WHERE THE PIPE IS UNDERCUT.
- WATER, SEWER, AND REUSE MAINS TO BE INSTALLED WITH A MINIMUM 36 INCHES OF COVER.
- 5. FOR COUNTY RIGHT-OF-WAY, REFER TO LAND DEVELOPMENT REGULATIONS FOR ROADWAY REPLACEMENT, PAVEMENT OVERLAY, AND DENSITY REQUIREMENTS. FOR STATE RIGHT-OF-WAY, REFER TO F.D.O.T. REGULATIONS FOR ROADWAY REPLACEMENT, PAVEMENT OVERLAY, AND DENSITY REQUIREMENTS.
- 7. A MINIMUM OF ONE DENSITY TEST PER LIFT PER 300 LINEAR FEET OF PIPE SHALL BE PERFORMED AND RECORDED.

TRENCH DETAIL N.T.S

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STANDARD

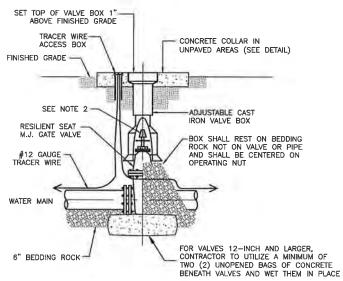
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STEPHEN C MACEACHERN, P E FLORIDA LICENSE No 76020 Project Number: 177310918 File Name: 10918cu-005.dwg

Drawing No. Sheet

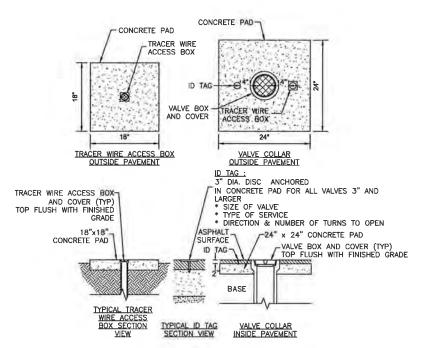
5 of 7



- PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
- THE ACTUATING NUT FOR VALVES 48" DEEP AND DEEPER SHALL BE EXTENDED TO WITHIN 6" OF FINAL GRADE.
- 3 LOOP #12 GAUGE TRACER WIRE UP THRU TRACER WIRE ACCESS BOX.
- 4. NO VALVES SHALL BE MORE THAN 48" DEEP UNLESS APPROVED BY N.P. UTILITIES.
- 5. FOR INSERTION VALVE, THE EXISTING TRACER WIRE SHALL BE SPLICED WITH WIRE TO ACCESS BOX.

GATE VALVE AND CONCRETE COLLAR DETAIL N.T.S.

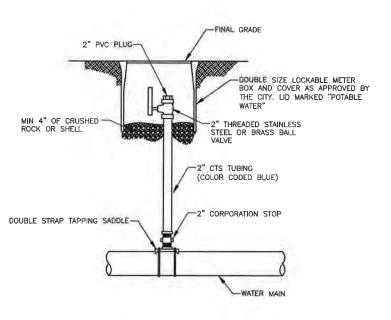
HDPE TO PVC CONNECTION



NOTES:

- 1. BRASS IDENTIFICATION DISC AND VALVE COLLAR SHALL BE REQUIRED FOR ALL VALVES LOCATED OUTSIDE OF ROADWAY PAVEMENT.
- IN ROADWAYS, SET ID TAG IN TOP OF CURB AND TRACER WIRE ACCESS BOX WITHIN 3 FEET OF NEAREST EDGE OF PAVEMENT OR BACK OF CURB.
- 3. CONCRETE PADS SHALL BE 6" THICK 3000 PSI CONCRETE REINFORCED W/FIBER MESH SET ON 98% T-180 COMPACTED

VALVE COLLAR DETAIL



MANUAL PRESSURE TESTING STATION / AIR RELEASE

THEY SELPCY

SCHEDULE FOR THRUST BLOCK AREAS

THRUST BLOCK AREAS TO BE COMPUTED ON BASIS OF (1,500 LBS). PER SQ. FT. SOIL RESTRAINT (1,500 LBN). BEJARNO. SEE NOTE 5

- THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL.
- 2. EXTEND THRUST BLOCK FULL LENGTH OF FITTINGS.
 JOINTS SHALL NOT BE COVERED BY THRUST BLOCKS.
 FITTINGS SHALL BE PROTECTED BY POLYETHYLENE FILM (8 MIL.) PRIOR TO PLACING CONCRETE THRUST
- 3. ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS, AS REQUIRED.
- THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED, TO SUIT THE SPECIFIC FITTING ARRANGEMENT.
- ALTERNATE DESIGNED RESTRAINING SYSTEMS SHALL BE PROVIDED WHERE STANDARD THRUST BLOCKING IS NOT SUITABLE AND/OR SOIL RESISTANCE BEARING IS LESS THAN 1500 PSF
- 6. ALL WOOD BLOCKING SHALL BE PRESSURE TREATED WITH PRESERVATIVE.

THRUST BLOCK DETAIL N.T.S.





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BRIDGE WATER MAIN F. S. SALFORD BOULEVAR NORTH PORT, FL

CITY OF NORTH PORT

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STEPHEN C MACEACHERN, P E FLORIDA LICENSE No. 76020 Project Number: 177310918

KG Chkd. Dsgn.

Drawing No.

Revision Sheet

MOLDED DIPS DR11 HDPExMJ ADAPTER

WELDED HOPE

(EQUAL TO DRISCO PLEX OR INDEPENDENT PIPE

N.T.S.

TRACING WIRE

MJ COUPLING OR MJ FITTING

- PVC C900, DR-18

MEGALUG RESTRAINT

EROSION CONTROL NOTES

1. GENERAL

2 WETLAND PROTECTION

- IN AMEAS OF CONSTRUCTION ADJACENT TO BETLANDS, THE FOLLOWING SHALL BE PERFORMED
- THE ACTUAL WETLAND AND REQUIRED BUFFERS, AS SHOWN ON THE PLANS, MUST BE ESTABLISHED AND ROPED OFF PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY ADJACENT TO SAID
- b) PRIOR TO THE PLACEMENT OF ANY FILL MATERIAL ADJACENT TO WETLANDS OR BUFFER AREAS, A SILTATION BARRIER SHALL BE CONSTRUCTED
- c) NO RIM DITCHING OF THE WETLANDS SHALL BE PERFORMED WATER LEVELS IN THE WETLANDS SHALL BE MAINTAINED ACCORDING TO LEVELS EXISTING PRIOR TO SITE DISTURBANCE.
- d) IN AREAS OF WETLANDS IN WHICH WORK IS TO BE PERFORMED, SUCH AREAS MUST BE CLEARLY STAKED AND ROPED OFF. ALONG SUCH LIMITS, A SILTATION BARRIER MUST BE CONSTRUCTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF BARRIERS BARRIERS SHALL REMAIN IN PLACE UNTIL ALL AREAS ARE STABILIZED
- f) THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON DISTURBANCE OF WETLAND AREAS THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ALL PROTECTED AREAS

3 EARTH MOVING ACTIVITIES

- b) DE CONTRACTOR SONIL EXTENSE CARE TO PRISONE THE NATIONAL LANGISCHE AND SMIL. PLAN CONSTRUCTOR OPERATIONS SO AS TO PREVENT ANY UNDECESSARY DESTRUCTION, SCARRING, OR REPCAUGO OF THE NUTHRIAN SURROUNDERS EXCEPT WHERE CLEARING IS REQUIRED FOR PERMANENT WORK, FOR APPROVED CONSTRUCTION ROUND, OR FOR EXCOUNTION OPERATIONS, ALL TREES, NATIVE SHUBBERY AND VECENTIONS SMALL BE PRESERVED AND SHALL BE PROTECTED FROM DAMAGE HISTER MAY SE CAUSED OF THE CONTRACTORS CONSTRUCTION OPERATIONS.
- N) THE FIRST STAGE OF THE EARTH MENNIG ACTIVITY SHALL BE CONTINUE TO THE EXCENSION OF THE STORMANTER FACULTY
- 4) GRADED AREAS SHALL BE SEEDED AND/OR SODDED WITHIN THIRTY (30) DAYS FOLLOWING EARTH MOVING PROCEDURES IF THE TIME OF YEAR IS NOT CONDUCTVE FOR PERMANDENT SEEDING, SHALL BE USED
- TEMPORARY DIVERSION BERMS AND/OR BARRIERS SHALL BE REMOVED ONLY AFTER THE CONSTRUCTION OF THOSE AREAS DIRECTED TO THE BERMS AND/OR BARRIERS HAVE SEEN COMPLETO.
- THE SILT COLLECTION PONDS SHALL BE REMOVED AND THE BEGRADED FOR
 PERMANENT USE, AS THE FINAL CONDUCT AND THE BEAUTY OF THE AREA LEFT OF THE BEAUTY OF TH

4. FILLS

- LAND TO BE CUT OR FILLED SHALL BE CLEARED OF TREES, STUMPS, ROOTS, BRUSH, BOULDERS, SOD AND DEBRIS
- c) FILL MATERIAL SHALL BE FREE OF SOD, ROOTS, OR OTHER DECOMPOSABLE MATERIA
- THE PLACING AND SPREADING OF FILL MATERIAL SHALL BE STARTED AT THE LOWEST POINT
- GENERALLY, A 6:1 SLOPE SHALL BE USED UNLESS SPECIFIC ENGINEERING DATA SHOWS A STEEPER SLOPE IS STABLE SLOPES OF 4:1 OR FLATTER ARE DESIRABLE FOR EROSION CONTROL, AND MAINTENANCE

- 9) WATER MANAGEMENT SYSTEMS SHALL BE PROVIDED TO PREVENT WATER CONCENTRATION AND ERODING THE FACE OF THE SLOPE KEEP SURFACE WATER OFF THE FACE OF THE SLOPE 5. CUTS

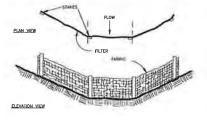
- DIVERSIONS SHALL BE CONSTRUCTED AT TOP OF THE SLOPES PRIOR TO CUTTING OPERATIONS TO CONVEY WATER FROM FACE OF SLOPE
- STEEPNESS OF CUTS WILL DEPEND ON SOIL TYPE AND DESIGN; HOWEVER, CUT SLOPES OF 4:1 OR FLATTER ARE DESIRABLE FOR EROSION CONTROL AND STABILITY
- CUT SLOPES SHALL BE BENCHED TO PROVIDE ACCESS FOR SEEDING AND MULCHING EQUIPMENT

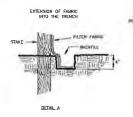
6 TEMPORARY SEDIMENT BASIN AND PERMANENT STORMWATER BASINS

CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED STATE AND LOCAL LAWS CONCERNING POLLUTION ABASEMENT SHALL BE COMPLEO WITH

7 MAINTENANCE

- ADPARE ALL DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION EQUIPMENT BEFORE THE DAY OF DIGH WORK DAY.
- c) AFTER CONSTRUCTION IS COMPLETED AND AREAS ARE SEEDED AND/OR SOODED, MAINTENANCE IS LIMITED TO VISUAL INSPECTIONS ON A ROUTINE DASS ANY OWNER OF THE REPORT AND A ROUTINE DASS ANY OWNER OF THE LEVEL OF WATER IS BEING MANIFAMED OVER THE EXPECTED DRAW DOWN TIME THE OUTPILL SYSTEM SHALL BE CLURADED AND REPORTED.



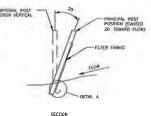


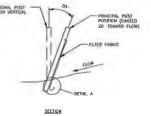
1 FILTER BARRIERS MUST BE INSTALLED, AS INDICATED HEREIN, PRIOR TO CONSTRUCTION 2 FILTER BARRIERS SHALL NOT BE INSTALLED IN ANY CONFIGURATION THAT BLOCKS THE THROAT OF ANY STORAWATER INLET

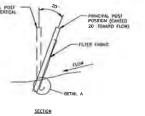
3 INSPECTIONS AND REPAIRS TO BARRIERS SHALL BE MADE DAILY

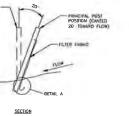
STAKED SILT BARRIER

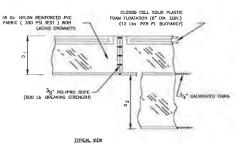
(DURING CONSTRUCTION ONLY)

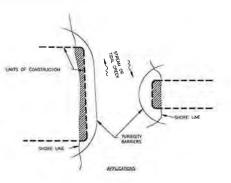






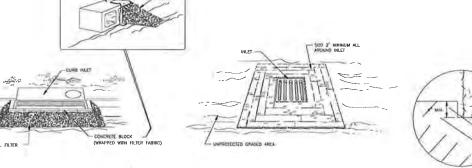


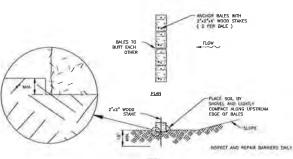


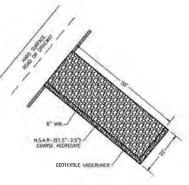


- 2. THEORY MAINLESS AND TO BE USED IN ALL PERMANENT HODES OF MAIN INCOMPLESS OF MAIN DEPTH MICH.
- 5. HAWRER AND SPACING OF ANCHORS DEPCNOON ON WATER VELOCITIES.
- A. INVESTED TO BEHAVE IN PLACE UND. APPROVED FOR HEMOVAL BY DISSISTER.

FLOATING TURBIDITY BARRIER





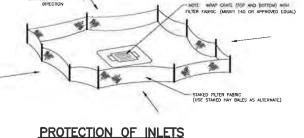


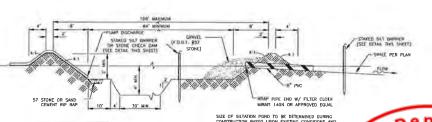
HAY BALE SILT BARRIER

MINIMUM WETLAND BUFFER

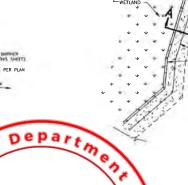
MAINTAIN UNTIL BUFFER ZONE IS PLANTED AND THE SOIL IS STABILIZE







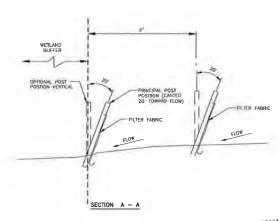
SILTATION POND DETAILS (REQUIRED DURING DEWATERING FOR SUMP EXCAVATION ONLY)



Permit Number 0358769-001-EG

South District Fort Myers

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WETLAND PROTECTION



Client/Proj

Permit-Seal

Drawing No. Revision

STEPHEN C. MACEACHERN, P.E. FLORIDA LICENSE No. 76020

File Name: 10918cu-007.dwa

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62-330.405 General Conditions for All General Permits.

The following general permit conditions are binding upon the permittee and are enforceable under Chapter 373, F.S. These conditions do not apply to the general permit in Section 403.814(12), F.S.

- (1) The general permit is valid only for the specific activity indicated. Any deviation from the specified activity and the conditions for undertaking that activity shall constitute a violation of the permit and may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
- (2) This general permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any construction, alteration, operation, maintenance, removal or abandonment authorized by this permit.
- (3) This general permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the general permit.
- (4) The general permit does not relieve the permittee from liability and penalties when the permitted activity causes harm or injury to: human health or welfare; animal, plant or aquatic life; or property. It does not allow the permittee to cause pollution that violates state water quality standards.
- (5) Section 253.77, F.S., provides that a person may not commence any excavation, construction, or other activity involving the use of state-owned or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required consent, lease, easement, or other form of authorization authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on state-owned lands.
- (6) The authorization to conduct activities under a general permit may be modified, suspended or revoked in accordance with Chapter 120, and Section 373.429, F.S.
- (7) This permit shall not be transferred to a third party except pursuant to Rule 62-330.340, F.A.C. The permittee transferring the general permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to sale, conveyance, or other transfer of ownership or control of the permitted project, activity, or the real property at which the permitted project or activity is located.
- (8) Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the permitted system to ensure conformity with the plans and specifications approved by the permit.
- (9) The permittee shall maintain any permitted project or activity in accordance with the plans submitted to the Agency and authorized in this general permit.
 - (10) A permitee's right to conduct a specific activity under this general permit is authorized for a duration of five years.
- (11) Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including other measures specified in the permit to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007*), available at www.dep.state.fl.us/water/wetlands/docs/erp/FLErosionSedimentManual_6_07.pdf, and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), available at www.dep.state.fl.us/water/nonpoint/docs/erosion/erosion-inspectors-manual.pdf.
- (12) Unless otherwise specified in the general permit, temporary vehicular access within wetlands during construction shall be performed using vehicles generating minimum ground pressure to minimize rutting and other environmental impacts. Within forested wetlands, the permittee shall choose alignments that minimize the destruction of mature wetland trees to the greatest extent practicable. When needed to prevent rutting or soil compaction, access vehicles shall be operated on wooden, composite, metal, or other non-earthen construction mats. In all cases, access in wetlands shall comply with the following:
- (a) Access within forested wetlands shall not include the cutting or clearing of any native wetland tree having a diameter 4 inches or greater at breast height;
 - (b) The maximum width of the construction access area shall be limited to 15 feet;
 - (c) All mats shall be removed within 72 hours after the work commences; and,
 - (d) Areas disturbed for access shall be restored to natural grades immediately after the maintenance or repair is completed.

