INVITATION TO BID

The Utilities Commission, City of New Smyrna Beach, Florida (COMMISSION) is seeking bids from qualified vendors to:

**Trihalomethane Reduction System Supply and Installation:**

Furnish and place into operation a Trihalomethane Reduction System (TRS) floating spray equipment at the Utilities Commission – South Beach Pump Station 1.0 Million Gallon Ground Storage Tank.

Notice is hereby given that sealed bids will be received at 200 Canal Street, New Smyrna Beach, FL 32168, until 2:30 P.M. on **July 9, 2019** at which time they will be publicly opened in the 3rd floor DeBerry Room.

Submit Bids To: Caleb Fisher, CPPB Purchasing Agent Utilities Commission, City of New Smyrna Beach (386) 424.3045 Voice (386) 424.2748 Fax [CFISHER@UCNSB.ORG](mailto:CFISHER@UCNSB.ORG)

Mailing Address: 200 Canal Street New Smyrna Beach, FL 32168

Walk In Delivery: 200 Canal Street New Smyrna Beach, FL 32168

Bidders must indicate on the sealed envelope the following:

A. Invitation To Bid Number
B. Hour and Date of Opening
C. Name of Bidder
TABLE OF CONTENTS

Bid Schedule ....................................................................................................................................3
General Terms & Conditions w. Insurance Requirements .........................................................................4
Certification of Drug-Free Workplace Form .............................................................................................17
Public Entity Crimes Form .......................................................................................................................18
Non-Collusion Affidavit of Prime Bidder Form .......................................................................................20
Authorized Signatures/Negotiators .........................................................................................................21
Request For Taxpayer Identification Number And Certification W-9 Form ...........................................22
Vendor Application .................................................................................................................................23
Questionnaire ...........................................................................................................................................24
Required Disclosure ..................................................................................................................................25
Bid Submittal Requirements .....................................................................................................................26
Compliance with Florida Trench Safety Act .............................................................................................27
Bid Scope of Work ....................................................................................................................................28
Bid Tabulation ..........................................................................................................................................37
Bid Form ..................................................................................................................................................38
Statement of No Bid Form ..........................................................................................................................40
Section 00410 Bid Bond ............................................................................................................................41
Section 00645 Performance and Payment Bond ......................................................................................44
Section 01000 Project Requirements .......................................................................................................45
Section 01027 Applications for Payments .................................................................................................51
Section 01380 Construction Photographs ..................................................................................................54
Section 01700 Project Closeout ..................................................................................................................56

ATTACHMENTS:
Tank Drawings
UTILITIES COMMISSION  
CITY OF NEW SMYRNA BEACH, FLORIDA

ITB# 21-19  
TRIHALOMETHANE REDUCTION SYSTEM SOUTH BEACH PUMPING STATION

BID SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 28, 2019</td>
<td>DISTRIBUTION OF THE INVITATION TO BID</td>
</tr>
<tr>
<td>June 13, 2019</td>
<td><strong>MANDATORY</strong> PRE-BID MEETING</td>
</tr>
<tr>
<td></td>
<td><strong>TIME:</strong> 10:00 A.M.</td>
</tr>
<tr>
<td></td>
<td><strong>LOCATION:</strong> WATER TREATMENT PLANT</td>
</tr>
<tr>
<td></td>
<td>UTILITIES COMMISSION</td>
</tr>
<tr>
<td></td>
<td>2640 PAIGE AVE</td>
</tr>
<tr>
<td></td>
<td>NEW SMYRNA BEACH, FL 32168</td>
</tr>
<tr>
<td>June 21, 2019</td>
<td>DEADLINE FOR FINAL QUESTIONS BY 2:30 P.M.</td>
</tr>
<tr>
<td></td>
<td>E-MAIL: <a href="mailto:cfisher@ucnsb.org">cfisher@ucnsb.org</a></td>
</tr>
<tr>
<td>June 28, 2019</td>
<td>ADDENDUM PUBLISHED BY 5:00 P.M.</td>
</tr>
<tr>
<td>July 9, 2019</td>
<td>BID RETURN DEADLINE BY 2:30 P.M.</td>
</tr>
<tr>
<td></td>
<td><strong>LOCATION:</strong> UTILITIES COMMISSION RECEPTION</td>
</tr>
<tr>
<td></td>
<td>200 CANAL STREET</td>
</tr>
<tr>
<td></td>
<td>NEW SMYRNA BEACH, FL 32169</td>
</tr>
</tbody>
</table>
GENERAL TERMS AND CONDITIONS

1. **INSTRUCTIONS TO BIDDERS:** To insure consideration of your bid, please follow these instructions. Bids not in compliance with conditions specified herein are subject to rejection.

2. **SEALED BIDS:** AN ORIGINAL BID AND 1 COPY plus a USB Flash Drive or a CD must be in the Finance Department by the date and time specified. The Bid Reply, Certification of Drug-Free Workplace Form, Public Entity Crimes Form, Non-Collusion Affidavit of Prime Bidder Form, Evaluation Factors, Questionnaire, and any addenda issued must be included. Proposals must be sealed and clearly labeled with the following information:
   a. Name and address of Bidder
   b. Bid number
   c. Date and time of Bid Opening

3. **COMMISSION:** The term **COMMISSION** used herein refers to the Utilities Commission, City of New Smyrna Beach, Florida, or its duly authorized representative.

4. **BIDDER:** The term **BIDDER** used herein refers to the dealer/manufacturer or business organization submitting a bid to the **COMMISSION** in response to this solicitation.

5. **BID EXAMINATION:** BIDDERS are expected to examine, when applicable, the drawings, specifications, delivery requirements, performance sites and all instructions to satisfy themselves of conditions affecting cost of performing this contract.

6. **FURNISHED ITEMS:** No material, labor or facilities will be furnished by the **COMMISSION** unless specifically stated.

7. **COLLUSION:** The **BIDDER** hereby attests that the prices in this offer have been arrived at independently without consultation, communication or agreement with any competitor for the purpose of restricting competition.

8. **PRICE WARRANTY:** The **BIDDER** warrants that the prices of the items set forth herein do not exceed the prices charged by the **BIDDER** under a contract with the State of Florida.

9. **COMMERCIAL WARRANTY:** The **BIDDER** agrees that the supplies and services furnished under this award shall be covered by the most favorable commercial warranties the **BIDDER** gives any customers for comparable quantities of such supplies or services and that the rights and remedies provided herein are in addition to and do not limit any rights afforded to the **COMMISSION** by any other provision of this award.

10. **INSPECTION AND ACCEPTANCE:** A duly authorized representative of the **COMMISSION** will accomplish inspection and acceptance of the supplies/services purchased herein at the designated delivery point.
11. **QUESTIONS REGARDING BID:** The COMMISSION has made every effort to provide prospective vendors with the information needed to appropriately respond to this bid. The COMMISSION realizes that some clarification, interpretation, or additional information may be required.