- (13) Barges or other work vessels used to conduct in-water activities shall be operated in a manner that prevents unauthorized dredging, water quality violations, and damage to submerged aquatic communities.
- (14) The construction, alteration, or use of the authorized project shall not adversely impede navigation or create a navigational hazard in the water body.
 - (15) Except where specifically authorized in a general permit, activities must not:
- (a) Impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands;
- (b) Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to Section 373.042, F.S., or a Works of the District established pursuant to Section 373.086, F.S., or
- (16) If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850)245-6333 or (800)847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.
- (17) The activity must be capable, based on generally accepted engineering and scientific principles, of being performed and of functioning as proposed, and must comply with any applicable District special basin and geographic area criteria.
- (18) The permittee shall comply with the following when performing work within waters accessible to federally- or state-listed aquatic species, such as manatees, marine turtles, smalltooth sawfish, and Gulf sturgeon:
- (a) All vessels associated with the project shall operate at "Idle Speed/No Wake" at all times while in the work area and where the draft of the vessels provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- (b) All deployed siltation or turbidity barriers shall be properly secured, monitored, and maintained to prevent entanglement or entrapment of listed species.
- (c) All in-water activities, including vessel operation, must be shutdown if a listed species comes within 50 feet of the work area. Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the in-water work, or until 30 minutes elapses since the last sighting within 50 feet. Animals must not be herded away or harassed into leaving. All on-site project personnel are responsible for observing water-related activities for the presence of listed species.
- (d) Any listed species that is killed or injured by work associated with activities performed shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1(888)404-3922 and ImperiledSpecies@myFWC.com.
- (e) Whenever there is a spill or frac-out of drilling fluid into waters accessible to the above species during a directional drilling operation, the FWC shall be notified at imperiledspecies@myfwc.com with details of the event within 24 hours following detection of the spill or frac-out.
- (19) The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any activity authorized by the general permit.
- (20) The permittee shall immediately notify the Agency in writing of any submitted information that is discovered to be inaccurate.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.4145, 373.418, 403.805(1) FS. Law Implemented 373.044, 373.118(1), 373.129, 373.136, 373.406(5), 373.413, 373.4131, 373.414(9), 373.4145, 373.416, 373.422, 373.423, 373.429, 403.814(1) FS. History–New 10-3-95, Amended 10-1-07, Formerly 62-341.215, Amended 10-1-13.

62-330.457 General Permit for Subaqueous Utility Crossings of Artificial Waterways.

- (1) A general permit is granted to any person constructing, repairing or replacing a subaqueous utility crossing of artificial waters and residential canal systems, provided:
- (a) The crossing is not located in Class I waters, Class II waters or waters approved, conditionally approved, restricted, or conditionally restricted by the Department of Agriculture and Consumer Services for shellfish harvesting if the utility line conveys petroleum, domestic wastewater, phosphate matrix slurry, phosphatic clay or sand tailings, recirculated water from beneficiation processes, or other substances which, if leaked, could contaminate drinking water supplies or result in closure of shellfish harvesting waters;
- (b) The crossing shall be limited to non-navigable watercourses or to those waterways in which navigation can be maintained at all times without the necessity of constructing temporary berms, dikes, or dams, or removing or relocating turbidity control devices to allow boat passage. Customary navigation through the waterway shall be maintained at all times during installation;
- (c) No dredging or filling shall be conducted in wetlands or other surface waters, located landward of the top of the banks of the waterway. Dredging and back filling of littoral zones and wetland vegetation growing on the side slopes of the artificial waterway is authorized as necessary to install the subaqueous utility line crossing;
- (d) The maximum length of the utility crossing shall not exceed 150 feet from top of bank to top of bank. Excavated trench dimensions shall be limited to a depth of not more than ten feet below existing bottom contours and a trench top width of not more than ten feet;
 - (e) The maximum width of the area disturbed by equipment during construction shall be no more than 30 feet wide;
- (f) Temporary or permanent spoil disposal sites shall be located exclusively on uplands and shall be sited, designed, and managed to have the capacity to retain all dredged material;
- (g) All previously excavated contours are restored with onsite native backfill, coarse sand, or clean, non-toxic rock bedding or cap material, as appropriate, within 72 hours following installation of the utility line.
- (2) Installation, maintenance, repair, and removal conducted using directional drilling or jack-and-bore methods under this general permit are subject to the following special conditions.
 - (a) The maximum outside diameter of the cable, conduit or pipeline, including encasement, shall not exceed 24 inches.
- (b) A minimum of depth of cover, equal to the greater of either five feet, or five times the maximum encased diameter of the utility line to be installed, shall be maintained between the top of the utility line and casing and the soil surface or submerged bottom of any wetland or waterbody being crossed.
- (c) All work areas associated with directional drilling or jack-and-bore activities, including entrance and exit pits, drill rigs, tanks, pumps, drilling fluid mixing and settling pits, dewatering systems and staging areas for pipe, cables, and drill string, shall be located within uplands.
- (d) The use of drilling fluids shall not cause or contribute to a violation of state ground water quality criteria or standards, as defined in Chapter 62-520, F.A.C.
- (e) At least 48 hours prior to commencement of any directional drilling or jack-and-bore activities, the permittee shall submit to the agency the name, as registered with the Florida Department of State, and all-hours telephone contact information of all contractors responsible for drilling and for containment and cleanup in the event of a drilling fluid frac-out or spill.
- (f) The permittee or the contractor shall, at all times during directional drilling activities, maintain appropriate equipment and materials in a readily-accessible location and condition, to effectively contain and clean up a drilling fluid frac-out or spill.
- (g) The permittee or the permittee's contractor shall, at all times during directional drilling activities, ensure that appropriately-trained personnel monitor downhole equipment position, drilling fluid circulation and pressures, and actively monitor the entire utility line route for surface frac-out of drilling fluids.
- (h) Drilling activities shall be discontinued and the drilling fluid or slurry shall be contained using appropriate methods as soon as possible, in the event of a drilling fluid frac-out or spill. Removal of drilling fluid or slurry from wetlands and other surface waters shall be initiated and completed in the most expeditious manner practicable. Removed drilling fluid shall be contained or disposed of in an appropriate upland location. Any frac-out or spill of drilling fluid into wetlands or other surface waters shall be reported to Agency staff within 24 hours following detection of the spill or frac-out.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.418, 403.805(1) FS. Law Implemented 373.118(1), 373.406(5), 373.413, 373.4131, 373.414(9), 373.416, 373.418 FS. History–New 10-3-95, Formerly 62-341.457, Amended 10-1-13.

General Conditions for Federal Authorization for SPGP V

- 1. The time limit for completing the work authorized ends on July 26, 2021.
- 2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner on the enclosed form and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit.
- 6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Further Information:

- 1. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal projects.

- 2. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
 - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or Construction deficiencies associated with the permitted work.
 - e. Damage claims associated with any future modification, suspension, or revocation of this permit.
- 3. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
- 4. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permit.
 - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 3 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.
- 5. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CER 209.170) accomplish the corrective measures by contract or otherwise and bill you for

ATTACHMENT 1 TO SPGP V PAGE 3 OF 3

the cost.

- 6. When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date the enclosed form.
- 7. The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal, relocation or alteration.

Department of the Army Permit Transfer for SPGP V

PERMITEE:	
PERMIT NUMBER:	DATE:
ADDRESS/LOCATION OF PROJEC	CT:
(Subdivision)	(Lot) (Block)
When the structures or work authorized by Department of the Arn limitations, does not expire. To validate the transfer of this per with compliance with its terms and compliance with structures.	orized by this permit are still in existence at the time and conditions of this permit will continue to be property. Although the construction period for works my permits is finite, the permit itself, with its mit and the associated responsibilities associated onditions, have the transferee sign and date below Engineers, Enforcement Branch, Post Office Box
(Transferee Signature)	(Date)
(Name Printed)	
(Street address)	
(Mailing address)	
(City, State, Zip Code)	

Special Conditions Related to All Review and Authorizations

In addition to the conditions specified above, the following Special Conditions apply to all projects reviewed and/or authorized under the SPGP V.

- 1. The District Engineer reserves the right to require that any request for authorization under this SPGP V be evaluated as an Individual Permit. Conformance with the terms and conditions of the SPGP V does not automatically guarantee Federal authorization.
- 2. On a case-by-case basis the Corps may impose additional Special Conditions which are deemed necessary to minimize adverse environmental impacts.
- 3. Failure to comply with all conditions of the Federal authorizations under the SPGP V would constitute a violation of the Federal authorization.
- 4. No structure or work shall adversely affect or disturb properties listed in the National Register of Historic Places or those eligible for inclusion in the National Register. Prior to the start of work, the Applicant/Permittee or other party on the Applicant's/Permittee's behalf, shall conduct a search of known historical properties by contracting a professional archaeologist, and contacting the Florida Master Site File at 850-245-6440 or SiteFile@dos.state.fl.us. The Applicant/Permittee can also research sites in the National Register Information System (NRIS). Information can be found at http://www.cr.nps.gov/nr/research.
- a. If, during the initial ground disturbing activities and construction work, there are archaeological/cultural materials unearthed (which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work in the vicinity and notify the Compliance and Review staff of the State Historic Preservation Office at 850-245-6333 and the Corps Regulatory Project Manager to assess the significance of the discovery and devise appropriate actions, including salvage operations. Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7.
- b. In the unlikely event that human remains are identified, they will be treated in accordance with Section 872.05, Florida Statutes; all work in the vicinity shall immediately cease and the local law authority, the State Archaeologist (850-245-6444), and the Corps Regulatory Project Manager shall immediately be notified. Such activity shall not resume unless specifically authorized by the State Archaeologist and the Corps.
- 5. No work shall be authorized under the SPGP V which proposes the use of prefabricated modules for habitat creation, restoration, or enhancement except as allowed in Special Condition 15 for *Living Shorelines* of the *Shoreline Stabilization category*.
- 6. The Design and construction of a Project must comply with the following.

- a. Where aquatic vegetation is present, adverse impacts to aquatic vegetation from construction of piling-supported structures may be avoided/minimized by adherence to, or employing alternative construction techniques that provide a higher level of protection than, the protective criteria in the joint U.S. Army Corps of Engineers'/National Marine Fisheries Service's "Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat" U.S. Army Corps of Engineers/National Marine Fisheries Service August 2001 (updated June 2008). Unless otherwise specifically approved by the National Marine Fisheries Service, where aquatic vegetation is present, piling-supported structures authorized under the SPGP V must comply with, or provide a higher level of protection than, the criteria contained in the referenced construction guidelines. Mangrove impacts are limited to the removal of mangroves along 4 linear feet of shoreline to accommodate a 4-ft-wide access walkway associated with a dock that meets the above guidelines.
- b. Additionally, because of concerns about adverse impacts to the endangered Johnson's seagrass (*Halophila johnsonii*) in the lagoon and canal systems on Florida's east coast from Sebastian Inlet (Brevard County) south to and including central Biscayne Bay (Miami-Dade County), the following requirements must be met:
- (1) Piling-supported structures must comply with, or provide a higher level of protection than, the criteria contained in the construction guidelines titled "Key for Construction Conditions for Docks or Other Minor Structures Constructed in or Over Johnson's seagrass (Halophila johnsonii)" National Marine Fisheries Service/U.S. Army Corps of Engineers February 2002 (updated October 2002)."
- (2) Removal of derelict vessels must comply with the practices of Special Condition 18.
- (3) All other activities will have no effect on Johnson's seagrass, i.e., no seagrass is present.
- c. The presence of seagrass will be determined utilizing the attached "Submerged Aquatic Vegetation Survey Guidelines".
- 7. For projects in waters accessible to sea turtles, Smalltooth sawfish, Gulf sturgeon, or Shortnose sturgeon, the Permittee will utilize the "Sea Turtle and Smalltooth Sawfish Construction Conditions" and the following additions:
- a. Any collision(s) with and/or injuries to any whale, or sturgeon occurring during the construction of a project, shall be reported immediately to NMFS's Protected Resources Division (PRD) at (727-824-5312).
- b. Reports to NMFS's Protected Resources Division (PRD) may be made by email to takereport.nmfsser@noaa.gov.
- c. Sea turtle and marine mammal stranding/rescue organizations' contact information is available by region at http://www.nmfs.noaa.gov/pr/health/networks.htm.

- d. Smalltooth sawfish encounters shall be reported to http://www.flmnh.ufl.edu/fish/sharks/sawfish/sawfishencounters.html.
 - e. All work must occur during daylight hours.
- 8. The Permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The Permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.
- 9. The Permitee is responsible for compliance with 50 CFR 224.103(c) prohibiting approach within 500 yards of a right whale, with limited exceptions.
- 10. Turbidity control measures shall be used throughout construction to control erosion and siltation to ensure there are no violations of state or federal water quality standards. Turbidity control measures shall be: (1) for the smallest practicable area; (2) monitored daily to ensure listed species are not entangled or trapped in the project area; (3) shall be removed promptly upon project completion and the return of water quality conditions; (4) and shall not block entry to or exit from designated critical habitat. Siltation barriers shall be made of material in which listed species cannot become entangled (i.e., reinforced impermeable polycarbonate vinyl fabric [PVC]).
- a. Turbidity curtains are not required where not practical in dynamic systems such as surf zones and could actually do more harm than good if the curtains become detached (e.g., they could entrap pelagic organisms and become entangled around benthic organisms, such as coral).
- b. Turbidity barriers are not required if installation of single piling in deep water since is unlikely to adversely affect water quality.
- 11. In-water rope or chain must meet the following requirements: Industrial grade metal
- chains or heavy cables that do not readily loop and tangle; All in-water lines (rope and cable) must be thick and taut and cannot have excess line in the water; Lines can be enclosed in a plastic or rubber sleeve/tube to add rigidity.
- 12. No work shall occur where hard bottom or any hard or coral including ESA-listed coral species are present within the footprint of the project.
- 13. No work shall occur that results in removal of mangroves (including prop roots), except:
 - a. as provided by Special Condition 6.a.; or,
- b. for removal of mangroves growing at the foot or from an existing seawall whose removal needed to repair the seawall.
- 14. No work shall occur that results in impacts to seagrass except as provided by Special Condition 6.

- 15. (For Docks, Piers, Associated Facilities, and Other Minor Piling-Supported Structures and Boat Ramps and Boat Launch Areas and Structures Associated with Such Ramps or Launch Areas.)
- a. Aids to Navigation and Private Aids to Navigation (e.g. attached to the structures authorized by the SPGP) must be approved by and installed in accordance with U.S. Coast Guard requirements.
- b. Temporary structures associated with marine events will be removed and the site restored upon completion of the event.
- c. (For multi-family residential docks (e.g., condos, trailer parks, apartment complexes) designated for fishing or vessel storage, for temporary marine event pile-supported structures involving high speed vessel traffic or fishing, and for commercial or public boat ramps.) Install educational signs as follows in a visible location to alert boaters of listed species in the area susceptible to vessel strikes or hook-and-line captures. NMFS website (http://sero.nmfs.noaa.gov/protected_resources/section_7/protected_species_educational_signs/i ndex.html) provides sign installation guidance and most current version of the signs.
- (1) All commercial and public boat ramps shall install the Save Sea Turtle, Sawfish, and Dolphin sign.
- (2) If the Project occurs within the range of Gulf, Atlantic, or Shortnose sturgeon, the Permittee will install and maintain the *Report Sturgeon* sign.
- (3) If the Project occurs within 14 miles of North Atlantic Right Whale critical habitat, the Permittee will install and maintain the *Help Protect North Atlantic Right Whales* sign.
- d. Project construction will take place from uplands or from floating equipment (e.g., barge); prop or wheel-washing is prohibited.
- 16. (For *Transient activities*.)
- a. Temporary structures shall not block access of species to an area such as preventing movement in or out of a river or channel.
- b. (For scientific sampling, measurement, and monitoring devices.) No later than 24 months from initial installation, or upon completion of data acquisition, whichever comes first, the measuring device and any other structure or fills associated with that device (e.g., anchors, buoys, lines) must be removed and the site must be restored to pre-construction elevations.
- 17. (For *Living Shorelines* of the *Shoreline Stabilization category*.)
 - a. Only native plant species will be planted.

- b. Not more than 500 linear feet in length, not more than 35 ft waterward of the hightide line.(note that FAC 62-330 limits to 10 feet of the mean high water line) or result in more than 0.5 ac area between the natural shoreline and the structure.
- c. No discharge of earthen fill material, other than earthen material associated with vegetative planting, is not authorized.
- d. Construction, maintenance and removal of approved permanent, shore-parallel wave attenuation structures are authorized. Approved permanent wave attenuation materials include oyster breakwaters (described above), clean limestone boulders, and prefabricated structures made of concrete and rebar that are designed in a manner that cannot trap sea turtles, Smalltooth sawfish, or sturgeon. Reef balls that are not open on the bottom, triangle structures with a top opening of at least 3 feet between structures, and reef discs stacked on a pile may be used.
 - e. (For oyster breakwaters).
- (1) Reef materials shall be placed in a manner to ensure that materials (e.g., bagged oyster shell, oyster mats, loose cultch surrounded and contained by a stabilizing feature, reef balls, and reef cradles) will remain stable and prevent movement of materials to surrounding areas.
- (2) Materials must be placed in designated locations (i.e., shall not be indiscriminately/randomly dumped) and shall not be placed outside of the total project limits.
- 18. (For Subaqueous Utility Lines of the Transient Activities category.)
- a. A Frac-out Contingency Plan similar to the attached plan will be developed, submitted with the application and then followed.
- b. All subaqueous transmission lines crossing over, under, or in flood control channels/canals in Federal projects (either federally or locally maintained) which are installed with horizontal direction drilling (HDD) shall ensure the top of the HDD boring is a minimum of 10 feet beneath the bottom of the channel plus a minimum 25 feet outside the channel edges and the estimated total drilling fluid pressure is less than 10 psi. Projects not in compliance with these criteria shall not be eligible for authorization under SPGP V.
- c. The Permittee shall, upon completion of work, provide an as-built survey showing the horizontal and vertical location (X-Y-Z coordinates in NAD 83 and NAVD 88) of the object below the channel as it enters and exits the design edges of the authorized width of the channel, plus a minimum of 25 feet outside the channel edges.
- 19. (For Removal of Derelict Vessels of the Transient Activities category.)
- a. Removal of marine debris shall require visual confirmation (e.g., divers, swimmers, camera) that the item can be removed without causing further damage to aquatic resources.
- b. If an item cannot be removed without causing harm to surrounding coral, the item will be disassembled as much as practicable so that it no longer can accidently harm or trap species.

- c. Monofilament debris will be carefully cut loose from coral so as not to cause further harm. Under no circumstance will line be pulled through coral since this could cause breakage of coral.
- d. Marine debris shall be lifted straight up and not be dragged through seagrass beds, coral, or hard bottom habitats. Debris shall be properly disposed of in appropriate facilities in accordance with applicable federal and state requirements.
- 20. For concrete piles installed by impact hammer:
 - a. The piles will be less than or equal to than 24 inches in diameter; and
 - b. Not more than 10 piles will be installed per day if in open water; or,
- c. Not more than 5 piles will be installed per day in a *confined space*. A *confined space* is defined as any area that has a solid object (e.g., shoreline, seawall, jetty) or structure within 150 feet of the pile installation site that would effectively serve as a barrier or otherwise prevent animals from moving past it to exit the area. This does not include objects such as docks or other pile-supported structures that would not stop animal movement or significantly reflect noise.
- 21. Metal piles will NOT be installed by impact hammer.
- 22. Projects within the boundary of the NOAA Florida Keys National Marine Sanctuary require prior approval from the Sanctuary.
- 23. The Permittee shall use only clean fill material. The fill material shall be upland sources and be free of items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.
- 24. No blasting is authorized.
- 25. For Projects authorized under this SPGP V in navigable waters of the U.S., the Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 26. The SPGP V will be valid for five (5) years from the date of issuance unless suspended or revoked by issuance of a public notice by the District Engineer. The Corps, in conjunction with the Federal resource agencies, will conduct periodic reviews to ensure that continuation of the permit during the five-year authorization period is not contrary to the public interest. If revocation occurs, all future applications for activities covered by the SPGP V will be evaluated by the Corps.

- 27. If the SPGP V expires or is revoked prior to completion of the authorized work, authorization of activities which have commenced or are under contract to commence in reliance upon the SPGP V will remain in effect provided the activity is completed within twelve (12) months of the date the SPGP V expired or was revoked.
- 28. The General Conditions attached hereto are made a part of this SPGP V and must be attached to all authorizations processed under this SPGP V.



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southeast Regional Office 263 13th Avenue South

St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006 O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc



Additions

to the

"Sea Turtle and Smalltooth Sawfish Construction Conditions"

for SPGP V

- a. Any collision(s) with and/or injuries to any whale, or sturgeon occurring during the construction of a project, shall be reported immediately to NMFS's Protected Resources Division (PRD) at (727-824-5312).
- b. Reports to NMFS's Protected Resources Division (PRD) may be made by email to takereport.nmfsser@noaa.gov.
- c. Sea turtle and marine mammal stranding/rescue organizations' contact information is available by region at http://www.nmfs.noaa.gov/pr/health/networks.htm.
- d. Smalltooth sawfish encounters shall be reported to http://www.flmnh.ufl.edu/fish/sharks/sawfish/sawfishencounters.html.
 - e. All work must occur during daylight hours.

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads Caution: Boaters must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:

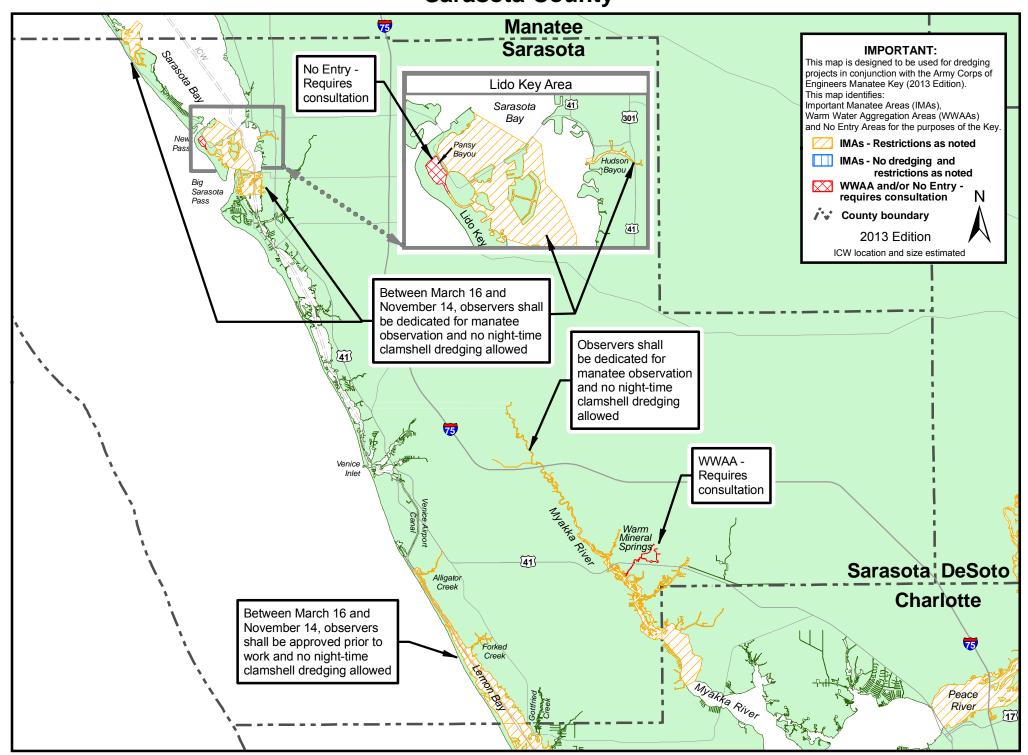
Wildlife Alert:



1-888-404-FWCC(3922)

cell *FWC or #FWC

Sarasota County



Tierra

September 14, 2017

Stantec Consulting Services, Inc. 5172 Station Way Sarasota, Florida 34233

Attn: Mr. Stephen MacEachern, P.E.

RE: Report of Geotechnical Engineering Services

S. Salford Water Pipeline Replacement

Sarasota County, Florida

Tierra Project Number: 6511-17-145

Mr. MacEachern:

Tierra, Inc. (Tierra) has performed a geotechnical study to evaluate the subsurface conditions for the Horizontal Directional Drilling (HDD) associated with the construction of a new water pipeline along S. Salford Boulevard. Based on the provided information, the HDD with be completed under the existing drainage canal within the existing right-of-way of S. Salford Boulevard between Barbary Lane and US 41. It is anticipated that the HDD will extend within the depths of the borings completed for this study. This letter report presents the subsurface conditions encountered at the boring locations and depths explored as part of this study.

Soil Boring and General Soil Conditions

To support the design of the HDD, Tierra performed two (2) Standard Penetration Test (SPT) borings to depths of 35 feet below the existing grade at the approximate locations requested by Stantec.

The borings were located in the field by a representative of Tierra using Garmin eTrex hand held Global Positioning System (GPS) equipment with a reported accuracy of ±10 feet. The approximate boring locations and soil profiles are shown on the attached **Boring Location Plan and Soil Profiles** sheet. Utility clearances were coordinated by Tierra via Sunshine State One Call as required prior to performing the soil borings.

The SPT borings were performed with the use of a drill rig using Bentonite Mud drilling procedures. The soil sampling was performed in general accordance with American Society for Testing and Materials (ASTM) Test Designation D-1586 titled "Penetration Test and Split-Barrel Sampling of Soils." The initial 4 feet of the SPT borings were manually augered to verify utility clearance. Thereafter, SPT resistance N-values were recorded and soil samples were collected continuously from a depth of 4 feet to a depth of 10 feet and at intervals of 5 feet thereafter. The soil samples were classified in the field and transported to our laboratory for review.

Report of Geotechnical Engineering Services S. Salford Water Pipeline Replacement Sarasota County, Florida

Tierra Project Number: 6511-17-145

Page 2 of 4

The soil strata encountered in the borings performed are summarized in the following table:

Stratum Number	Soil Description	USCS Symbol
1	Pale Brown to Brown Fine SAND to SAND with Silt	SP/SP-SM
2	Gray to Dark Gray Silty SAND	SM

Soil stratification was determined based on a review of recovered samples and interpretation of the field boring logs. Stratification lines represent approximate boundaries between soil layers of different engineering properties; however, actual transitions between layers may be gradual. In some cases, small variations in properties that were not considered pertinent to our engineering evaluation may have been abbreviated or omitted for clarity. The soil profiles represent the conditions at the particular boring location and variations in soil conditions should be anticipated along the HDD alignment. Specific details about subsurface conditions and materials encountered at the boring locations can be obtained from the soil profiles presented on the Boring Location Plan and Soil Profiles sheet.

Groundwater Information

The groundwater table was measured at depths ranging from approximately 9 to 10 feet below the existing ground surface. The encountered groundwater levels are presented adjacent to the soil profiles on Boring Location Plan and Soil Profiles sheet.

It should be noted that groundwater levels tend to fluctuate during periods of prolonged drought and extended rainfall and may be affected by man-made influences. In addition, a seasonal effect will also occur in which higher groundwater levels are normally recorded in rainy seasons.

Evaluations and Recommendations

The borings generally encountered loose sandy soils with shell fragments to depths of approximately 13 feet below grade. This was underlain very loose to dense silty sands with phosphate pebbles to approximately 28 feet below grade. This was underlain by very dense sand to refusal material sand with shell fragments and phosphate pebbles to the boring termination depth of approximately 35 feet below the existing grade.

Very dense sands to refusal material sand with shell fragments and phosphate pebbles were encountered within the borings. Drilling and reaming within this material will be difficult. If the horizontal directional drilling operations extend into this stratum, the Contractor should anticipate difficult drilling conditions in and through these layers and Report of Geotechnical Engineering Services S. Salford Water Pipeline Replacement Sarasota County, Florida Tierra Project Number: 6511-17-145

Page 3 of 4

should be prepared to utilize specialized equipment to facilitate drilling and reaming within these stratums.

Additionally, due to the loose soil conditions and typically high permeability rates of the sand with shell soil mixtures, the Contractor should anticipate higher than normal circulation losses of drilling fluid during the HDD operations. Additionally, if this material is encountered during pipe trench excavations, dewatering will be difficult and may require non-conventional dewatering methods.

Based on a review of the "Potentiometric Surface of the Upper Floridan Aquifer, West-Central Florida" maps published by the USGS; the potentiometric surface elevation of the upper Floridan Aquifer in the project vicinity ranges from approximately +30 to +40 feet, NGVD 1929. The project site elevations range from approximately +10 to +15 feet NGVD 1929. Artesian conditions were not encountered at the time of our field activities; however, the Contractor should be prepared to handle artesian conditions, if encountered.

Report Limitations

This report was prepared for the exclusive use of Stantec and their client for evaluating the design of the HDD as it relates to the geotechnical aspects discussed herein. The conclusions and recommendations contained in this report are professional opinions based on the site conditions and project layout described herein and further assumes that the conditions observed in the exploratory borings are representative of the subsurface conditions throughout the site, i.e., the subsurface conditions elsewhere on the site are the same as those disclosed by the boring. If, during construction, subsurface conditions different from those encountered in the exploratory borings are observed or appear to be present beneath excavations, we should be advised at once so that we can review these conditions and reconsider our recommendations where necessary.

Report of Geotechnical Engineering Services S. Salford Water Pipeline Replacement Sarasota County, Florida Tierra Project Number: 6511-17-145

Page 4 of 4

Tierra has completed the geotechnical engineering study for the above referenced project. The results of the study are provided herein.

Should there be any questions regarding the report, please do not hesitate to contact our office at (813) 989-1354. Tierra would be pleased to continue providing geotechnical services throughout the implementation of the project. We look forward to working with you and your organization on this and future projects.

Respectfully Submitted,

TIERRA, INC.

Susan E. Fries, E.I.

Geotechnical Engineer Intern

Michael T. Jordan P.E.

Senior Project Manager

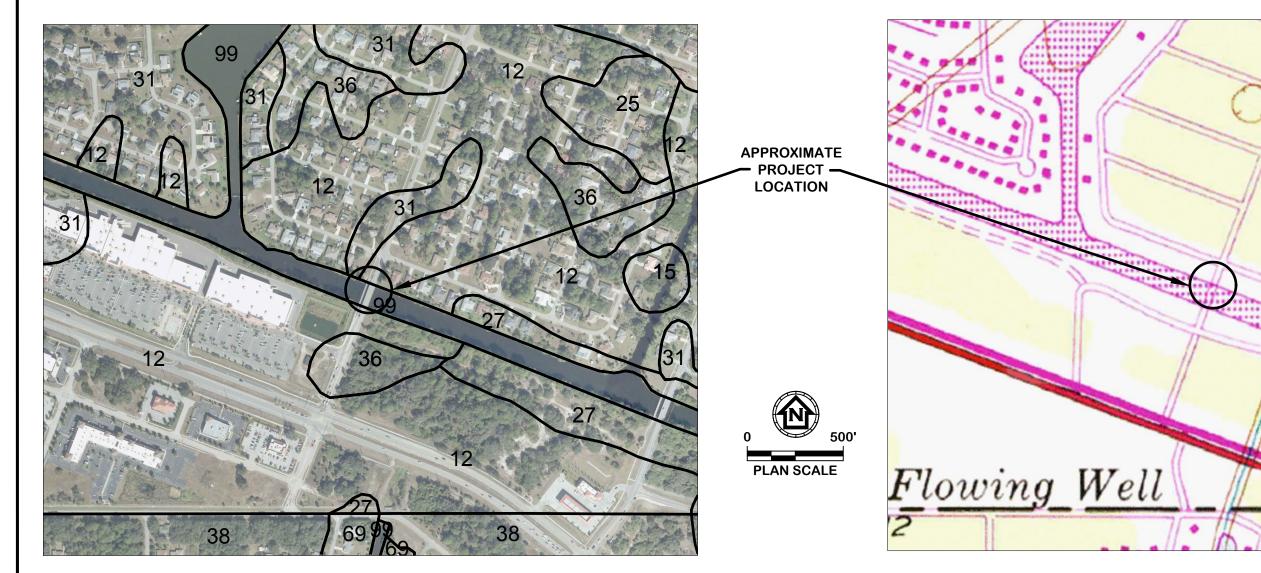
Florida License No. 56102

Attachments: USDA and USGA Site Vicinity Map

Boring Location Plan and Soil Profiles

USDA SOIL SURVEY MAP

USGS QUADRANGLE MAP



REFERENCE: "MURDOCK, FLORIDA" USGS QUADRANGLE MAP

TOWNSHIP: 39 S RANGE: 21 E SECTION: 33

DRAWN BY:

CHECKED BY:

MTJ
DATE:
SEP 2017

APPROVED BY:

ENGINEER OF RECORD:

MICHAEL T. JORDAN, P.E.
FLORIDA LICENSE NO.:
56102

REFERENCE: USDA SOIL SURVEY OF SARASOTA COUNTY, FLORIDA



NOTED

PROJECT NUMBER: 6511-17-145

GEOTECHNICAL ENGINEERING SERVICES

SOUTH SALFORD WATER PIPELINE REPLACEMENT

SARASOTA COUNTY, FLORIDA

SHEET 1

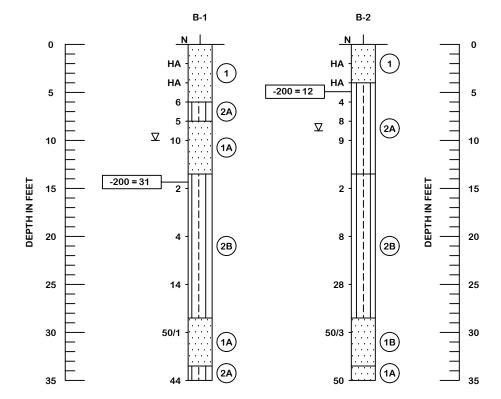
BORING LOCATION PLAN

0 100
PLAN SCALE



BARBARY LN.