*Questions regarding any portion of this bid shall be directed, in writing, to:*
Utilities Commission, City of New Smyrna Beach
Caleb Fisher, Purchasing Agent
cfisher@ucnsb.org
or
P.O. Box 100
New Smyrna Beach, FL 32170-0100

All such requests must be received no later than 2:30 PM, Eastern Standard Time, **June 21, 2019**. Responses to all requests for more information will be included in any addenda and will be made available to all BIDDERS on **June 28, 2019**.

Requests for additional information received after the **June 21, 2019** deadline will not receive a response. Responses will **not** be made orally.

Any additional information pertaining to this Bid or to the services being sought hereunder obtained in a manner other than as described in the preceding paragraph should be regarded as unofficial. The COMMISSION will not be bound in any way by information so obtained, or by a Bidder’s reliance thereon.

12. **COMMUNICATIONS:** Any communication between any potential vendor, service provider, bidder, lobbyist or consultant and any U.C. Commission Member, staff member, or consultant of the U.C. regarding this procurement is strictly prohibited from the date on which the solicitation advertisement appears on the U.C.’s website, Demandstar, or newspaper through the date of contract award. Also from the date of the filing of any notice of protest of award through resolution for the parties involved in the protest or contract award, whichever is longer. The only exceptions to this are communications with the U.C.’s Material Manager or the U.C.’s designated point of contact. Any violation shall constitute grounds for immediate and permanent disqualification of the offending firm and possible debarment or suspension. At the U.C.’s General Manager/CEO and Director of Finance (CFO)’s sole discretion, it may also serve as grounds for the voiding of any Contract with the violator and/or to temporarily or permanently debarring the violator from future work with the U.C. This process will safeguard the integrity of the U.C.’s procurement and protest process and also provide an ethical, equitable, and transparent procurement process.

13. **NON DISCLOSURE:** The Utilities Commission understands the vendors concerns regarding confidential and/or proprietary information for both participating parties. In response UCNSB is incorporating the following verbiage into **ITB 21-19 Trihalomethane Reduction System Supply & Installation**. Upon receipt by UCNSB, responses to solicitations become public records subject to the provisions of Florida’s state policy on public records, Section 119 Florida Statutes. If you believe that any portion of your
14. **INVOICES**: All invoices resulting from the award of this bid will be paid within 30 days of receipt of invoice or receipt of goods or acceptance of work performed.

15. **BID FORM**: A Bid Form is provided and a completed original and one duplicate copy shall be returned in a sealed envelope properly marked with Bid number and acknowledgment of receipt of addenda where applicable. It is incumbent upon each bidder to ensure that they have received all addenda before submitting their bid.

16. **BID OPENING**: Bids will be publicly opened, read aloud and recorded, on the date and time indicated, at the location specified in the request for bid. It is the BIDDER’s sole responsibility to assure his/her bid is delivered at the proper time and place of the bid. The COMMISSION will not be responsible for late deliveries or delayed mail. Bids delivered after the time specified shall not be considered; such bids shall remain unopened.

17. **QUOTING PRICES**: Carelessness in quoting prices or in preparation of bid otherwise will not relieve the BIDDER. BIDDERs are expected to examine specifications, delivery schedule, extensions, and all terms and conditions in the bid documents. Bids having erasures or corrections must be initialed in ink by the BIDDER. In the event of an extension error(s), the unit price will prevail.

18. **AMENDED OR WITHDRAWN BIDS**: Bids may be amended or withdrawn only by written notice prior to the bid opening. Amendments will only be accepted in the form of a new bid package. The bidder must pick up the original bid package and submit an amended sealed bid prior to the bids closing date and time. Amendments or withdrawals received after the bid opening will not be effective, and the original bid submitted will be considered.

19. **PUBLIC ENTITY CRIMES**: UNDER SECTION 287.133(2)(a), FLORIDA STATUTES, 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 287.017, for Category two for a period of 36 months from the date of being placed on the convicted vendor list. See attachment “A”.

20. **CONSIDERATION OF BIDS**: The COMMISSION reserves the right to award the contract to the Bidder(s) that the COMMISSION deems to offer the best overall bid. The COMMISSION is therefore not bound to accept a bid on the basis of lowest price. In addition, the COMMISSION at its sole discretion, reserves the right to cancel this Bid, to reject any and all bids, to waive any and all informalities and/or irregularities, to re-advertise with either the identical or revised specifications, or not award a contract at all if
it is deemed to be in the best interest of the COMMISSION to do so. The COMMISSION also reserves the right to make multiple or split awards if it is deemed to be in the COMMISSION'S best interest. The COMMISSION shall not be responsible for any cost or expense incurred by the Bidder in preparing or submitting a bid or any cost prior to the execution of a contract agreement.

21. **TIE BID:** In the event of a tie bid where quality and service are equal; a preference is given to vendors submitting, with the proposal, a certification of a drug free work place in accordance with Section 287.087 Florida Statutes. Where tie bids are between bidders, one of which is located in Volusia County and the other bidder is not, the recommended award shall be to the local bidder. Past Performance-Consideration will be given to a vendor based on previous history and performance on similar Utilities Commission projects or requirements. Delivery availability or completion period. Capacity to perform in terms of service availability, facilities, personnel or financial availability. Closeness to delivery point. If all conditions are equal, a flip of a coin, with two witnesses present, shall be the deciding factor.

22. **SUBMITTING BIDS:** Bids shall be addressed and mailed or delivered as specified on page one (1) to 200 Canal St. New Smyrna Beach, Florida 32168.

23. **NO BID:** In the event an Invitation to Bid is returned as a no bid, "NO BID" shall be properly marked on the outside of the envelope with the bid number.

24. **REJECTED BIDS:** The COMMISSION reserves the right to reject bids containing any additional terms or conditions not specifically requested in the original conditions and specifications.

25. **FAILURE OF THE CONTRACTOR TO DELIVER:** Failure of the contractor to deliver within the time specified, or within a reasonable time as interpreted by the COMMISSION or failure to make replacements of rejected articles as directed, shall permit the COMMISSION to purchase on the open market articles of comparable grade to take the place of those rejected or not delivered. On all such purchases, the contractor shall reimburse the COMMISSION, within a reasonable time specified by the Purchasing Authority, for any expenses incurred in excess of the defaulted price. Payments due the contractor by the COMMISSION may be withheld until reimbursement is received.

26. **BRAND OR TRADE NAMES:** When brand or trade names are used in the bid invitation, it is for the purpose of item identification and to establish standards for quality, style and features. Bids on equivalent items will be considered unless items are noted as no substitutes. Equivalent bids must be accompanied by descriptive literature and/or specifications to receive consideration. Demonstrations and/or samples may be required and shall be at no charge to the COMMISSION. The COMMISSION reserves the right to determine if bid goods are equivalent to specified goods.