SOIL PROFILES



LEGEND

1

PALE BROWN TO BROWN FINE SAND TO SAND WITH SILT(SP/SP-SM)

2

GRAY TO DARK GRAY SILTY SAND (SM)

A - WITH SHELL FRAGMENTS

B - WITH PHOSPHATE PEBBLES

- AP

APPROXIMATE LOCATION OF SPT BORING

Z GROUNDWATER LEVEL ENCOUNTERED DURING INVESTIGATION

SPT N-VALUE IN BLOWS/FOOT FOR 12 INCHES
OF PENETRATION (UNLESS OTHERWISE NOTED)

SP UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2488)
GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW
AND LABORATORY TESTING ON SELECTED SAMPLES
FOR CONFIRMATION OF VISUAL REVIEW

NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

HA HAND AUGERED TO VERIFY UTILITY CLEARANCES

-200 PERCENT PASSING #200 SIEVE

NOTES:

- 1. VERY DENSE SANDS TO REFUSAL MATERIAL SAND WITH SHELL FRAGMENTS AND PHOSPHATE PEBBLES WERE ENCOUNTERED WITHIN THE BORINGS. DRILLING AND REAMING WITHIN THIS MATERIAL WILL BE DIFFICULT. IF THE HORIZONTAL DIRECTIONAL DRILLING OPERATIONS EXTEND INTO THIS STRATUM, THE CONTRACTOR SHOULD ANTICIPATE DIFFICULT DRILLING CONDITIONS IN AND THROUGH THESE LAYERS AND SHOULD BE PREPARED TO UTILIZE SPECIALIZED EQUIPMENT TO FACILITATE DRILLING AND REAMING WITHIN THESE STRATUMS.
- 2. VERY DENSE SANDS TO REFUSAL MATERIAL SAND WITH SHELL FRAGMENTS AND PHOSPHATE PEBBLES WERE ENCOUNTERED WITHIN THE BORINGS. DRILLING AND REAMING WITHIN THIS MATERIAL WILL BE DIFFICULT. IF THE HORIZONTAL DIRECTIONAL DRILLING OPERATIONS EXTEND INTO THIS STRATUM, THE CONTRACTOR SHOULD ANTICIPATE DIFFICULT DRILLING CONDITIONS IN AND THROUGH THESE LAYERS AND SHOULD BE PREPARED TO UTILIZE SPECIALIZED EQUIPMENT TO FACILITATE DRILLING AND REAMING WITHIN THESE STRATUMS.
- 3. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS; THE POTENTIOMETRIC SURFACE ELEVATION OF THE UPPER FLORIDAN AQUIFER IN THE PROJECT VICINITY RANGES FROM APPROXIMATELY +30 TO +40 FEET, NGVD 1929. THE PROJECT SITE ELEVATIONS RANGE FROM APPROXIMATELY +10 TO +15 FEET NGVD 1929. ARTESIAN CONDITIONS WERE NOT ENCOUNTERED AT THE TIME OF OUR FIELD ACTIVITIES; HOWEVER, THE CONTRACTOR SHOULD BE PREPARED TO HANDLE ARTESIAN CONDITIONS, IF ENCOUNTERED.

AUTOMATIC HAMMER

GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	
VERY LOOSE	LESS THAN 3	
LOOSE	3 TO 8	
MEDIUM	8 TO 24	
DENSE	24 TO 40	
VERY DENSE	GREATER THAN 40	
SILTS AND CLAYS	SPT N-VALUE	
CONSISTENCY	(BLOWS/FT.)	
VERY SOFT	LESS THAN 1	
SOFT	1 TO 3	
FIRM	3 TO 6	
STIFF	6 TO 12	
VERY STIFF	12 TO 24	
HARD	GREATER THAN 24	

DRAWN BY:

CHECKED BY:

MTJ
DATE:
SEP 2017

APPROVED BY:

ENGINEER OF RECORD:

MICHAEL T. JORDAN, P.E. FLORIDA LICENSE NO.: 56102



SCALE: NOTED

6511-17-145

PROJECT NUMBER

GEOTECHNICAL ENGINEERING SERVICES
SOUTH SALFORD WATER PIPELINE REPLACEMENT
SARASOTA COUNTY, FLORIDA

SHEET 2

Revised: October 2015

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4

SUPPLEMENTAL GENERAL CONDITIONS

FOR

FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

EPA SPECIAL CONDITIONS

The attached instructions and regulations as listed below shall be incorporated into the Specifications and comprise the EPA's Special Conditions.

EPA Special Provisions	Attachment Number 1		
Requirements for Subagreements Awarded by Prime Contractors	Attachment Number 2		
2 CFR 200 (Procurement)	Attachment Number 3		
Equal Employment Opportunity (EEO) Documents: Notice of Requirement for Affirmative Action	Attachment Number 4		
Contract Specifications (Executive Order 11246)	Attachment Number 5		
EEO Goals for Region 4 Economic Areas	Attachment Number 6		
Special Notice #1 - Check List of EEO Documentation	Attachment Number 7		
Employer Information Report EEO-1 (SF 100)	Attachment Number 8		
Labor Standards Provisions for Federally Assisted Construction, EPA Form 5720-4	Attachment Number 9		
Certifications			
Debarment, Suspension and Other Responsibility Matters	Attachment Number 10		
Anti-lobbying	Attachment Number 11		
Region 4 Disadvantaged Business Enterprise (DBE)	Attachment Number 12		
Negotiated Rates as of October 1, 2006	Attachment Number 13		
Bonds and Insurance	Attachment Number 14		

EPA SPECIAL PROVISIONS

- (a) The construction of the project shall conform to the applicable requirements for state, territorial and local laws and ordinances to the extent that such requirements do not conflict with Federal laws.
- (b) The EPA shall have access to the site and the project.
- (c) Any contract(s) awarded under this invitation for Bids are expected to be funded in part by a grant from the U.S. Environmental Protection Agency. Neither the United States nor any of its departments, agencies or employees are or will be a part to this Invitation for Bids or any resulting contract.
- (d) The "Method of Award" is to the lowest responsible responsive bidder
- (e) A statement that the bidder must make positive efforts to use Disadvantaged Business Enterprises.
- (f) Davis-Bacon Act (40 U.S.C. 276a to 276-7) does not apply to grants under the U. S. Environmental Agency's State and Tribal Assistance Grants Special Appropriations. Compliance with the Davis-Bacon Act is not required by U. S. EPA under this contract.

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REQUIREMENTS FOR SUBAGREEMENTS AWARDED BY A PRIME CONTRACTOR

A contractor must comply with the following provisions in its award of subagreements. (This section does not apply to a supplier's procurement of materials to produce equipment, materials and catalog, off-the-shelf, or manufactured items.)

- (a) 2 CFR 200.213 (Debarment and Suspension Under EPA Assistance Programs);
- (b) The limitations and subagreement award in 2 CFR 200.92 and 2 CFR 200.330-332;
- (c) The requirement for small, small rural, minority, women's and labor surplus area business in 2 CFR 200.321;
- (d) The specifications requirements of 2 CFR 200;
- (e) The Federal cost principles in 2 CFR 200.400-475;
- (f) The prohibited types of subagreements in 2 CFR 200.323(d); and
- (g) 2 CFR 200.450 (Anti-Lobbying under EPA Assistance Programs).

Title 2: Grants and Agreements

Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

Subpart D – Post Federal Award Requirements

Procurement Standards

§200.317 Procurements by states.

When procuring property and services under a Federal award, a state must follow the same policies and procedures it uses for procurements from its non-Federal funds. The state will comply with \$200.322 Procurement of recovered materials and ensure that every purchase order or other contract includes any clauses required by section \$200.326 Contract provisions. All other non-Federal entities, including subrecipients of a state, will follow \$\$200.318 General procurement standards through 200.326 Contract provisions.

§200.318 General procurement standards.

- (a) The non-Federal entity must use its own documented procurement procedures which reflect applicable State, local, and tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this part.
- (b) Non-Federal entities must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.
- (c)(1) The non-Federal entity must maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, non-Federal entities may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity.

- (2) If the non-Federal entity has a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe, the non-Federal entity must also maintain written standards of conduct covering organizational conflicts of interest. Organizational conflicts of interest means that because of relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization.
- (d) The non-Federal entity's procedures must avoid acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.
- (e) To foster greater economy and efficiency, and in accordance with efforts to promote cost-effective use of shared services across the Federal Government, the non-Federal entity is encouraged to enter into state and local intergovernmental agreements or inter-entity agreements where appropriate for procurement or use of common or shared goods and services.
- (f) The non-Federal entity is encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.
- (g) The non-Federal entity is encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.
- (h) The non-Federal entity must award contracts only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. See also §200.213 Suspension and debarment.
- (i) The non-Federal entity must maintain records sufficient to detail the history of procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.
- (j)(1) The non-Federal entity may use a time and materials type contract only after a determination that no other contract is suitable and if the contract includes a ceiling price that the contractor exceeds at its own risk. Time and materials type contract means a contract whose cost to a non-Federal entity is the sum of:
 - (i) The actual cost of materials; and
- (ii) Direct labor hours charged at fixed hourly rates that reflect wages, general and administrative expenses, and profit.

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- (2) Since this formula generates an open-ended contract price, a time-and-materials contract provides no positive profit incentive to the contractor for cost control or labor efficiency. Therefore, each contract must set a ceiling price that the contractor exceeds at its own risk. Further, the non-Federal entity awarding such a contract must assert a high degree of oversight in order to obtain reasonable assurance that the contractor is using efficient methods and effective cost controls.
- (k) The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any contractual responsibilities under its contracts. The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, state, or Federal authority having proper jurisdiction.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014; 80 FR 43309, July 22, 2015]

§200.319 Competition.

- (a) All procurement transactions must be conducted in a manner providing full and open competition consistent with the standards of this section. In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals must be excluded from competing for such procurements. Some of the situations considered to be restrictive of competition include but are not limited to:
 - (1) Placing unreasonable requirements on firms in order for them to qualify to do business;
 - (2) Requiring unnecessary experience and excessive bonding;
 - (3) Noncompetitive pricing practices between firms or between affiliated companies;
 - (4) Noncompetitive contracts to consultants that are on retainer contracts;
 - (5) Organizational conflicts of interest;
- (6) Specifying only a "brand name" product instead of allowing "an equal" product to be offered and describing the performance or other relevant requirements of the procurement; and
 - (7) Any arbitrary action in the procurement process.
- (b) The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state, local, or tribal geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing

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laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

- (c) The non-Federal entity must have written procedures for procurement transactions. These procedures must ensure that all solicitations:
- (1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a "brand name or equivalent" description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and
- (2) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.
- (d) The non-Federal entity must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, the non-Federal entity must not preclude potential bidders from qualifying during the solicitation period.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014]

§200.320 Methods of procurement to be followed.

The non-Federal entity must use one of the following methods of procurement.

- (a) Procurement by micro-purchases. Procurement by micro-purchase is the acquisition of supplies or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (§200.67 Micro-purchase). To the extent practicable, the non-Federal entity must distribute micro-purchases equitably among qualified suppliers. Micro-purchases may be awarded without soliciting competitive quotations if the non-Federal entity considers the price to be reasonable.
- (b) Procurement by small purchase procedures. Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or other property that do not cost more than the Simplified Acquisition Threshold. If small purchase procedures are used, price or rate quotations must be obtained from an adequate number of qualified sources.
 - (c) Procurement by sealed bids (formal advertising). Bids are publicly solicited and a firm

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fixed price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bid method is the preferred method for procuring construction, if the conditions in paragraph (c)(1) of this section apply.

- (1) In order for sealed bidding to be feasible, the following conditions should be present:
- (i) A complete, adequate, and realistic specification or purchase description is available;
- (ii) Two or more responsible bidders are willing and able to compete effectively for the business; and
- (iii) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.
 - (2) If sealed bids are used, the following requirements apply:
- (i) Bids must be solicited from an adequate number of known suppliers, providing them sufficient response time prior to the date set for opening the bids, for local, and tribal governments, the invitation for bids must be publicly advertised;
- (ii) The invitation for bids, which will include any specifications and pertinent attachments, must define the items or services in order for the bidder to properly respond;
- (iii) All bids will be opened at the time and place prescribed in the invitation for bids, and for local and tribal governments, the bids must be opened publicly;
- (iv) A firm fixed price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs must be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and
 - (v) Any or all bids may be rejected if there is a sound documented reason.
- (d) Procurement by competitive proposals. The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If this method is used, the following requirements apply:
- (1) Requests for proposals must be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals must be considered to the maximum extent practical;
 - (2) Proposals must be solicited from an adequate number of qualified sources;
- (3) The non-Federal entity must have a written method for conducting technical evaluations of the proposals received and for selecting recipients;

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- (4) Contracts must be awarded to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and
- (5) The non-Federal entity may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitors' qualifications are evaluated and the most qualified competitor is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms are a potential source to perform the proposed effort.

(e) [Reserved]

- (f) Procurement by noncompetitive proposals. Procurement by noncompetitive proposals is procurement through solicitation of a proposal from only one source and may be used only when one or more of the following circumstances apply:
 - (1) The item is available only from a single source;
- (2) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation;
- (3) The Federal awarding agency or pass-through entity expressly authorizes noncompetitive proposals in response to a written request from the non-Federal entity; or
 - (4) After solicitation of a number of sources, competition is determined inadequate.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014; 80 FR 54409, Sept. 10, 2015]

§200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

- (a) 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.
 - (b) 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

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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.

§200.322 Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014]

§200.323 Contract cost and price.

- (a) The non-Federal entity must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the non-Federal entity must make independent estimates before receiving bids or proposals.
- (b) The non-Federal entity must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.
- (c) Costs or prices based on estimated costs for contracts under the Federal award are allowable only to the extent that costs incurred or cost estimates included in negotiated prices would be allowable for the non-Federal entity under Subpart E—Cost Principles of this part. The non-Federal entity may reference its own cost principles that comply with the Federal cost principles.
 - (d) The cost plus a percentage of cost and percentage of construction cost methods of

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contracting must not be used.

§200.324 Federal awarding agency or pass-through entity review.

- (a) The non-Federal entity must make available, upon request of the Federal awarding agency or pass-through entity, technical specifications on proposed procurements where the Federal awarding agency or pass-through entity believes such review is needed to ensure that the item or service specified is the one being proposed for acquisition. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the non-Federal entity desires to have the review accomplished after a solicitation has been developed, the Federal awarding agency or pass-through entity may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.
- (b) The non-Federal entity must make available upon request, for the Federal awarding agency or pass-through entity pre-procurement review, procurement documents, such as requests for proposals or invitations for bids, or independent cost estimates, when:
- (1) The non-Federal entity's procurement procedures or operation fails to comply with the procurement standards in this part;
- (2) The procurement is expected to exceed the Simplified Acquisition Threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation;
- (3) The procurement, which is expected to exceed the Simplified Acquisition Threshold, specifies a "brand name" product;
- (4) The proposed contract is more than the Simplified Acquisition Threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or
- (5) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the Simplified Acquisition Threshold.
- (c) The non-Federal entity is exempt from the pre-procurement review in paragraph (b) of this section if the Federal awarding agency or pass-through entity determines that its procurement systems comply with the standards of this part.
- (1) The non-Federal entity may request that its procurement system be reviewed by the Federal awarding agency or pass-through entity to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews must occur where there is continuous high-dollar funding, and third party contracts are awarded on a regular basis;
- (2) The non-Federal entity may self-certify its procurement system. Such self-certification must not limit the Federal awarding agency's right to survey the system. Under a self-certification procedure, the Federal awarding agency may rely on written assurances from the non-Federal entity that it is complying with these standards. The non-Federal entity must cite specific policies, procedures, regulations, or standards as being in compliance with these requirements and have its system available for review.

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§200.325 Bonding requirements.

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

- (a) A bid guarantee from each bidder equivalent to five percent of the bid price. The "bid guarantee" must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.
- (b) A performance bond on the part of the contractor for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.
- (c) A payment bond on the part of the contractor for 100 percent of the contract price. A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

§200.326 Contract provisions.

The non-Federal entity's contracts must contain the applicable provisions described in Appendix II to Part 200—Contract Provisions for non-Federal Entity Contracts Under Federal Awards.

Appendix II to Part 200 – Contract Provisions for non-Federal Entity Contracts Under Federal Awards

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

- (A) Contracts for more than the simplified acquisition threshold currently set at \$150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.
- (B) All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

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- (C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."
- (D) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.
- (E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

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- (F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) 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.
- (G) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).
- (H) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.
- (I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. 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. Each tier must 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 non-Federal award.
- (J) See §200.322 Procurement of recovered materials. [78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75888, Dec. 19, 2014]

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NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

The following excerpts are from 45 FR 65984 (October 3, 1980):

"The minority and female goals apply to Federal and federally assisted construction contractors and subcontractors which have covered contracts. The goals are expressed as a percentage of the total hours worked by such a covered contractor's or subcontractor's entire onsite construction workforce which is working on any construction site within a relevant area. The goal applies to each construction craft and trade in the contractor's entire workforce in the relevant area including those employees working on private nonfederally involved projects.

Until further notice, the following goals for minority utilization in each construction craft and trade shall be included in all Federal or federally assisted construction contracts and subcontracts in excess of \$10,000 to be performed in the respective geographic area. The goals are applicable to each nonexempt contractor's total onsite construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, federally assisted or nonfederally related project, contract or subcontract.

Construction contractors which are participating in an approved Hometown Plan (see 41 CFR 60-4.5) are required to comply with the goals of the Hometown Plan with regard to construction work they perform in the area covered by the Hometown Plan. With regard to all their other covered construction work, such contractors are required to comply as follows:

Goals for female participation in each trade	6.9%
Goals for minority participation in each trade	Insert goals for each year
	(see Attachment Number 6)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area."

The following excerpts are from 45 FR 65977 (October 3, 1980):

"The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor

shall make a good faith effort to employ minority and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- 3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.
- 4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed giving the state, country, and city, if any)."

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STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

EEO Specifications

Following is the standard language which must be incorporated into all solicitations for offers and bids on all Federal and Federally assisted construction contracts or subcontracts in excess of \$10,000 to be performed in designated geographical areas:

- 1. As used in these specifications:
 - a. "Covered Area" means the geographical area described in the solicitation from which this contract resulted.
 - (b) "Director" means Director, Office of Federal Contract Compliance Program, United States Department of Labor, or any person to whom the Director delegates authority;
 - (c) "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - (d) "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the Contractor or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in

- excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take a good faith efforts to achieve the Plan goals and timetables.
- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7-a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- 7. The Contractor shall take specific affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative actions steps at least as extensively as the following:

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- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor=s employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligation.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources complied under 7-b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

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- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, lay-off, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor=s recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- 1. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to

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- assure privacy between the sexes.
- Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative actions obligations (7 a through p). The efforts of a contractor association, joint contractor-union, contractor-community, of other similar group of which the contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7 a through p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor=s minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be defense for the Contractor's noncompliance.
- 9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example: even though the Contractor has achieved its goal for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
- 10. The Contractor shall not use the goals and timetables for affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.
- 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of

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- Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and executive Order 11246, as amended.
- 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
- 15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

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EEO Goals for Economic Areas in Region 4Source: Appendix B-80 in 45 FR 65984 (October 3, 1980)

Alabama: 047 Mobile, AL	
SMSA Counties:	
5160 Mobile, AL	26.9
AL Baldwin; AL Mobile.	20.5
6026 Pascagoula - Moss, Point MS	16.9
MS Jackson.	
Non-SMSA Counties	26.4
AL Choctaw; AL Clarke; AL Conecuh; AL Escambia; AL Monroe; AL Washington; AL WIcox;	_
MS George; MS Greene.	
048 Montgomery, AL:	
SMSA Counties	
5240 Montgomery, AL	29.9
AL Autauga; AL Elmore; AL Montgomery.	
Non-SMSA Counties	29.9
AL Barbour; AL Bullock; AL Butler; AL Coffee; AL Coosa; AL Covington;	
AL Crenshaw; AL Dale; AL Dallas; AL Geneva; AL Henry; AL Houston.;	
AL Lowndes; AL Macon; AL Perry; AL Pike; AL Tallapoosa.	
049 Birmingham, AL:	
SMSA Counties: 0450 Anniston, AL	14.3
AL Calhoun	14.3
1000 Birmingham, AL	24.9
AL Jefferson, AL St- Clair; AL Shelby; AL Walker; AL Etowah	24.9
8600 Tuscaloosa, AL	20.6
AL Tuscaloosa, AE	20.0
Non-SMSA Counties	20.7
AL Bibb; AL Blount AL Cherokee; AL Chilton; AL Clay; AL Cleburne; AL Cullman;	
AL Fayette; AL Greene; AL Hale; AL Lamar; AL Marion; AL Pickens; AL Randolph;	
AL Sumter: AL Talladega; AL Winston.	
050 Huntsville - Florence, AL:	
SMSA Counties:	
2650 Florence, AL	11.9
AL Colbert; AL Lauderdale.	
3440 Huntsville, AL	12.0
AL Limestone; AL Madison; AL Marshall.	
Non-SMSA Counties	11.2
AL Franklin; AL Lawrence AL Morgan; TN Lincoln.	
Georgia:	
035 Augusta, GA:	
SMSA Counties:	27.2
0600 Augusta, GA - SC GA Columbia; GA Richmond; SC Aiken	21.2
Non-SMSA Counties	32.8
GA Burke; GA Emanuel; GA Glascock; GA Jefferson; GA Jenkins; GA Lincoln; GA	32.0
McDuffie; GA Taliaferro; GA Warren; GA Wilkes; SC Allendale, SC Bamberg;	
SC Barnwell; SC Edgefield; SC McCormick	
036 Atlanta, GA	
SMSA Counties	
0520 Atlanta	21.2
GA Butts; GA Cherokee; GA Clayton; GA Cobb; GA Dekalb; GA Douglas; GA Fayette;	
GA Forsyth; GA Fulton; GA Gwinnett; GA Henry, GA Newton; GA Paulding; GA Rockdale;	
GA Walton	
Non-SMSA Counties	19.5

GA Banks; GA Barrow; GA Bartow; GA Carroll; GA Clarke; GA Coweta; GA Dawson; GA Elbert; GA Fannin; GA Floyd; GA Franklin; GA Gilmer; GA Gordon; GA Greene; GA Habersham; GA Hall; GA Haralson; GA Hart; GA Heard; GA Jackson; GA Jasper; GA Lamar, GA Lumpkin; GA Madison, GA Morgan; GA Oconee, GA Oglethorpe; GA Pickens; GA Pike; GA Polk; GA Rabun, GA Spalding; GA Stephens; GA Towns;	
GA Union; GA Upson; GA White.	
037 Columbus, GA:	
SMSA Counties	00.6
1800 Columbus AL Russell; GA Chattahoochee; GA Columbus.	29.6
Non-SMSA Counties	31.6
AL Chambers; AL Lee; GA Harris; GA Marion; GA Meriwether; GA Quitman;	0
GA Schley; GA Stewart; GA Sumter; GA Talbot; GA Troup; GA Webster.	
038 Macon, GA:	
SMSA Counties	07.5
4660 Macon, GA	27.5
GA Bibb; GA Houston; GA Jones; GA Twiggs. Non-SMSA Counties	31.7
GA Baldwin; GA Bleckley; GA Crawford; GA Crisp; GA Dodge; GA Dooly; GA Hancock;	31.7
GA Johnson; GA Laurens; GA Macon; GA Monroe; GA Peach; GA Pulaski;	
GA Putnam. GA Taylor; GA Telfair; GA Treutlen; GA Washington; GA Wheeler; GA Wilcox;	
GA Wilkinson.	
039 Savannah, GA:	
SMSA Counties:	20.6
7520 Savannah, GA GA Bryan; GA Chatham; GA Effingham	30.6
Non-SMSA Counties	29.8
GA Appling; GA Atkinson; GA Bacon; GA Bullock; GA Candler; GA Coffee;	20.0
GA Evans; GA Jeff Davis; GA Liberty; GA Long; GA McIntosh; GA Montgomery;	
GA Screven; GA Tattinall; GA Toombs; GA Wayne; SC Beaufort; SC Hampton; SC Jasper.	
040 Albany, GA	
SMSA Counties	32.1
0120 Albany, GA GA Dougherty; GA Lee.	32.1
Non-SMSA Counties	31.1
GA Baker; GA Ben Hill; GA Berrien; GA Brooks; GA Calhoun; GA Clay; GA Clinch; GA	
Colquitt; GA Cook; GA Decatur; GA Early; GA Echols; GA Grady; GA Irwin; GA Lanier,	
GA Lowndes; GA Miller; GA Mitchell; GA Randolph; GA Seminole, GA Terrell; GA	
Thomas; GA Tift; GA Turner; GA Worth	
Florido	
Florida: 041 Jacksonville, FL:	
SMSA Counties	
2900 Gainesville, FL	20.6
FL Alachua	
3600 Jacksonville, FL	21.8
FL Baker; FlL Clay; FL Duval; FL Nassau; FL St. Johns.	
Non-SMSA Counties	22.2
FL Bradford; FL Columbia; FL Dade; FL Gilchrist; FIL Hamilton; FL LaFayetle; FL Levy; FL Marion; FL Putnam; FL Suwannee; FL Union; GA Brantley; GA Camden;	
GA Charlton; GA Glynn; GA Pierce; GA Ware.	
042 Orlando - Melbourne - Daytona Beach, FL.	
SMSA Counties:	
2020 Daytona Beach, FL	15.7
FL Volusia.	40-
4900 Melbourne - Tutusville - Cocoa, FL	10.7
FL Brevard. 5960 Orlando, FL	15.5
FL Orange; FL Osceola; FL Seminole.	10.0
Non-SMSA Counties	14.9
FL Flagler; FL Lake; FL Sumter.	

043 Miami - Fort Lauderdale, FL:	
SMSA Counties:	
2680 Fort Lauderdale - Hollywood, FL	15.5
FL. Broward.	
5000 Miami, FL	39.5
FL Dade.	
8960 West Palm Beach - Boca Raton, FL	22.4
FL Palm Beach.	00.4
Non-SMSA Counties	30.4
FL Glades; FL Hendry; FL Indian River, FL Martin; FL Monroe:	
FL Okeechobee; FL St. Lucie. 044 Tampa - St Petersburg, FL	
SMSA Counties:	
1140 Bradenton. FL	15.9
FL Manatee.	10.0
2700 Fort Myers, FL	15.3
FL Lee.	
3980 Lakeland - Winter Haven, FL	18.0
FL Polk	
7510 Sarasota, FL	10.5
FL Sarasota.	
8280 Tampa - St. Petersburg, FL	17.9
FL Hillsborough, FL Pasco; FL Pinellas	
Non-SMSA Counties	17.1
FL Charlotte; FL Citrus; FL Collier, FL Desoto; FL Hardee; FL Hernando; FL Highlands.	
045 Tallahassee. FL:	
SMSA Counties:	04.6
8240 Tallahassee, FL	24.3
FL Leon; FL Wakulla. Non-SMSA Counties:	29.5
FL Calhoun; FL Franklin; FL Gadsden; FIL Jackson; FL Jefferson: FL Liberty;	29.0
FIL Madison; FL Taylor.	
046 Pensacola - Panama City, FL	
SMSA Counties:	
8615 Panama City, FL	14.1
FIL Bay.	
6080 Pensacola, FL	18.3
FL Escambia; FL Santa Rosa.	
Non-SMSA Counties	15.4
FL Gulf, FIL Holmes; FIL Okaloosa; FL Walton; FL Washington.	
Kentucky:	
056 Paducah, KY:	
Non-SMSA Counties	5.2
IL Hardin; IL Massac; IL Pope; KY Ballard; KY Caldwell; KY Calloway. KY Carlisle;	
KY Crittenden; KY Fulton; KY Graves; KY Hickman; KY Livingston; KY Lyon. KY McCracken; KY Marshall.	
057 Louisville, KY:	
SMSA Counties:	
4520 Louisville, KY-IN	11.2
IN Clark; IN Floyd; KY Bullift; KY Jefferson; KY Oldham.	
Non-SMSA Counties	9.6
IN Crawford; IN Harrison; IN Jefferson; IN Orange; IN Scott; IN Washington;	
KY Breckinridge; KY Grayson; KY Hardin; KY Hart; KY Henry; KY Larue; KY Marion;	
KY Meade; KY Nelson; KY Shelby; KY Spencer; KY Trimble; KY Washington.	

058 Lexington, KY SMSA Counties	
4280 Lexington-Fayette, KY KY Fayette; KY Jessamine; KY Scott; KY Woodford.	10.8
Non-SMSA Counties KY Adair KY Anderson; KY Bath; KY Boyle; KY Breathitt; KY Casey; KY Clay; KY Estill; KY Franklin- KY Garrard; KY Green; KY Harrison- KY Jackson; KY Knott; KY Lee; KY Leslie; KY Letcher; KY Lincoln; KY Madison; KY Magoffin; KY Menifee; KY Mercer; KY Montgomery; KY Morgan. KY Nicholas; KY Owsley; KY Perry; KY Powell; KY Pulaski; KY Rockcastle; KY Russell; KY Taylor; KY Wolfe.	7.0
Mississippi:	
112 Jackson, MS:	
SMSA Counties; 3560 Jackson, MS	30.3
MS Hinds; MS Rankin.	00.0
Non-SMSA Counties	32.0
MS Attala; MS Choctaw; MS Choctaw; MS Clarke; MS Copiah; MS Covington; MS Franklin; MS Holmes: MS Humphreys; MS Issaquena; MS Jasper; MS Jefferson; MS Jefferson Davis; MS Jones; MS Kemper; MS Lauderdale; MS Lawrence; MS Leake; MS Lincoln; MS Lowndes; MS Madison; MS Neshoba; MS Newton; MS Noxubee,- MS Oktibbeha; MS Scott; MS Sharkey; MS Simpson; MS Smith; MS Warren; MS Wayne; MS Winston; MS Yazoo.	
North Carolina:	
024 Rocky Mount - Wilson - Greenville NC:	
Non-SMSA Counties	31.7
NC Beaufort; NC Carteret; NC Craven,- NC Dare; NC Edgecombe; NC Greene; NC Halifax; NC Hyde; NC Jones; NC Lenoir', NC Martin; NC Nash; NC Northampton; NC Pamlico; NC Pitt; NC Tyrrell; NC Washington; NC Wayne; NC Wilson 025 Wilmington, NC:	
SMSA Counties:	20.7
9200 Wilmington, NC NC Brunswick; NC New Hanover.	20.7
Non-SMSA counties	23.5
NC Columbus; NC Duplin; NC Onslow; NC Pender.	
026 Fayetteville, NC:	
SMSA Counties: 2560 Fayetteville, NC	26.2
NC Cumberland.	20.2
Non-SMSA Counties	33.5
NC Bladen; NC Hoke; NC Richmond; NC Robeson; NC Sampson; NC Scotland.	
027 Raleigh - Durham, NC.	
SMSA Counties: 6640 Raleigh - Durham	22.8
NG Durham; NC Orange; NC Wake.	22.0
Non-SMSA Counties	24.7
NC Chatham; NC Franklin; NC Granville; NC Harnett; NC Johnston; NC Lee; NC Person;	
NC Vance; NC Warren.	
028 Greensboro - Winston Salem - High Point, NC: SMSA Counties:	
1300 Burlington, NC	16.2
NC Alamance.	10.2
3120 Greensboro - Winston Salem - High Point NC	16.4
NC Davidson; NC Forsyth; NC Guilford,- NC Randolf; NC Stokes; NC Yadkin.	
Non-SMSA Counties NC Alleghany; NG Ashe; NC Caswell; NC Davie; NC Montgomery; NC Moore; NC	15.5
Rockingham; NC Surry; NC Watauga; NC Wilkes.	