27. **AWARDS:** Awards shall be made as required for the best interest of the COMMISSION. The right is reserved to make award(s) by individual items, group of items, all or none, or any combination thereof, with one or more suppliers.
28. **INDEPENDENT CONTRACTORS:** Contractor is an independent contractor, and all persons employed by Contractor in connection herewith shall be its employees and not employees of COMMISSION in any respect.

29. **INSURANCE:** The Contractor shall, at its sole expense, maintain in effect at all times during the performance of the services insurance coverage with limits not less than those set forth below and with insurers and under forms of policies satisfactory to COMMISSION.

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Minimum Amounts and Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Worker's Compensation</td>
<td>Statutory requirements at location of work</td>
</tr>
<tr>
<td>Employer's Liability</td>
<td>$ 100,000 Each occurrence</td>
</tr>
<tr>
<td></td>
<td>$ 300,000 Disease, aggregate</td>
</tr>
<tr>
<td></td>
<td>$ 100,000 Disease, each employee</td>
</tr>
<tr>
<td>(b) General Liability</td>
<td>$ 1,000,000 General Aggregate</td>
</tr>
<tr>
<td></td>
<td>$ 1,000,000 Products - Comp Ops Agg</td>
</tr>
<tr>
<td></td>
<td>$ 500,000 Each Occurrence</td>
</tr>
<tr>
<td></td>
<td>$ 50,000 Fire Damage</td>
</tr>
<tr>
<td></td>
<td>$ 5,000 Medical Expense</td>
</tr>
<tr>
<td>(c) Automobile Liability</td>
<td>$ 1,000,000 Combined Single Limit</td>
</tr>
<tr>
<td>(owned, hired and non-owned)</td>
<td></td>
</tr>
<tr>
<td>Option of Split Limits:</td>
<td></td>
</tr>
<tr>
<td>(1.) Bodily Injury</td>
<td>$ 500,000 Per Person</td>
</tr>
<tr>
<td></td>
<td>$ 1,000,000 Per Accident</td>
</tr>
<tr>
<td>(2.) Property Damage</td>
<td>$ 500,000</td>
</tr>
</tbody>
</table>

30. **WARRANTY AND ACCEPTANCE:** All material shall be new and workmanship shall be first class in every respect. The work shall be subject to inspection and acceptance by COMMISSION. Contractor guarantees its work hereunder for a period of twelve (12) months after completion and acceptance of the work unless otherwise set forth herein. In the event COMMISSION discovers defects in material or workmanship at any time before the expiration of the specified warranty period, Contractor shall, upon written notice from COMMISSION, repair or replace at its sole expense any such defects. COMMISSION may perform such repairs or replacements by other reasonable means and Contractor agrees to pay for such corrective measures. Neither acceptance of the work by COMMISSION nor payment shall relieve Contractor from liability under the indemnity clause or any of the guarantees or warranties contained or implied herein.
31. **LAWS, REGULATIONS, PERMITS AND TAXES:** Contractor must comply with COMMISSION’s jobsite procedures and regulations and with all applicable local, state and federal laws, rules and regulations and must obtain all permits required for any of the work performed hereunder. Contractor must procure and pay for all permits and inspections required for any of the work performed hereunder and must furnish any bonds, security or deposits required to permit performance of the work. Contractor must, to the extent permissible under applicable law, comply with the jobsite provisions which validly and lawfully apply to work on the specific jobsite being performed under this Contract.

32. **WORK RULES, SECURITY:** For work performed on COMMISSION premises, Contractor shall strictly observe COMMISSION work rules and security requirements. All work shall be carried out during normal COMMISSION working hours unless specifically agreed to in writing by COMMISSION. Contractor shall, at COMMISSION’s request remove from site any employee whom COMMISSION deems to be incompetent, dishonest or uncooperative.

33. **CHANGES:** COMMISSION may, at any time, direct in writing additions, deletions or changes to all or any part of the work. If any such changes cause an increase or decrease in the cost of or in the time required to perform such work, Contractor shall submit detail information substantiating such claims and an equitable adjustment shall be made to the price or time of performance.

34. **RELEASE AGAINST LIENS OR CLAIMS:** Contractor shall promptly pay all claims of persons or firms furnishing labor, equipment or materials used in performing the work hereunder. COMMISSION may require Contractor to submit satisfactory evidence of payment and releases of all such claims. If there is any evidence of any such unpaid claim, the COMMISSION may withhold any payment until Contractor has furnished such evidence of payment and release.

35. **ASSIGNMENT:** Any assignment by Contractor of this Contract or of any rights hereunder or hypothecation thereof in any manner, in whole or in part, by operation of law or otherwise, without the prior written consent of the COMMISSION shall be voided.

36. **SAFETY AND FIRE PREVENTION:** Contractor shall at all times conduct all operations under the Contract in a manner to avoid risks of bodily harm to persons, damage to any property and fire. Contractor shall be responsible to take all precautions necessary and continuously inspect all work, materials and equipment to discover, determine and correct any such conditions which may result in any of the aforementioned risks.
37. SUSPENSION OF WORK AND TERMINATION: COMMISSION May Suspend Work - The COMMISSION may at any time and without cause suspend the Work or any portion thereof by notice in writing to the Contractor. The Project Manager shall fix the date on which Work shall be resumed and the Contractor will resume the Work on the date so fixed. The Contractor will be allowed an extension of the Contract Time, if directly attributable to any suspension. However, no change to the contract price will be allowed on claims for suspended work or delays, whatever the Cause or reason.

COMMISSION May Terminate for Cause - If the Contractor is adjudged bankrupt or insolvent; if he makes a general assignment for the benefit of his creditors without COMMISSION approval; if a trustee or receiver is appointed for the Contractor or for any of his property; if he files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws; if he fails to prosecute and complete the Work in accordance with the established Project Schedule or within the Contract Time allowed; if he repeatedly fails to supply sufficient skilled workers or suitable materials or equipment; if he repeatedly fails to make prompt payment to subcontractors for labor, materials or equipment; if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction; if he disregards the authority of the Project Manager; or if he otherwise substantially violates any provisions of the Contract Documents, then the COMMISSION may, without prejudice to any other right or remedy and after giving the Contractor and his Surety seven (7) days written notice, terminate the services of the Contractor and take possession of the Work and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and assign the completion of the Work to the Surety, or finish the Work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Amount exceeds the direct and indirect cost of completing the Work, including compensation for additional professional services, such excess shall be paid to the Contractor. If such cost exceeds such unpaid balance, the Contractor will pay the difference to the COMMISSION. Such cost incurred by the COMMISSION will be determined by the COMMISSION and incorporated in a Change Order.

Where the Contractor's services have been so terminated by the COMMISSION, said termination shall not affect any rights of the COMMISSION against the Contractor then existing or which may thereafter accrue. Any retention or payment of moneys by the COMMISSION due the Contractor will not release the Contractor from liability.