029 Charlotte, NC: SMSA Counties:	
1520 Charlotte - Gastonia, NC	18.5
NC Gaston; NC Mecklenburg; NC Union. Non-SMSA Counties	15.7
NC Alexander; NC Anson; NC Burke; NG Cabarrus; NC Caldwell; NC Catawba; NC Cleveland; NC Iredell; NC Lincoln; NC Rowan; NC Rutherford; NC Stanley; SC Chester; SC Lancaster SC York.	10.7
030 Asheville, NC	
Non-SMSA Counties: 0480 Asheville, NC	8.5
NC Buncombe; NC Madison.	0.0
Non-SMSA Counties	6.3
NC Avery,- NC Cherokee; NC Clay; NC Graham; HC Heywood, NC Henderson; NC Jackson; NC McDowell; NC Macon; NC Mitchell; NC Swain; NC Transylvania; NC Yancey.	
South Carolina:	
031 Greenville -Spartanburg, SC: SMSA Counties:	
316bGreenville -Spartanburg, SC	16.0
SC Greenville; SC Pickens; SC Spartanburg.	4= 0
Non-SMSA Counties SC Polk; SC Abbeville; SC Anderson; SC Cherokee', SC Greenwood; SC Laurens;	17.8
SC Oconee; SC Union.	
.032 Columbia, SC	
SMSA Counties: 1760 Columbia, SC	23.4
SC Lexington; SC Richland.	_
No'n-SMSA Counties	32.0
SC Calhoun SC Clarendon; SC Fairfield; SC Kershaw; SC Lee; SC Newberry; SC Orangeburg; SC Saluda; SC Sumter	
033 Florence, SC	
Non-SMSA Counties SC Chesterfield; SC Darlington; SC Dillon; SC Florence; SC Georgetown; SC Horry;	33.0
SC Marion; SC Marlboro; SC Williamsburg.	
034 Charleston - North Charleston, SC	
SMSA Counties 1440 Charleston - North Charleston, SC	30.0
SC Berkeley; SC Charleston; SC Dorchester.	30.0
Non-SMSA Counties	30.7
SC Collection	
Tennessee:	
051 Chattanooga, TN:	
SMSA Counties 1560 Chattanooga, TN - GA	12.6
GA Catoosa; GA Dade; GA Walker; TN Hamilton; TN Marion; TN Sequatchie.	
Non-SMSA Counties AL De Kalb; AL Jackson; GA Chattooga; GA Murray; GA Whitfield;	8.6
TN Bledsoe; TN Bradley; TN Grundy; TN McMinn; TN Meigs; TN Monroe;	
TN Polk; TN Rhea.	
052 Johnson City - Kingsport - Bristol, TN-VA: SMSA Counties'.	
3660 Johnson City - Kingsport - Bristol. TN - VA	2.6
TN Carter; TN Hawkins- TN Sullivan; TN Unicoi; TN Washington; VA Scott;	
VA Washington; VA Bristol. Non-SMSA Counties	3.2
TN Greene; TN Hancock; TN Johnson; VA Buchanan; VA Dickenson; VA Lee;	0.2
VA Russell; VA Smyth; VA Tazewell; VA Wise; VA Norton; WV McDowell, WV Mercer. 053 Knoxville, TN	
OOO INIOAVIIIG, III	

SMSA Counties: 3840 Knoxville, TN TN Anderson; TN Blount; TN Knox; TN Union. Non-SMSA Counties KY Bell; KY Harlan; KY Knox; KY Laurel; KY McCreary; KY Wayne; KY Whitley; TN Campbell; TN Claiborne; TN Cocke; TN Cumberland; TN Fentress; TN Grainger, TN Hamblen; TN Jefferson; TN Loudon; TN Morgan; TN Roane; TN Scott; TN Sevier. 054 Nashville, TN:	6.6 4.5
SMSA Counties:	
	10.0
1660 Clarksville - Hopkinsville, TN - KY	18.2
KY Christian; TN Montgomery.	45.0
5360 Nashville - Davidson, TN	15.8
TN Cheatham, TN Davidson; TN Dickson; TN Robertson; TN Rutherford; TN Sumner;	
TN Williamson; TN Wilson. Non-SMSA Counties	12.0
KY Allen; KY Barren; KY Butler; KY Clinton; KY Cumberland; KY Edmonson;	12.0
KY Logan; KY Metcalfe; KY Monroe; KY Simpson; KY Todd; KY Trigg; KY Warren;	
TN Bedford; TN Cannon; TN Clay; TN Coffee; TN DeKalb; TN Franklin; TN Giles;	
TN Hickman; TN Houston; TN Humphreys; TN Jackson; TN Lawrence; TN Lewis;	
TN Macon; TN Marshall; TN Maury; TN Moore; TN Overton; TN Perry; TN Pickett;	
TN Putnam; TN Smith,, TN Stewart; TN Trouslale; TN Van Buren; TN Warren;	
TN Wayne; TN White.	
055 Memphis, TN:	
SMSA Counties:	
4920 Memphis, TN-AR-MS	32.3
AR Critteriden; MS Do Soto; TN Shelby; TN Tipton.	02.0
Non-SMSA Counties	26.5
AR Clay; AR Craighead; AR Cross; AR Greene; AR Lawrence; AR Lee;	20.0
AR Mississippi; AR Phillips- AR. Poinsett; AR Randolph; AR St. Francis; MS Alcorn,	
MS Benton; MS Bolivar; MSCalhoun; MS Carroll; MS Chickasaw, MS Clay;	
MS Coahoma; MS Grenada; MS Itawamba; MS Lafayette; MS Lee; MS Leflore;	
MS Marshall; MS Monroe; MS Montgomery; MS Panola; MS Pontotoc; MS Prentiss;	
MS Quitman; MS Sunflower; MS Tallahatchie; MS Tate; MS Tippah; MS Tishomingo;	
MS Union; MS Washington; MS Webster. MS Yalobusha; MO Dunklin;	
MO New Madrid; MO Perniscot; TN Benton; TN Carroll; TN Chester; TN Crockett;	
TN Decatur; TN Dyer; TN Fayette; TN Gibson; TN Hardeman; TN Hardin;	
TN Haywood; TN Henderson- TN Henry; TN Lake; TN Lauderdale; TN McNairy;	
TN Madison; TN Obion; TN Weakley.	
masses, esten, reamey.	

CHECK LIST OF EEO DOCUMENTATION FOR BIDDERS ON EPA ASSISTED CONSTRUCTION

(Required by Executive Order 11246 as amended)

The low, responsive responsible bidder must forward the following items, in duplicate, to the owner (grantee) no later than ten (10) days after bid opening. The owner (grantee) shall have one (1) copy available for inspection by the Office of Federal Contracts Compliance within 14 days after the bid opening. The web site for the OFCC is http://www.dol.gov/esa/ofcp_org.htm.

- 1. EPA Project Number. Project Location. Type of Construction.
- 2. Proof of registration with the Joint Reporting Commission. (See Attachment Number 8.)
- 3. Copy of Affirmative Action Plan of contractor. Indicate company official responsible for EEO.
- 4. List of current construction contracts, with dollar amount. List contracting Federal Agency, if applicable.
- 5. Statistics concerning company percent workforce, permanent and temporary, by sex, race, trade, handicapped, and age. 40 CFR Part 7.
- 6. List of employment sources for project in question. If union sources are utilized, indicate percentage of minority membership within the union crafts.
- 7. Anticipated employment needs for this project, by sex, race and trade, with estimate of minority participation in specific trades.
- 8. List of subcontractors (name, address and telephone) with dollar amount and duration of subcontract. Subcontractor contracts over \$10,000 must submit items 1-8.
- 9. List of any subcontract work yet to be committed with estimate of dollar amount and duration of contract.
- 10. Contract Price. Duration of prime contract.
- 11. DBE Documents See special instructions regarding use of Minority, and Women Owned, and Small Businesses.

Employer Information Report EEO-1

Under the direction of the US Equal Employment Opportunity Commission, the Joint Reporting Committee is responsible for the full-length, multi-phase processing of employment statistics collected on the Employer Information Report EEO-1. This report, also termed Standard Form 100, details the sex and race/ethnic composition of an employer's work force by job category.

The Employer Information EEO-1 survey is conducted annually under the authority of Public Law 88-352, Title VII of the Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972. All employers with 15 or more employees are covered by Public Law 88-352 and are required to keep employment records as specified by Commission regulations. Based on the number of employees and federal contract activities, certain large employers are required to file an EEO-1 Report on an annual basis.

The EEO-1 Report must be filed by:

- (A) All private employers who are: (1) subject to Title VII of the Civil Rights Act of 1964 (as amended by the Equal Employment Opportunity Act of 1972) with 100 or more employees EXCLUDING State and local governments, primary and secondary school systems, institutions of higher education, Indian tribes and tax-exempt private memberships clubs other than labor organizations; OR (2)subject to Title VII who have fewer than 100 employees if the company is owned or affiliated with another company, or there is centralized ownership, control or management (such as central control of personnel policies and labor relations) so that the group legally constitutes a single enterprise and the entire enterprise employs a total of 100 or more employees.
- **(B)** All federal contractors (private employers), who:(1) are not exempt as provided for by 41 CFR 60-1.5, (2) have 50 or more employees, and (a) are prime contractors or first-tier subcontractors, and have a contract, subcontract, or purchase order amounting to \$50,000 or more; or (b) serve as depository of Government funds in any amount, or (c) is a financial institution which is an issuing an paying agent for U.S. Savings Bonds and Notes.

Only those establishments located in the District of Columbia and the 50 states are required to submit the EEO-1 Report. No Reports should be filed for establishments in Puerto Rico, the Virgin Islands or other American Protectorates.

When filing for the EEO-1 Report for the first time, go to the web site at: http://www.mimdms.com/jrc.html and select AFiling for the first time@ from the box labeled INFORMATION. File out the electronic questionnaire to enter your company into Joint Reporting Committee (JRC) system. One you have completed the registration process, you will be contacted on how to proceed with the EEO-1 Report. If you have previously registered with the JRC, follow their instructions to update your information.

EPA Form 5720 **Attachment Number 9**

Labor Standards Provisions For Federally Assisted Construction

Labor standards provisions applicable to contracts covering federally financed and assisted construction (29 CFR 5.5, Contract Provisions and Related Matters) that apply to EPA Special Appropriations Projects grants are:

- (a)(4)(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.
- (a)(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.
- (a)(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5 (a) (1) through (10) and such other clauses as the U.S. Environmental Protection Agency may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- (a)(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

- (b) Contractor Work Hours and Safety Standards Act. The Administrator, EPA shall cause or require the contracting officer to insert the following clauses set forth in paragraph (b)(1),(2),(3), and (4) of this section in full in any contract subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by *Section 5.5(a) of this title. As used in this paragraph, the terms Alaborers@ and Amechanics@ include watchmen and guards.
- (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 work week in which he or she is employed on such work to in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

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- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b) (1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. 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 unliquidated damages. 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 (b)(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 forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. The U.S. Environmental Protection Agency 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 liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b) (2) of this section.
- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in section 5.1, the Administrator of EPA shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly worked, deductions made, and actual wages paid. Further, the Administrator of EPA shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the U.S. Environmental Protection Agency and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job. (Approved by the Office of Management and Budget under OMB control numbers 1215-0140 and 1215-0017.)

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CERTIFICATIONS

Debarred Firms

All prime Construction Contractors shall certify that Subcontractors have not and will not be awarded to any firm that is currently on the EPA Master List of Debarred, Suspended and Voluntarily Excluded Persons in accordance with the provisions of 40 CFR 32.500(c). Debarment action is taken against a firm for noncompliance with Federal Law.

All bidders shall complete the attached certification (Attachment Number 10) in duplicate and submit both copies to the owner with the bid proposal. The owner (grantee) shall transmit one copy to EPA within 14 days after bid opening.

Anti-lobbying Certification

All prime Construction Contractors must certify (Attachment Number 11) that no appropriated funds were or will be expended for the purpose of lobbying the Executive or Legislative Branches of the Federal Government or Federal Agency concerning this contract (contract in excess of \$100,000). If the Contractor has made or agreed to make payment to influence any member of Congress in regard to award of this contract, a Disclosure Form must be completed and submitted to the owner (grantee) with the bid proposal. The owner must transmit one copy to the EPA Grants Management Office.

All prime Contractors must require all Subcontractors to submit the certification which must also be submitted to the owner (grantee).

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CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

The prospective participant certifies to the best of its knowledge and belief that it and its principals:

- (A) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal. State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Typed Name & Title of Authorized Representative		
Signature of Authorized Representative	Date	
I am unable to certify to the above statements.	My explanation is at	tached.

Instructions for Certification Regarding Debarments

Under Executive Order 12549, an individual or organization debarred or excluded from participation in Federal assistance or benefit programs may not receive any assistance award under a Federal program, or a subagreement thereunder for \$25,000 or more.

Accordingly, each prospective recipient of an EPA grant, loan, or cooperative agreement and any contract or subagreement participant thereunder must complete the attached certification or provide an explanation why they cannot. For further details, see 40 CFR 32.510, Participants' responsibilities, in the attached regulation.

Where To Submit:

The prospective EPA grant, loan, or cooperative agreement recipient must return the signed certification or explanation with its application to the appropriate EPA Headquarters or Regional office, as required in the application instructions.

A prospective prime contractor must submit a completed certification or explanation to the individual or organization awarding the contract.

Each prospective subcontractor must submit a completed certification or explanation to the prime contractor for the project.

How To Obtain Forms:

EPA includes the certification form, instructions, and a copy of its implementing regulation (40 CFR Part 32) in each application kit. Applicants may reproduce these materials as needed and provide them to their prospective prime contractor, who, in turn, may reproduce and provide them to prospective subcontractors.

Additional copies/assistance may be requested from:

Compliance Branch Grants Administration Division (PM-216F) U.S. Environmental Protection Agency 401 M Street, SW Washington, DC 20460 (Telephone: 202/475-8025)

EPA Form 5700-49 (11-88)

CERTIFICATION REGARDING LOBBYING Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, 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 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.

TYPED NAME & TITLE OF AUTHORIZED REPRESEN	TATIVE
SIGNATURE OF AUTHORIZED REPRESENTATIVE	DATE
I am unable to certify to the above statements. My exp	planation is attached.

EPA DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

EPA's Disadvantaged Business Enterprise Program rule applies to contract procurement actions funded in part by EPA assistance agreements awarded after May 27, 2008. The rule is found at Federal regulation Title 40, Part 33. Specific responsibilities are highlighted below. The EPA EPA form 6100-2, 6100-3, and 6100-4 are not required to be submitted to EPA; because they are out of date. However the information is still required to be sent to EPA and the forms can be used.

Grant recipient responsibilities:

- Conduct an Availability Analysis and negotiate fair share objectives with EPA (§ 33.411), or adopt the fair share objectives of the oversight state agency revolving loan fund for comparable infrastructure. (§ 33.405(b)(3)).
- Include the Appendix A term and condition in each contract with a primary contractor (§ 3.106). The term and condition is included in the EPA Region 4 contract specifications insert FEDERAL REQUIREMENTS AND CONTRACT PROVISIONS FOR SPECIAL APPROPRIATION ACT PROJECTS US ENVIRONMENTAL PROTECTION AGENCY, Region III, June 2008.
- Employ the six Good Faith Efforts during prime contractor procurement (§ 33.301).
- Require prime contractor to comply with the following prime contractor requirements of Title 40 Part 33:
 - To employ the six Good Faith Efforts steps in paragraphs (a) through (e) of § 33.301 if the prime contractor awards subcontracts (§ 33.301(f)).
 - To provide EPA form 6100-2 *DBE Subcontractor Participation Form* to all DBE subcontractors (§ 33.302(e)).
 - To submit EPA forms 6100-3 *DBE Program Subcontractor Performance Form* and 6100-4 *DBE Program Subcontractor Utilization Form* with bid package or proposal. (§ 33.302 (f) and (g)).
 - To pay its subcontractor for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the recipient (§ 33.302(a)).
 - To notify recipient in writing by its prime contractor prior to any termination of a DBE subcontractor for convenience by the prime contractor (§ 33.302(b)).

- To employ the six good faith efforts described in § 33.301 if soliciting a replacement subcontractor after a DBE subcontractor fails to complete work under the subcontract for any reason. (§ 33.302(c)).
- To employ the six good faith efforts described in § 33.301 even if the prime contractor has achieved its fair share objectives under subpart D of Part 33. (§33.302(d)).
- Semiannually complete and submit to Charles Hayes, EPA Region 4 DBE Coordinator EPA form 5700-52A summarizing DBE participation achieved during the previous six months (§ 33.502).
- Maintain records documenting its compliance with the requirements of Title 40 Part 33, including documentation of its, and its prime contractors', good faith efforts (§ 33.501(a)).

Prime Contractor Responsibilities:

- Employ the six Good Faith Efforts steps in paragraphs (a) through (e) of § 33.301 if the prime contractor awards subcontracts (§ 33.301(f)).
- Provide EPA form number 6100-2 *DBE Program Subcontractor Participation Form* and form number 6100-3 *DBE Program Subcontractor Performance Form* to each DBE subcontractor prior to opening of the contractor's bid or proposal (§ 33.302(e) and (f)).
- Complete EPA form number 6100-4 *DBE Program Subcontractor Utilization Form* (§ 33.302(g).
- Submit to recipient with it bid package or proposal the completed EPA form number 6100-4, plus an EPA form number 6100-3 for each DBE subcontractor used in the contractor's bid or proposal (§ 33.302(f) and (g)).
- Pay subcontractors for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the recipient (§ 33.302(a)).
- Notify the recipient in writing prior to prime contractor termination of a DBE subcontractor for convenience (§ 33.302(b)).
- Employ the six good faith efforts described in § 33.301 if soliciting a replacement subcontractor after a DBE subcontractor fails to complete work under the subcontract for any reason. (§ 33.302(c)).

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- Employ the six good faith efforts described in § 33.301 even if the prime contractor has achieved its fair share objectives under subpart D of Part 33. (§33.302(d)).
- Semiannually inform recipient of DBE participation achieved (§ 33.502).
- Maintain records documenting its compliance with the requirements of Title 40 Part 33, including documentation of its, and its prime contractors', good faith efforts (§ 33.501(a)).

Subcontractor Responsibilities:

- May submit EPA form 6100-2 *DBE Subcontractor Participation Form* to Charles Hayes, EPA Region 4 DBE Coordinator (§ 33.302(e)).
- Must complete EPA form 6100-3 *DBE Program Subcontractor Performance Form*, and submit it to the prime contractor soliciting services from the subcontractor prior to the opening of bids for the prime contract.

Form	Requirement	Provided By:	Completed By:	Submitted To:
EPA Form 6100-2	Grant Recipients required to have prime contractors provide form to Subcontractors	Prime Contractors	DBE Subcontractors	EPA Region 4 DBE Coordinator Charles Hayes
EPA Form 6100-3	Grant Recipients required to have prime contractors provide form to Subcontractors	Prime Contractors	DBE Subcontractors	Grant Recipients as part of a bid or proposal package
EPA Form 6100-4	Grant Recipients required to have prime contractors complete the form	Gran t Recipients	Prime Contractors	Grant Recipients as part of a bid or proposal package

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OMB Control No: 2090-0030 Approved: 05/01/2008 Approval Expires: 01/31/2011

Disadvantaged Business Enterprise Program DBE Subcontractor Participation Form

NAME OF SU	JBCONTRACTOR'	PROJECT NAME			
ADDRESS	ADDRESS CONTRACT NO.				
TELEPHONE	TELEPHONE NO. EMAIL ADDRESS				
PRIME CON	TRACTOR NAME				
Please use the termination by	Please use the space below to report any concerns regarding the above EPA-funded project (e.g., reason for termination by prime contractor, late payment, etc.).				
CONTRACT ITEM NO.	NO. THE PRIME CONTRACTOR WAS PAID BY PRI		AMOUNT SUBCONTRACTOR WAS PAID BY PRIME CONTRACTOR		
Subcontractor Signature Title/Date					

Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

EPA FORM 6100-2 (DBE Subcontractor Participation Form)

Disadvantaged Business Enterprise Program DBE Subcontractor Participation Form

The public reporting and recordkeeping burden for this collection of information is estimated to average fifteen (15) minutes. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed EPA DBE Subcontractor Participation Form to this address.

EPA FORM 6100-2 (DBE Subcontractor Participation Form)

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OMB Control No: 2090-0030 Approved: 05/01/2008 Approval Expires: 01/31/2011

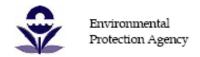
Disadvantaged Business Enterprise Program DBE Subcontractor Performance Form

NAME OF SUBCO	NTRACTOR:	PROJECT NAME		
ADDRESS		BID/PROPOSAL NO.		
TELEPHONE NO.		E-MAIL ADDRESS		
PRIME CONTRAC	CTOR NAME			
CONTRACT ITEM NO.	ITEM OF WORK OR DESCRIPTION OF SERVICES BID TO PRIME		N OF SERVICES BID TO PRICE OF WORK SUBMITTED TO PRIME CONTRACTOR	
	as an MBE or WBE under EPA's DB ate Print Name Title	E Program?Yes	_ No Signature of	
	Signati	are of Subcontractor Date	Print	
Name Title				

Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

EPA FORM 6100-3 (DBE Subcontractor Performance Form)

OMB Control No: 2090-0030 Approved: 05/01/2008 Approval Expires: 01/31/2011



Disadvantaged Business Enterprise Program DBE Subcontractor Performance Form

The public reporting and recordkeeping burden for this collection of information is estimated to average fifteen (15) minutes. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed EPA DBE Subcontractor Performance Form to this address.

EPA FORM 6100-3 (DBE Subcontractor Performance Form)



BID/PROPOSAL NO.

OMB Control No: 2090-0030 Approved: 05/01/2008 Approval Expires: 01/31/2011

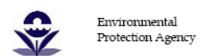
Disadvantaged Business Enterprise Program DBE Subcontractor Utilization Form

NAME OF PRIME BIDDER/PROPOSER		E-MAIL ADDRESS			
ADDRESS					
TELEPHONE NO.		FAX NO.			
The following subcontractors: will	be used on	this project:			
COMPANY NAME, ADDRESS, PHONE NUMBER, AND E-MAIL ADDRESS			ESTIMATE D DOLLAR AMOUNT	CURRENTLY CERTIFIED AS AN MBE OR WBE?	
I certify under penalty of perjury that the replacement of a subcontractor, I will adh Section 33.302(c).					
Signature of Prime Contractor		Da	ite		
Print Name		Ti	tle		

PROJECT NAME

Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

EPA FORM 6100-4 (DBE Subcontractor Utilization Form)



OMB Control No: 2090-0030 Approved: 05/01/2008 Approval Expires: 01/31/2011

Disadvantaged Business Enterprise Program DBE Subcontractor Utilization Form

The public reporting and recordkeeping burden for this collection of information is estimated to average fifteen (15) minutes. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed EPA DBE Subcontractor Utilization Form to this address.

EPA FORM 6100-4 (DBE Subcontractor Utilization Form)

Fair Share Go	Fair Share Goals Set October 1, 2006					
	Region 4					
Recipient MBE % WBE %						
Kentucky	Construction	0.70%	7.60%			
Kentucky	Supplies	3.70%	4.60%			
	Services	1.20%	16.30%			
	Goods/Equipment	1.20%	1.10%			
	Combined	1.2070	1.1076			
	Comonica					
Florida DEP	Construction	9.00%	3.00%			
	Supplies					
	Services					
	Goods/Equipment					
	Combined					
Florida - Hillsborough County	Construction	20.00%	20.00%			
	Supplies	10.00%	10.00%			
	Services	10.00%	10.00%			
	Goods/Equipment	10.00%	10.00%			
	Combined					
South Carolina	Construction	3.60%	2.40%			
	Supplies	9.00%	9.00%			
	Services	11.00%	11.00%			
	Goods/Equipment	10.00%	10.00%			
	Combined					
Tennessee	Construction	2.60%	2.60%			
	Supplies	5.20%	5.20%			
	Services	5.20%	5.20%			
	Goods/Equipment	5.20%	5.20%			
	Combined					
Mississippi – Non-SRF Programs	Construction					
	Supplies	7.70%	3.40%			
	Services	1.10%	2.20%			
	Goods/Equipment	6.80%	5.10%			
	Combined					

Recipient		MBE%	WBE%
Georgia	Construction	13.70%	7.00%
	Supplies	13.70%	7.00%
	Services	13.70%	7.00%
	Goods/Equipment	13.70%	7.00%
	Combined		
North Carolina	Construction	8.00%	5.00%
	Supplies	7.00%	9.00%
	Supplies	7.00%	9.00%
	Goods/Equipment	7.00%	9.00%
	Combined	4.00%	10.00%
Alabama	Construction	5.00%	17.00%
	Supplies	4.00%	11.00%
	Supplies	8.00%	30.00%
	Goods/Equipment	5.00%	20.00%
	Combined		

BONDS AND INSURANCE

The minimum requirements shall be as follows:

Bonding requirements for contracts of \$100,000 or less are contained in 2 CFR 200.325.

Bond requirements for contracts in excess of \$100,000 are:

- < Bid guarantee equivalent to five percent of the bid price. The bid guarantee shall consist of a firm commitment such as a certified check or bid bond submitted with the bid;
- < Performance bond equal to 100 percent of the contract price, and
- < Payment bond equal to 100 percent of the contract price. Bonds must be obtained from companies holding Certificates of Authority as acceptable sureties, issued by the U.S. Treasury.</p>

Insurance requirements are contained in the General Conditions of the contract. In addition to the other required insurance, the owner or the contractor, as appropriate, must acquire any flood insurance made available by the Federal Emergency Management Agency as required by 44 CFR Parts 59-79, if construction will take place in a flood hazard area identified by the Federal Emergency Management Agency. The owner's requirements on Flood Insurance are contained in the Special Conditions Section of the Contracts Documents.

BID SCHEDULE FOR RFB NO. 2019-43 BRIDGE WATER MAIN REPLACEMENT - S. SALFORD BOULEVARD ESTIMATED SUMMARY OF PAY ITEMS

	ITEM DESCRIPTION	UNIT OF MEASURE	EST QTY	UNIT PRICE	EXTENDED PRICE
2	12-inch HDPE DR-11 DIRECTIONAL BORE UNDER COCOPLUM WATERWAY	LF	336		\$0.00
3	10-inch PVC C-900, DR-18 R.J. PIPE AND FITTINGS	LF	50		\$0.00
4	10-inch GATE VALVE	EA	1		\$0.00
5	12-inch X 10-inch TAPPING SLEEVE AND 10-inch TAPPING VALVE	EA	1		\$0.00
6	CONNECTION TO EXISTING 10-inch AC WATER MAIN	EA	1		\$0.00
7	REMOVE AND DISPOSE OF BRIDGE SUPPORTED WATER MAIN	LS	1		\$0.00
8	GROUT, CAP, and ABANDON EXISTING WATER MAINS IN PLACE	LS	1		\$0.00
9	MANUAL PRESSURE TESTING STATION/AIR RELEASE	EA	2		\$0.00
SUB-TOTAL BID PRICE (ITEMS 2–9)					
1	MOBILIZATION/DEMOBILIZATION (MAX. OF 5% OF ITEMS 2 THROUGH 9)	LS	1		\$0.00
				TOTAL	\$0.00

COMPANY:		
PRINT NAME/TITLE:	÷	

This page must be completed and submitted

ALL BID PAGES MUST BE EXECUTED BY A CORPORATE/BINDING AUTHORITY & NOTARIZED WHERE APPLICABLE



City of North Port FINANCE DEPARTMENT/PURCHASING DIVISION 4870 CITY HALL BLVD, STE 337 NORTH PORT, FLORIDA 34287

Office: 941.429.7170

Fax: 941.429.7173
Email: purchasing@cityofnorthport.com



December 20, 2018

ADDENDUM 1

TO: PROSPECTIVE BIDDERS

RE: RFB NO. 2019-43 Bridge Water Main Replacement S Salford Blvd

DUE DATE January 18, 2019

City Hall, Room 302 (Bids need to be delivered to Room 337 so they can be date and time stamped on or before 2:00 PM. Bid opening will commence in Room 302 shortly thereafter)

Bidders are hereby notified that this addendum shall be made part of the above-named bid and contract documents. The following changes to the above bid are issued to modify, and/or clarify the bid and contract documents (the deletions are as **strikethroughs** and additions as **underlined**). These items shall have the same force and effect as the original documents, and bids to be submitted on the specified date shall conform with the additions, deletions and revisions as listed herein.

ITEM #1: QUESTIONS/ANSWERS

- Q1: Question regarding the tapping sleeve and valve: On the plans it calls for a 12" tapping sleeve/valve and 12" PVC, however on the bid form it reads 12"x10" tapping sleeve/valve with PVC. Please clarify size of tapping sleeve and valve, PVC pipe and any required fittings.
- A1: The Bid Form is correct. The connection to existing 12" water main on the south side of the bridge shall be made using a 12"x10" Tapping Sleeve with a 10" Tapping Valve. The PVC piping and fittings between the tapping valve and the HDPE pipe shall be 10" in size and will be paid for under Bid Item 3.

Bid Item 2 and Bid Item 5 have been revised. Revised sections have been highlighted.

<u>Please replace Construction Drawing Sheets 3 and 4 of 17 with the attached updated sheets.</u>
<u>Please replace Section 1025 of the Measurement and Payment and replace with the attached.</u>

Q2: For lane closures, is there a time limitation on how long we can have the lane closed?

A2: The lane would have to be open by the end of the business day. Any lane closures will be planned and approved thru the City of North Port.

Q3: What is the Engineer's Estimate?

A3: \$105,094.50

Firms are required to acknowledge receipt of this addendum on their proposal forms. All other terms and conditions of the original proposal and contract documents remain the same.

Keith Raney

Keith Raney, CPPB, CPPO Contract Administrator II Finance Department/Purchasing Division 4970 City Hall Blvd. North Port, Florida 34286

Tel: 941.429.7103 Fax: 941.429.7173

E-mail: kraney@cityofnorthport.com

Receipt of Addendum No. 1 shall be noted within the Bid Form in the appropriate section.

End of Addendum No.1

SECTION 01025 MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 EXPLANATION AND DEFINITIONS

A. The following explanation of Measurement and Payment for the bid form items is made for information and guidance. The omission of reference to any item in this description shall not, however, alter the intent of the bid form or relieve the Contractor of the necessity of furnishing such as a part of the Contract at no additional cost.

1.02 MEASUREMENT

- A. The quantities set forth in the bid form are approximate and are given to establish a uniform basis for the comparison of bids. The CITY reserves the right to increase or decrease the quantity of any class or portion of the work during the progress of construction in accord with the terms of the Contract.
- B. The lump sum price for mobilization/demobilization shall not exceed five percent (5%) of the total of all other items bid (excluding this item). The CONTRACTOR shall provide a breakdown of the lump sum bid for mobilization. The breakdown shall identify items of preparatory work and operations with the corresponding cost per item.

1.03 PAYMENT

- A. Payment shall be made for the items listed on the Bid Form on the basis of the work actually performed and completed, such work including but not limited to, the furnishing of all necessary labor, materials, equipment, transportation, clean up, restoration of disturbed areas, and all other appurtenances to complete the construction and installation of the work as shown on the drawings and described in the specifications.
- B. Unit prices are used as a means of computing the final figures for bid and Contract purposes, for periodic payments for work performed, for determining value of additions or deletions and wherever else reasonable.

1.04 MEASUREMENTS FOR PAYMENT

- A. Methods for Measurement: Units for measurement shall be:
 - 1. Each (EA).
 - 2. Linear Feet (LF).
 - 3. Lump Sum (LS).
 - 4. Square Yards (SY).
- B. Unit Price Contracts/Items:

- Linear Feet (LF) shall be measured along the horizontal length of the centerline of the
 installed material, unless otherwise specified. Pipe shall be measured along the
 centerline of the length of the completed pipeline, regardless of the type of joint
 required, without deduction for the length of valves or fittings. Pipe included within
 the limits of lump sum items will not be measured.
- 2. Square Yards (SY) shall be measured as the amount of the material installed within the limits shown and specified in the Construction Plans and these Specifications. Slope angles and elevations shall be measured using land surveying equipment. The Contractor shall provide supporting documentation (i.e., drawings, delivery tickets, invoices, survey calculations, etc.) to verity the actual quantity installed.

PART 2 – PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 GENERAL

- A. Payment shall be made on the basis of Work actually performed completing each item in the Bid Form, such Work including, but not limited to, the furnishing of all necessary labor, materials, equipment, transportation, cleanup, and all other appurtenances to complete the construction and installation of the work to the configuration and extent as shown on the Construction Plans and described in these Technical Specifications. Payment for each item includes compensation for project photographs or videos, project layout, as built survey, cleanup, and restorations. Restoration is included but not limited to any sidewalk, curb, asphalt, mailboxes, sod, decorative landscape materials, etc.
- B. Water used for flushing, pressure testing, and other activities shall be provided through a metered jumper. The cost of the City meter, fee for water used, and the necessary piping and appurtenances shall be included in the unit price for the Item in which the water is being used for.
- C. No work outside the scope of work to be performed prior to a change order approval.