Upon Termination for Cause, the Contractor shall not be entitled to payment for any anticipated supplemental costs, administrative expenses and/or profit for uncompleted Work. If after notice of termination of the services of the Contractor for cause, it is determined that the Contractor was not in default, the termination shall be deemed to have been for the convenience of the COMMISSION. In such event the Contractor may recover from the COMMISSION payment for Work completed and reasonable termination costs as provided in the following paragraph.
Termination for Convenience: Upon seven (7) days written notice to the Contractor and the Surety, or sooner if reasonable under the circumstances, the COMMISSION may, without cause and without prejudice to any other right or remedy, elect to terminate any part of the Work, or the Contract in whole or in part, as the COMMISSION may deem appropriate. In any termination for convenience, the Contractor shall be paid for work completed, and costs incurred, materials delivered or ordered by the Contractor and subcontractors at the time of termination provided, however, that the payment to the Contractor will exclude any and all anticipated supplemental costs, administrative expenses and profit for uncompleted Work. Upon termination for convenience, the COMMISSION shall have full power and authority to take possession of the Work, assume any sub-agreements with Subcontractors and suppliers which the COMMISSION selects, and prosecute the Work to completion by contract or as the COMMISSION may deem expedient.

Removal of Contractor Employee: The COMMISSION retains the right to require immediate removal of any contractor employee, including the foreman or superintendent if in the COMMISSION’s sole determination it is in the interest of the COMMISSION or the project. Such removal should be immediate and not subject to approval or discussion.

38. **MAINTENANCE OF RECORDS:** The Contractor will keep adequate records and supporting documents applicable to this contract. Said records and documentation will be retained by the Contractor for a minimum of five (5) years from the date of final payment on this Contract. The COMMISSION and its authorized agents shall have the right to audit, inspect and copy records and documentation as often as the COMMISSION deems necessary during the period of this contract and a period of five (5) years after completion of contract performance; provided however, such activity shall be conducted only during normal business hours. The COMMISSION, during the period of time defined by the preceding sentence, shall also have the right to obtain a copy of and otherwise inspect any audit made at the direction of the Contractor as concerns the aforesaid records and documentation.

39. **CONFLICT OF INTEREST OF OFFICERS OR EMPLOYEES OF THE CONTRACTING ENTITY/LOCAL JURISDICTION, MEMBERS OF THE LOCAL GOVERNING BODY, OR OTHER ELECTED OFFICIALS:** No member or employee of the contracting entity/local jurisdiction or its designees or agents; no member of the governing body; and no other public official of the COMMISSION who exercises any function or responsibility with respect to this contract, during his/her tenure or for one year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed. Further, the Contractor shall cause to be incorporated in all subcontracts, the language set forth in this paragraph prohibiting conflict of interest.
40. **EMPLOYEE CONFLICT OF INTEREST**: It shall be unethical for any COMMISSION employee to participate directly or indirectly in a procurement contract when the COMMISSION employee knows that:

(1) The COMMISSION employee or any member of the COMMISSION employee's immediate family has a financial interest in the procurement contract; or

(2) Any other person, business, or organization with whom the COMMISSION employee or any member of a COMMISSION employee's immediate family is negotiating or has an arrangement concerning prospective employment is involved in the procurement contract.

A COMMISSION employee or any member of a COMMISSION employee's immediate family who holds a financial interest in a disclosed blind trust shall not be deemed to have a conflict of interest with regard to matters pertaining to that financial interest.

41. **GRATUITIES AND KICKBACKS**:  
(1) Gratuities. It shall be unethical for any person to offer, give, or agree to give any COMMISSION employee or former COMMISSION employee, or for any COMMISSION employee or former COMMISSION employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity COMMISSION in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore.

(2) Kickbacks. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier sub-contractor or any person associated therewith, as an inducement for the award of a subcontract or order.

(3) Contract Clause. The prohibition against gratuities and kickbacks prescribed in this Section shall be conspicuously set forth in every contract and solicitation therefore.
42. **USE OF PREMISES:** The Contractor will confine his equipment, the storage of materials and equipment, and the operations of his workers to the areas permitted by law, ordinances, permits or the requirements of the Contract Documents and shall not unreasonably encumber the premises with materials or equipment.

The Contractor shall confine the operation of workmen and equipment, and the storage of materials and equipment to the **COMMISSION’s** property or to other non-**COMMISSION** property or in public right-of-way areas indicated on the Contract Drawings as including work to be done pursuant to the Contract documents. In the event the Contractor desires to have access to the project site, or perform work or operations pertaining to the contract on, over or from non-**COMMISSION** property adjacent to the project site, the Contractor shall obtain written authorization to do so from the respective adjacent property owner(s) prior to using such property. Such written authorization shall include a provision whereby the property owner agrees to hold the **COMMISSION** harmless, and to defend the Utilities Commission, in the event of any liability, loss, injury, or claim incurred as a result of the Contractor’s work or operations involving the use of the adjacent non-**COMMISSION** property. The **COMMISSION** shall be provided with a notarized, certified copy of such written authorization(s) before the Contractor commences work or operations or use of such property in connection with work or operations pursuant to this contract.

43. **EMERGENCIES:** In emergencies affecting the safety of persons, the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Project Manager, is obligated to act at his discretion to prevent threatened damage, injury or loss. He will give the Engineer and or Project Manager prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby, and a Change Order shall thereupon be issued covering the changes and deviations involved. If the Contractor believes that additional Work done by him in an emergency which arose from causes beyond his control entitles him to an increase in the Contract Amount or any extension of the Contract Time, he may make a claim.

44. **CHANGES IN THE WORK:** Without invalidating the Agreement, the **COMMISSION** may, at any time or from time to time, order additions, deletions or revisions in the Work authorized by written Change Orders or directive. Upon receipt of a Change Order, the Contractor will proceed with the work involved. All such work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Amount or any extension or shortening of the Contract Time, an equitable adjustment will be made.

Additional Work performed by the Contractor without authorization of a Change Order will not entitle him to an increase in the Contract Amount or any extension of the Contract Time, except in the case of an emergency.
It is the Contractor's responsibility to notify his Surety of any changes affecting the general scope of the Work or change of the Contract Amount and the amount of the applicable bonds shall be adjusted accordingly, and an amended bond document furnished to the COMMISSION.

In the event the COMMISSION directs the Contractor to make a change in the Work, and if the COMMISSION and the Contractor do not arrive at a mutually acceptable increase of decrease in the Contract Amount, the Contractor shall not use any such lack of mutual acceptance as a basis or cause to stop or otherwise delay the progress or the execution and completion of any of the work ordered, directed or required pursuant to the Contract Documents.

45. PERFORMANCE AND PAYMENT BONDS: In the event the Contract is awarded to the Bidder, he will thereafter enter into a written contract with the Owner and furnish a Payment and Performance Bond in an amount equal to the contract price, in strict accordance with Section 255.05 of Florida Statutes. Payment and Performance Bonds shall be secured from or countersigned by an agency or surety company recognized in good standing and authorized to do business in the State of Florida.

46. BID BOND: Bids shall be accompanied by a security deposit as follows: Bid Bond in the amount of a sum no less than 10 percent of the Bid Price/Sum. Endorse the Bid Bond in the name of the COMMISSION as the obligee, signed and sealed by the principal (Contractor) and surety.

47. HURRICANE OR TROPICAL STORM SUSPENSIONS: During official hurricane season (June 1 to Nov. 30) this provision will be effective. If a hurricane or tropical storm watch or warning is issued for any part of the COMMISSION service area contractors will be required to take the following actions at no added cost to COMMISSION.

1. Cease all work except to secure the completed work and protect any stored materials from storm damage, or from being caught into motion by storm forces that may damage other property.
2. Fill any excavations and secure from erosion and traffic.
3. Collect and remove or secure any loose material or packing from work or storage areas.
4. Remove all materials or equipment from any street or roadway.
5. Remove equipment from the barrier islands.
6. Evacuate all personnel from work areas upon issue of order by emergency services agency.

Contractors may return to work upon lifting of watches and warnings and restoration of public access. Allowance will be made to contract time for storm warning/watch & preparation plus reasonable time (not more than 5 days unless special circumstances warrant) after access is restored if it has been interrupted by official order. No adjustments will be made to the contract prices.
48. LIQUIDATED DAMAGES:
If awarded this construction contract, the Bidder agrees to complete the work covered by this contract as follows:

1. Final Completion in **THIRTY (30)** consecutive calendar days from agreed start date.

For the purposes of this project, Substantial Completion shall be when the COMMISSION explains the intent of Substantial Completion.

Should the Contractor fail to complete work under this Contract on or before the date stipulated for Completion (or such later date as may result from extensions of time granted by Owner), he shall pay Owner, as liquidated damages, the sum of **$75.00 (SEVENTY FIVE DOLLARS)** for each consecutive calendar day that terms of the Contract remain unfulfilled beyond date allowed by the contract, which sum is agreed upon as a reasonable and proper measure of damages which Owner will sustain per deim by failure of Contractor to complete work within time as stipulated; it being recognized by Owner and Contractor to complete on schedule is uncertain and cannot be computed exactly. In no way shall costs for liquidated damages be construed as a penalty on the Contractor.

For each consecutive calendar day that the work remains incomplete after the date established for Completion, the Owner will retain from the compensation otherwise to be paid to the Contractor the sum of **$75.00 (SEVENTY FIVE DOLLARS) (Maximum of 25% of Substantial Completion)**. This amount is the minimum measure of damages the Owner will sustain by Failure of the Contractor to complete all remedial work, correct deficient work, clean up the project and other miscellaneous tasks as required to complete all work specified. This amount is in addition to the liquidated damages prescribed above for Substantial Completion.

47. INDEMNIFICATION FOR TORT ACTIONS/LIMITATION OF LIABILITY:
The provisions of Florida Statute 768.28 applicable to the Utilities Commission, City of New Smyrna Beach apply in full to this contract. Any legal actions to recover monetary damages in tort for injury or loss of property, personal injury, or death caused by the negligent or wrongful act or omission of any employee of the Utilities Commission acting within the scope of his/her office or employment are subject to the limitations specified in this statute.

No officer, employee or agent of the Utilities Commission acting within the scope of his/her employment or function shall be held personally liable in tort or named as a defendant in any action for injury or damage suffered as a result of any act, event or failure to act.

The Utilities Commission shall not be liable in tort for the acts or omissions of an officer, employee or agent committed while acting outside the course and scope of his/her employment. This exclusion includes actions committed in bad faith or with malicious purpose, or in a manner exhibiting wanton and willful disregard of human rights, safety, or property.
To the fullest extent permitted by law, the vendor shall defend, indemnify, and hold harmless the Utilities Commission, its officials, agents, and employees from and against any and all claims, suits, judgments, demands, liabilities, damages, cost and expenses (including attorney’s fees) of any kind or nature whatsoever arising directly or indirectly out of or caused in whole or in part by any act or omission of the vendor or its subcontractors (if any), anyone directly or indirectly employed by them, or anyone for whose acts any of them may be liable; excepting those acts or omissions arising out of the sole negligence of the Utilities Commission.

Provided, however, if the contract between the Utilities Commission and the Contractor is deemed by a court of competent jurisdiction to be a construction contract for purposes of Section 725.06, Florida Statutes, any obligation of the Contractor to defend, indemnify or hold harmless the Utilities Commission, shall be limited to an obligation to indemnify or hold harmless the Utilities Commission, its officers and employees from liability damages, losses, and costs, including but not limited to reasonable attorney’s fees, to the extent caused by the negligence, recklessness or intentionally wrongful conduct of the contractor and persons employed or utilized by the Contractor in the performance of the contract.
IDENTICAL TIE BIDS - Preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids which are equal with respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).

4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the 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 of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

VENDOR SIGNATURE
PUBLIC ENTITY CRIMES FORM
SWORN STATEMENT UNDER SECTION 287.133(3) (1) FLORIDA STATUTES

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

1. This sworn statement is submitted Bid, Bid or Contract for TRIHALOMETHANE REDUCTION SYSTEM SOUTH BEACH PUMPING STATION.

2. This sworn statement is submitted by __________________________________________
   [name of entity submitting sworn statement] whose business address is: _________________________________
   and (if applicable) its Federal Employer Identification Number (FEIN) is ______________________.
   If entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: ____________________________.

3. My name is ___________________________ and my relationship to the entity named above is ________________________________.

4. I understand that a “public entity crime” as defined in Paragraph 287.133 (1) (g), Florida Statutes, means a violation of any state of federal law be a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state, or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

5. I understand that “convicted” or “conviction” as defined in Paragraph 287.133 (91) (b), Florida Statutes means a finding of guilt or a conviction of a public entity crime, with or without adjudication of guilt, in any federal or state trial court or recording, relating to charges brought by federal or state trial court or recording, relating to charges brought by federal or state trial court or recording, relating to charges brought by indictment or information after July 1, 1989, as a result of just verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.

6. I understand the “affiliate” as defined in Paragraph 287.133(1)(a), Florida Statutes, means: (1) A Predecessor or Successor of a person convicted of public crime: or (2) An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term “affiliate” includes those officers, directors, executives, partners, shareholder, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm’s length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of public crime in Florida during the preceding 36 months shall be considered an affiliate.
7. I understand that a “person” as defined in Paragraph 287.133(1) (e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provisions of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term “person” includes those officers, directors, executives, partners, shareholders, employees, members and agents who are active in management of an entity.

8. Based on information and belief, that statement which I have marked below is true in relation to the entity submitting this sworn statement. [Please indicate which statement applies]

_____ Neither the entity submitting this sworn statement, or one more of the officers, directors, executives, partners, shareholders, employees, members or agents who are active in the management of the entity, nor any affiliate or the entity, has been charged with and convicted of public entity subsequent to July 1, 1989, AND [Please indicate which additional statement applies.]

_____ There has been a proceeding concerning the conviction before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. [Please attach a copy of the final order.]