3.02 BID ITEMS

- A. <u>Mobilization/Demobilization (Item 1):</u> Payment for mobilization and demobilization will be made at the Contract lump sum price for mobilization/demobilization as one bid item for execution of the entire project. This price shall be full compensation for all costs incurred for preparatory work and operations including but not limited to:
 - Movement of personnel, equipment, supplies, and incidentals to and from the project site(s);
 - The establishment and removal of facilities necessary for work on the project, including but not limited to safety and sanitary facilities;

- Fees for bonds and insurance;
- Maintenance of traffic;
- Subcontractor coordination; and
- For all other work and operations, including submittals and obtaining construction permits, which must be performed prior to beginning work on the various items.

Payment for mobilization/demobilization will be payable in the first partial payment at seventy-five percent (75%) of the contract lump sum price for mobilization/demobilization and the balance payable in the final payment.

BID ITEM	DESCRIPTION	UNITS
1	MOBILIZATION/DEMOBILIZATION	LS

- B. <u>HDPE Directional Bores (Item 2)</u>: Payment for HDPE directional bores will be made at the contract unit price per linear foot of each size and dimension ration (DR) of a fully functional reclaimed water main furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, installing, and testing of the reclaimed water main and shall include but not be limited to:
 - Project layout;
 - Staging;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;
 - Restraining utility poles;
 - Protecting of existing facilities;
 - Clearing and grubbing;
 - Exploratory excavations;
 - Excavation of all material encountered including rock encountered during the drilling/boring process.
 - Sheeting and bracing;
 - Dewatering;
 - HDPE pipe with welded joints;
 - Connections to adjacent pipe, including but not limited to welded connections/adapters, ductile iron fittings, gaskets, and mechanical joint restraints;
 - Locator wire;
 - Sub-aqueous crossing signs;
 - Removal of drillers bentonite mud;
 - Compaction and compaction testing;
 - Grading;
 - Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
 - Cleanup;
 - Repair of existing utilities that are disturbed during construction;

- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Flushing, Pigging;
- · Pressure testing;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the pipe complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, sidewalk, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

Measurement of the pipe shall be to the nearest foot along the centerline of the pipe as measured in the horizontal plane between the limits shown on the Construction Plans. If the City agrees that field conditions (e.g., minimum radius, installation conditions) require the beginning and/or end of directional drills be extended, the extension will be paid for at the unit price bid for Item 3—
Item 3—
Item 4—
<a hr

BID ITEM	DESCRIPTION	UNITS
2	12-INCH HDPE DR-11 DIRECTIONAL BORE	l F
2	UNDER COCOPLUM WATERWAY	LF

- C. PVC Potable Water Main Pipe and Fittings (Item 3): Payment for PVC potable water main pipe and fittings will be made at the contract unit price per linear foot of each size and dimension ratio (DR) of a fully functional reclaimed water main (either with or without restrained joints) furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, laying, and testing of the reclaimed water main and shall include but not be limited to:
 - Project layout;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;
 - Restraining utility poles;
 - Protection of existing facilities;
 - Clearing and grubbing;
 - Exploratory excavations;
 - Excavation of all material encountered including rock;
 - Undercutting;
 - Sheeting and bracing;
 - Dewatering;

- PVC pipe and ductile iron fittings;
- Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
- Detectable tape and locator wire;
- Clamps, Harnessing, Adapters;
- Fill materials, including temporary fill;
- Removal and replacement of unsuitable subgrade;
- Compaction and compaction testing;
- Grading;
- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Flushing, Pigging;
- Pressure testing;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the pipe complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, sidewalk, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
3	10-INCH PVC C-900, DR-18 R.J. PIPE AND FITTINGS	LF

- D. <u>10-Inch Gate Valve (Item 4)</u>: Payment for 10-inch gate valve will be made at the contract unit price for each fully functional 10-inch gate valve furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, installing, and testing the gate valve and shall include but not be limited to:
 - Project layout;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;
 - Restraining utility poles;
 - Protection of existing facilities;
 - Clearing and grubbing;
 - Exploratory excavations;

- Excavation of all material encountered including rock;
- Undercutting;
- Sheeting and bracing;
- Dewatering;
- 10-inch gate valve and concrete valve collar including but not limited to bedding, adjustable cast iron valve box, operator extensions; tracer wire access box; reinforced concrete pad(s), brass ID tag, and reflective delineator;
- Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
- Detectable tape and locator wire;
- Clamps, Harnessing, Adapters;
- Fill materials, including temporary fill;
- Removal and replacement of unsuitable subgrade;
- Compaction and compaction testing;
- Grading;
- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the gate valve complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
4	10-INCH GATE VALVE	EA

- E. <u>Tapping Sleeve and Tapping Valve (Item 5)</u>: Payment for 12-inch X 10-inch tapping sleeve and 10-inch tapping valve will be made at the contract unit price for each fully functional tapping sleeve and tapping valve furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, installing, and testing the sleeve and valve and shall include but not be limited to:
 - Project layout;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;

- Restraining utility poles;
- Protection of existing facilities;
- Clearing and grubbing;
- Exploratory excavations;
- Excavation of all material encountered including rock;
- Undercutting;
- Sheeting and bracing;
- Dewatering;
- 10-inch tapping valve and concrete valve collar including but not limited to bedding, adjustable cast iron valve box, operator extensions; tracer wire access box; reinforced concrete pad(s), brass ID tag, and reflective delineator;
- Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
- Detectable tape and locator wire;
- Clamps, Harnessing, Adapters;
- Fill materials, including temporary fill;
- Removal and replacement of unsuitable subgrade;
- Compaction and compaction testing;
- Disinfecting the connection;
- Grading;
- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the gate valve complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
_	12-INCH x 10-INCH TAPPING SLEEVE AND 10-INCH TAPPING	ГА
5	VALVE VALVE	EA

- F. <u>Connections to Existing Potable Water Mains (Item 6)</u>: Payment for connections to existing potable water mains will be made at the lump sum contract unit price for each connection complete in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for connecting new PVC water mains paid for under Bid Item 3 to existing potable water mains and shall include but not be limited to:
 - All necessary coordination with the City for connections to existing potable water mains;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;
 - Restraining utility poles;
 - Protection of existing facilities;
 - Clearing and grubbing;
 - Exploratory excavations;
 - Excavation of all material encountered including rock;
 - Undercutting;
 - Sheeting and bracing;
 - Dewatering;
 - Necessary demolition including but not limited to saw-cutting and removal of existing pipe and removal of existing fittings;
 - PVC pipe and ductile iron fittings;
 - Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
 - Detectable tape and locator wire;
 - Fill materials, including temporary fill;
 - Removal and replacement of unsuitable subgrade;
 - Compaction and compaction testing;
 - Disinfecting the connection;
 - Grading;
 - Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
 - Cleanup;
 - Repair of existing utilities that are disturbed during construction;
 - Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
 - Testing;
 - Placing into service;
 - Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
 - As-built record data, including but not limited to surveying and recording as-built information; and
 - All other work incidental to the installation of the connection complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping

structures, sidewalk, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
6	CONNECTION TO EXISTING 10-INCH AC WATER MAIN	EA

G. Remove and Dispose of Bridge Supported Water Main (Item 7): Payment for the removal and disposal of the existing water main connected to the side of the bridge will be made at the Contract lump sum price. This item shall include, but is not limited to, all labor, tools and equipment for removal and disposal of the existing water main attached to side of the bridge including all water main support materials and water main appurtenances within five-feet of the water main; cleaning, patching and touch-up painting of the affected bridge structure and including a clean cut of the water main parallel to the face of concrete wall of each bridge abutment.. The lump sum price shall include all necessary labor, tools and equipment for providing the demolition, removal, disposal (or transmittal, as directed, to City of North Port inventory) and cleanup of designated items of the existing water main as shown on the plans and specified herein.

BID ITEM	DESCRIPTION	UNITS
7	REMOVE AND DISPOSE OF BRIDGE SUPPORTED WATER MAIN	LS

H. Grout, Cap and Abandon Existing Water Mains in Place (Item 8): Payment for the grouting, capping and abandonment of the existing water main will be made at the Contract lump sum price. This item shall include, but is not limited to, all materials, equipment and labor necessary for capping the ends of the existing water mains called out to be grouted and abandoned in place with mechanical joint caps, filling the abandoned sections of water mains with flowable fill from the cap to the saw-cut end of the pipe at the bridge abutment and screening the flowable fill smooth at the saw-cut end to form a neat, finished end under the bridge.

This item shall include, but is not limited to, all materials, equipment and labor necessary for crushing of the existing water mains called out to be crushed and abandoned in place. Also included is backfill, cleanup, landscaping, sodding and other surface materials not specifically designated in the Bid.

This item also includes maintenance of traffic, protection of existing utilities, dewatering, sheeting, excavation, backfill, compaction, and restoration.

BID ITEM	DESCRIPTION	UNITS
8	GROUT, CAP, and ABANDON EXISTING WATER MAINS IN PLACE	LS

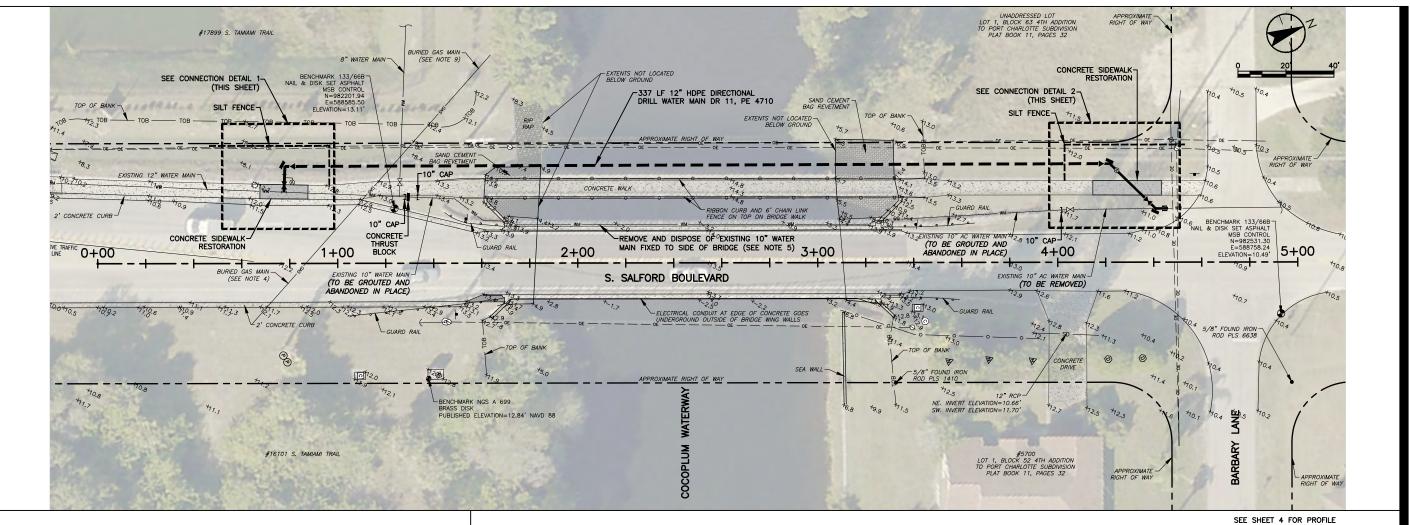
I. <u>Manual Pressure Testing Station/Air Release (Item 9):</u> Payment for manual pressure testing station will be made at the contract unit price each full functional station assembly furnished and installed in place and ready for service. The price shall include all necessary labor,

equipment, fittings, and materials for furnishing and installing the manual pressure testing station assembly and shall include but not be limited to:

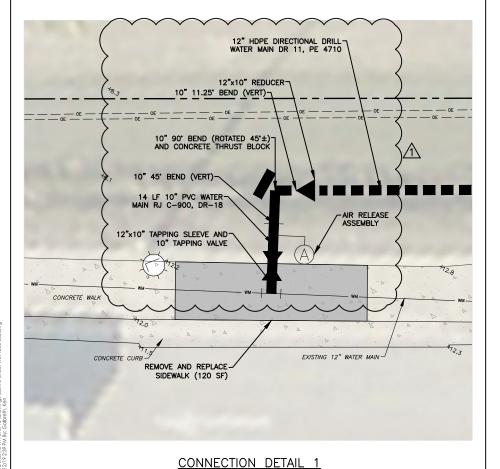
- Double strap service saddle and connection to water main;
- Corporation stop;
- Curb stop;
- CTS tubing;
- Brass fittings;
- Locator wire;
- Meter box and cover;
- Crushed rock or shell;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the air release assembly complete in place.

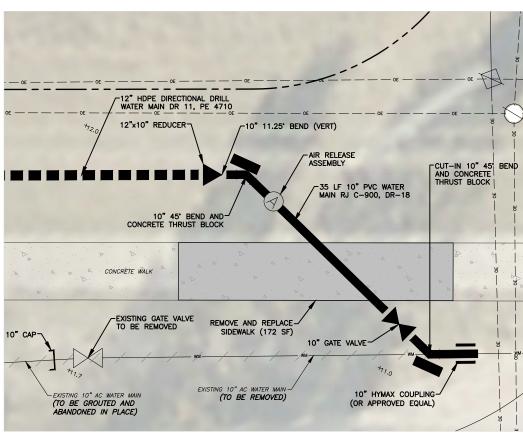
BID ITEM	DESCRIPTION	UNITS
9	MANUAL PRESSURE TESTING STATION/AIR RELEASE	EA

END OF SECTION



SEE SHEET 4 TOK PROTE





NOTES

- THE 12" HDPE SHALL BE FLUSHED, PRESSURE TESTED, DISINFECTED, BACTERIOLOGICALLY TESTED AND CLEARED BY DOH PRIOR TO BEING CONNECTED TO THE EXISTING WATER MAIN.
- 2. DURING DIRECTIONAL DRILLING OPERATIONS, THE CONTRACTOR SHALL TAKE CARE TO PROTECT THE EXISTING WATER MAIN AND AND STORM SEWER SYSTEM FROM DAMAGE. ANY DAMAGE TO THE EXISTING WATER MAIN OR STORM SEWER SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO ADDITIONAL COST TO NORTH PORT UTILITY DEPARTMENT.
- EXISTING WATER MAIN IDENTIFIED TO BE ABANDONED IN PLACE SHALL BE CAPPED AND FILLED WITH FLOWABLE FILL ONCE THE NEW MAIN IS IN SERVICE.
- 4. CONTRACTOR SHALL LOCATE THE HORIZONTAL AND VERTICAL LOCATION OF THE EXISTING GAS MAIN AT THE WATER MAIN CROSSING. THE EXISTING LOCATION SHALL BE PROVIDED TO NORTH PORT UTILITIES AND THE ENGINEER TO DETERMINE WHETHER THERE IS A CONFLICT.
- REMOVE EXISTING 10" WATER MAIN, BRACKETS, HANGERS, ETC FROM SIDE OF BRIDGE. CUT PIPE 3" FROM BRIDGE ABUTMENTS AND FILL BURIED PORTIONS WITH FLOWABLE FILL. MORTAR SMOOTH AT SAW CUT ENDS AT BRIDGE ABUTMENTS.
- 6. SAFE PEDESTRIAN PASSAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY SHELL SIDEWALK IN AREAS WHERE THE EXISTING SIDEWALK IS REMOVED TO FACILITATE CONSTRUCTION OF THE NEW
- CONTRACTOR SHALL COORDINATE WITH NORTH PORT UTILITIES ON WHICH EXISTING GATE VALVES NEED TO BE USED TO ISOLATE THE EXISTING WATER MAIN FOR CONNECTIONS.
- 8. SILT FENCE LOCATIONS ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL ADJUST LOCATION IF NEEDED TO ACCOMMODATE THEIR CONSTRUCTION ACTIVITIES. SEE SHEET 7 FOR BEST MANAGEMENT PRACTICES.
- 9. THE CONTRACTOR SHALL FIELD LOCATE (HORIZONTAL AND VERTICAL) THE EXISTING GAS MAIN AT THE WATER MAIN HDD CROSSING TO ENSURE THE GAS MAIN IS NOT DAMAGED DURING DRILLING AND PULL BACK OPERATIONS.

IDGE WATER MAIN SALFORD BOULEVA

Stantec

Permit-Seal

CII

Drawing No.

Revision Sheet

CONNECTION DETAIL 2

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