_____ The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. [Please attach a copy of the final order.]

_____ The person or affiliate has not been placed on the convicted vendor list. [Please describe any action taken by or pending with the Department of General Services.]

Date        Signature

STATE OF: _________________  COUNTY OF: _________________

PERSONALLY APPEARED BEFORE ME, the undersigned authority, ____________________ [name of individual signing] who after first sworn by me affixed his/her signature in the space provided above on this_____ day of__________________,20______.

My commission expires: Personally known to me, or

Produced Identification:

__________________________ ________________________
Notary Public Print, Type or Notary Stamp Type of I.D.
NON-COLLUSION AFFIDAVIT OF PRIME BIDDER FORM

State of ______________
County of ______________

________________________________, being first duly sworn, deposes and says that:

He/she is ______________ of ______________, Bidder that has submitted the attached Bid;

He/she is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

Neither the said Bidder nor any of its officers, partners, owners, agent representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person, to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the UTILITIES COMMISSION.

The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

________________________________
Signed

________________________________
Title

Subscribed and sworn to before me this _____ day of ________, 20__.

________________________________
________________________________
Title

My Commission Expires: ___________
AUTHORIZED SIGNATURES/NEGOTIATORS

The BIDDER or proposer represents that the following persons are authorized to sign and/or negotiate contracts and related documents to which the BIDDER or proposer will be duly bound:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone #</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Signature)

_________________________

(Title)

_________________________

(Name of Business)

The BIDDER/offeror shall complete and submit the following information with the bid or proposal:

Type of Organization

_____ Sole Proprietorship   _____ Partnership

_____ Joint Venture   _____ Corporation

State of Incorporation: _____________________________________________

Federal I.D. or Social Security number is: _____________________________

ITB #21-19
21
Request for Taxpayer Identification Number and Certification

> Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

2 Business name/dissolved entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.

☐ Individual/two proprietor or single-member LLC
☐ C Corporation
☐ S Corporation
☐ Partnership
☐ Trust/estate
☐ Limited liability company. Enter the tax classification (C= C corporation, S= S corporation, P= Partnership) __________________
Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded by the owner or the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded by the owner should check the appropriate box for the tax classification of its owner.
☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) __________________
Exemption from FATCA reporting code (if any) __________________
(Applicable to accounts maintained outside the U.S.)

5 Address (number, street, and apt., or suite no.) See instructions.

6 City, state, and ZIP code

Requestor's name and address (optional)

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)
Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see How to Get a TIN, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see What Name and Number To Give the Requester for guidelines on whose number to enter.

<table>
<thead>
<tr>
<th>Social security number</th>
</tr>
</thead>
<tbody>
<tr>
<td>__________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Or</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer identification number</td>
</tr>
<tr>
<td>__________________</td>
</tr>
</tbody>
</table>

Part II Certification

Under penalties of perjury, I certify that:
1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here Signature of U.S. person ▶

Date ▶

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN), which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

• Form 1099-DIV (dividends, including those from stocks or mutual funds)

• Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)

• Form 1098-B (stock or mutual fund sales and certain other transactions by brokers)

• Form 1099-S (proceeds from real estate transactions)

• Form 1099-K (merchant card and third party network transactions)

• Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)

• Form 1099-C (canceled debt)

• Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.
In addition to General conditions, your BID may be disqualified if the following vendor information is not returned with your BID.

Vendor is:
( ) Corporation
( ) Partnership
( ) Sole Proprietorship
( ) Other ________________________________________________ (Explain)

Federal Employer Identification Number or Social Security Number: _________________________________

Do you collect Florida State Sales Tax? ( ) Yes ( ) No

Firm Name: ______________________________________________________

Mailing Address: __________________________________________________

__________________________________________________

Telephone No. _______________________ Fax No. ____________________

Email Address: ____________________ Web Address:____________________

Commodity or Service Supply: _______________________________________

If vendor is quoting, as a manufacturer’s representative and the purchase order should be addressed to the manufacturer in care of the vendor, so indicate.

If remittance address is different from the mailing address so indicate below.

Firm Name: ______________________________________________________

Mailing Address: __________________________________________________

__________________________________________________

__________________________________________________

Submitted by: _____________________________________________________

Name & Title Printed: _____________________________________________
QUESTIONNAIRE

Additional space may be required. Please answer questions in the order presented. All questions must be answered or contractor may be disqualified.

1. Has your company ever been denied insurance or had insurance canceled?

2. Is your company bondable? Has your company ever been denied bond?
   If yes, explain.

3. Can your insurance company produce a certificate of insurance stating your limits and naming UCNSB as an Additional Insured?

4. Since January 1, 2014, has your company been a defendant in any lawsuits?

5. Is your company a subsidiary or otherwise legally affiliated with any other company?

6. Is your company rated by Dunn & Bradstreet or any other rating agency?
   If yes, what is the name of the agency and rating?

7. Is your company in any stage of bankruptcy, including initial filing?

8. Has your company been disbarred by the Federal Government or any State Government?

9. How many employees does your company have?

   Staff Employees:   Full Time______________ Part Time______________

   Contract Employees: Full Time______________ Part Time______________
REQUIRED DISCLOSURE

At its sole discretion, the COMMISSION may reject any bidder the COMMISSION finds to lack, or whose present or former executive employees, officers, directors, stockholders, partners or owners are found by the COMMISSION to lack honesty, integrity, or moral responsibility. The discretion of the COMMISSION may be exercised based on the COMMISSION’S own investigation, public records, or any other reliable sources of information. By submitting a bid, bidder recognizes and accepts that the COMMISSION may reject the bid based upon the exercise of its sole discretion and bidder waives any claim it might have for damages or other relief resulting from the rejection of its bid based on these grounds.
BID SUBMITTAL REQUIREMENTS

Bids shall include all of the information solicited in this ITB, and any additional information that the BIDDER deems pertinent to the understanding and evaluating of the bid. Bids shall be organized and sections tabbed in the following order. The BIDDER should not withhold any information from the written response in anticipation of presenting the information orally or in a demonstration, since oral presentations or demonstrations may not be solicited. All bids shall include, at a minimum, the following information. Failure to supply all of the information requested shall result in the bid being excluded from consideration. The COMMISSION reserves the right to request information or clarification from bidders following the bid opening if omissions are deemed curable.

**TAB #1 Experience:** Provide a profile showing company history, business structure, and a list of principals. A minimum of five (5) years in business is required.

**TAB #2 References:** Submit a detailed list of clients receiving similar services within the last two (2) years. Please include a brief description of the scope of work performed and the name, phone number and email address of the contact person.

**TAB #3 Pricing:** Complete, sign and submit the Bid Tabulation and Bid Form.

**TAB #4 License and Insurance** Submit a current Occupational License, from an authorizing government agency, and a current Certificate of Insurance. The COMMISSION does not need to be named as an Additional Insured at this time but this is a requirement when work commences.

**TAB #5 Other Required Forms:** Complete, sign, notarize (if required) and submit the following:

- A. Certification of Drug-Free Workplace
- B. Public Entity Crimes
- C. Non Collusion Affidavit of Prime Bidder
- D. Authorized Signatures/Negotiators
- E. Taxpayer Identification Number and Certification W-9
- F. Vendor Application
- G. Questionaire
- H. Compliance with the Florida Trench Safety Act

**TAB #6 Addenda Acknowledgement:** Complete, sign and submit all addenda (if any).

**TAB #7 Other Information:** Provide any information / samples that will provide insight to the evaluators about the qualifications, fitness and abilities of the BIDDER. This information should be succinct.
BIDDER hereby acknowledges that all costs for complying with the Florida Trench Safety Act (553.60-553.64 inclusive Florida Statutes) are included in the various items of the proposal and in the total bid price. For informational purposes only, the BIDDER is required to further identify these costs to be summarized below:

<table>
<thead>
<tr>
<th>Trench Safety Measure (Description)</th>
<th>Unit of Measure (LF, SY)</th>
<th>Unit (Quantity)</th>
<th>Extended Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. _____________________________</td>
<td>______________________</td>
<td>_____________</td>
<td>______________</td>
</tr>
<tr>
<td>B. _____________________________</td>
<td>______________________</td>
<td>_____________</td>
<td>______________</td>
</tr>
<tr>
<td>C. _____________________________</td>
<td>______________________</td>
<td>_____________</td>
<td>______________</td>
</tr>
<tr>
<td>D. _____________________________</td>
<td>______________________</td>
<td>_____________</td>
<td>______________</td>
</tr>
</tbody>
</table>

**THIS IS NOT A PAY ITEM.** The purpose of this form is to disclose information on the costs associated with trench safety measures and to insure that the BIDDER has considered these costs and has included them in the bid price. Contractor will not receive additional payment if actual quantities differ from those estimated above or if the contractor uses a safety measure different than those listed.

Failure to complete the above form, if applies to BID, may result in the BID being declared non-responsive.
The COMMISSION is seeking a Qualified Vendors to Provide, Install and Maintain a Trihalomethane Reduction System for our South Beach Pumping Station licensed in the State of Florida to complete the following scope of work.

The Utilities Commission, City of New Smyrna Beach is seeking competitive sealed proposals from vendors to provide and install a Ground Storage (GST) Trihalomethane (THM) reduction systems at the South Beach Pump Station (SBPS). The successful bidder will furnish all parts/labor and obtain all necessary permits for a complete, functioning system. This is a 1.0 MG potable water ground storage tank (GST) that can be drained to facilitate the work if necessary. The Utilities Commission is seeking an in-tank THM Reduction System to achieve a 30-40% reduction of THM levels inside the tank.

Contractor shall provide insurance, materials, tools, labor, equipment and supervision to perform all work necessary to complete this scope of work. Contractor shall reference plans and specifications attached for further detail.

Contractor shall submit warranties and a construction schedule with bid submittal.

Contractor is responsible for staging area and storage of materials. The COMMISSION will pay for installed materials only.

Contractor is responsible for all Maintenance of Traffic Devices, including obtaining an approved Maintenance of Traffic Plan from FDOT, the County of Volusia, and the City of New Smyrna Beach. (if required)


All construction is subject to the COMMISSION’s inspection.
GENERAL:

The Utilities Commission, City of New Smyrna Beach is seeking competitive sealed proposals from vendors to provide and install a Ground Storage (GST) Trihalomethane (THM) reduction systems at the South Beach Pump Station (SBPS). The successful bidder will furnish all parts/labor and obtain all necessary permits for a complete, functioning system. This is a 1.0 MG potable water ground storage tank (GST) that can be drained to facilitate the work if necessary. The Utilities Commission is seeking an in-tank THM Reduction System to achieve a 30-40% reduction of THM levels inside the tank.

All questions concerning this bid should be provided in writing to the Purchasing Department. Answers will be provided as an addendum to all bidders.

Mandatory Pre-bid meeting, Date Thursday June 13th 10:00AM at the Water Treatment Facility located at 2640 Paige Ave, New Smyrna Beach, FL 32168. Site Visit to Follow Directly after.

1.00 SCOPE OF WORK

A. The MANUFACTURER/CONTRACTOR shall furnish and install one (1) Ground Storage Tank (GST) THM Reduction Aeration System (AMS) for the South Beach Pump Station (SBPS) 1.0 M-gal GST. The GST has a diameter of 78-ft and a height of 27-ft. This GST currently has one (1) existing Medora GridBee Model GS-12 v2 submersible mixer. The AMS shall consist of, (a) A minimum of one floating spray aerator, (b) One external GST roof-mounted off gas blower necessary to help remove the THMs stripped from the finished drinking water stored in the GST.

2.00 REQUIREMENTS

Furnish, install, test, and ready for operation a floating spray aeration system and a turbine blower/air filter unit with all supports and any other appurtenances required at the location for a complete system as specified herein. This system shall provide the spray aeration systems blower, drives, motors, controls, pipe, connections, and other appurtenances for a complete and operable system.

A. Provide Installation and Startup Services to insure, (a) Proper equipment placement in the GST, (b) Proper pump placement and floating spray discharge setting. (c) AMS equipment supports for aerators and dual tether system for the spray aerators shall be installed inside the GST.

B. Bring the electric and control cables from each piece of equipment to the outside of the tank, via through-wall water-tight fittings installed through the vertical side of the raised hatch of the existing GST.

C. Provide blower base and install off-gas centrifugal blower per specifications and coordinate installation of blower with GST manufacturer (CROM).
D. Provide and install exterior duct from blower to GST fiberglass vent opening (if required), including removal of existing vent and coordinate supports for stainless steel duct with GST manufacturer (CROM) to ensure GST is not damaged.

E. All conduits or other equipment to be secured to the reservoir shall be attached in a manner to facilitate future reservoir maintenance activity, including but not limited to future removal of existing coating systems and application of new coating systems. Removable conduit clamps to attach the conduit to either the ladder brackets or overflow pipe brackets are allowed. The control center enclosure, if attached to the GST, shall have at least one foot of clearance from the reservoir.

3.00 ELECTRICAL

A. All power cable and signal wire to be attached to the reservoir shall be inside rigid galvanized conduit which shall be installed in a manner that does not interfere with climbing the access ladder or utilizing the roof hatch. MANUFACTURER/CONTRACTOR shall obtain and submit attachment details from the tank manufacturer for the conduits.

B. Route source power up to the AMS equipment on the tank roof and install motor control panels and all associated electrical connections.

C. Provide electrical conduits with circuit breaker to the AMS control panel.

D. Provide electrical conduit with 480 VAC 3 phase power supply to the AMS control panel.

E. Provide conduits from the AMS control panel to connection box next to tank hatch or for penetration through vertical wall of hatch.

F. A lightning protection and surge protection system shall be included with the mixing system.

G. All work shall be in accordance with the following requirements, (a) Materials and equipment shall be inspected prior to installation, defective components shall be repaired or replaced, (b) Electrical work shall be in accordance with the National Electrical Code and local electrical codes, whichever is stricter, (c) Electrical connections within the tank shall be sealed to prevent water migration.

4.00 SUBMITTALS

A. A list of five similar installations by the MANUFACTURER/CONTRACTOR that are in use in Florida or other areas of similar climate for potable water storage service. These...
systems shall be of the similar in capacity size as specified herein. This list shall include the names and telephone numbers of the owners and design Engineers.

B. Complete design calculations for required voltage, amperage, and detailed drawings.

C. Detailed system drawings and supplemental information including the following, (a) Dimensional drawings, indicating the size of all structural support members, (b) System connection size and types, (c) Roof and wall penetration details for the openings in the GST’s roof and wall, including the anchor cabling or wire rope, used for retrieving and securing the equipment in the tank, and the electrical power cabling and instrumentation cabling for the equipment. The penetration details shall include the opening size, the type of method of penetration and the repair or sealing of the opening.

D. The roof and wall penetration detail(s) must be reviewed and approved by the tank manufacturer, prior to submission to the OWNER for review and approval.

E. A letter of approval provided by the GST tank manufacturer (CROM), indicating the roof and wall penetrations have been reviewed and approved by them.

F. The MANUFACTURER/CONTRACTOR shall offer a yearly or annual service agreement to the OWNER for the type of system installed. The agreement shall include the annual service rate and a complete description of the scope of work proposed.

G. Submit an AMS Installation Plan describing the methods/processes for the installation of mechanical process equipment, the electrical components, control panel, power cable, and signal wire, including but not limited to locations, tank penetration location/method, method of attachments to tank, methods for protecting tank coating systems, materials and methods for coating or recoating steel surfaces, conduit, and schedule of fittings. The Plan shall also include disinfection procedures for equipment, materials and personnel entering the reservoir, to prevent any contamination of the drinking water in the GST and shall be in conformance with AWWA standards.

5.00 REFERENCE STANDARDS

A. American Water Works Association (AWWA)
2. AWWA C652 - Standard for Disinfection of Water Storage Facilities
B. National Sanitation Foundation (NSF)
1. NSF 61 - Standard for Drinking Water System Components
2. NSF 14 - Plastic Pipe Components and Related Materials
C. Underwriters Laboratories (UL)
1. UL 508 – Standard for Industrial Control Equipment
D. Occupational Safety and Health Administration (OSHA)
6.00 WARRANTY
A. The floating spray aerator equipment shall be warranted to be free of defects in materials and workmanship for a period of two years from substantial completion.
B. The blower shall be warranted to be free of defects in materials and workmanship for a period of two years from substantial completion.

7.00 QUALITY ASSURANCE

A. The floating spray equipment and blower shall be designed to operate continuously, 24 hours per day using 480 VAC 3-phase as the power source.

B. The equipment and accessories shall have no visual defects, shall have high quality welds, assembly, and corrosion resistant finish.

C. The MANUFACTURER/CONTRACTOR of the equipment shall have extensive experience in the production of such equipment, and the equipment shall be manufactured in the continental United States.

D. Inspection of the installation and startup services shall be performed by full time factory employees experienced in the operation of this equipment and who have completed OSHA safety trainings applicable to this type of installation.

E. Four (4) hours shall be provided by a factory trained technician(s) for operation and maintenance training.

8.00 PERFORMANCE STANDARD

A. The AMS shall reduce the concentration of THMs in the GST by a minimum of 35-40% percent.

9.00 EQUIPMENT AND DESIGN CRITERIA

A. The AMS shall be designed to achieve a 30-40% percent reduction of THMs levels in the untreated water entering the tank during peak THM season, when starting, THM levels exceed 50 µg/l and temperatures exceed 60 degrees F. During non-peak THM formation season, the THM reduction may be reduced to less than the range listed above when starting THM levels and temperatures are lower.

B. The AMS system shall be designed to achieve the reduction of untreated THM, based on a maximum flow through the tank of 385,000 gpd, a 1,000 gpm fill rate and a THM's as high as 48 µg/L during peak time in the tank and THMs downstream of this tank of 84 µg/L.
C. Compatible with water containing free chlorine/chloramine residuals of 1 to 4 mg/L, temperature range of 50 to 90 F, pH range of 7.5 to 9.0, and hardness levels of 10 to 250 mg/L as CaCO3.

D. The Aeration Mixing System (AMS) described herein shall be manufactured by Medora Corporation, of Dickinson, ND or an approved alternate Manufacturer.

10.00 FLOATING SPRAY AERATION SYSTEM

A. The AMS shall consist of a minimum of one (1) floating spray aerator and shall be designed to fit through a 36-inch square opening at the top of the GST. The Manufacturer shall determine the total number floating spray units and the capacity of each unit required to meet the performance requirements for the SBPS GST.

B. The floating spray equipment shall be constructed of Type 316 stainless steel metal, pickled and passivated, for strength and superior corrosion resistance. Other non-stainless-steel materials shall be of NSF approved materials and rated for contact with potable water.

C. Motor. The floating spray aeration equipment shall be mechanically operated by a submersible motor that meets the following criteria, (a) Direct Drive, with no gearbox and no lubrication maintenance required, (b) Designed for submersible operation, (c) Designed for Continuous Operation without overheating or compromising motor life expectancy, (d) 480 VAC, 3-phase, 60Hz power requirement.

D. A Submersible Motor Protection device, such as Franklin Submonitor or equivalent shall be provided for the floating spray aeration equipment.

E. The floating spray aeration equipment shall be supplied with intakes capable of being positioned at the lowest elevation of the tank or reservoir floor. The intake level setting shall bring water into the floating spray at a horizontal layer within 1 inch (2.5 cm) of the tank or reservoir floor. The intake shall include a singular hose of adequate length to reach the required intake depth setting.

F. The floating spray aeration equipment shall be equipped with a nozzle assembly sized specifically for the pump capacity output. Nozzles shall be constructed of 316 stainless steel for optimal corrosion resistance and long wear life.

G. The floating aeration spray equipment shall be constructed with NSF / ANSI Standard 61 approved materials for safe contact with potable water.
H. Equipment shall be designed to operate normally with the following maintenance features, (a) No scheduled lubrication shall be required of any system components including the motor, (b) No spare parts shall be required to be kept on hand.

11.00 MIXING SYSTEM

A. The GST active mixing system consists of one (1) existing Medora GridBee Model GS-12 v2 submersible mixer.

12.00 FORCED AIR INJECTION SYSTEM

A. The forced air ventilation system or an off-gas blower shall be provided to supplement the spray aeration system and the submersible mixer. The forced air ventilation system shall consist of the following.

B. Blower: The forced air injection shall be fed with one 2 hp minimum centrifugal blower capable of providing a minimum of 750 cfm air flow at 5 water column inches, CE, UL listed and CSA certified motor with NEMA Class F insulation. Standard single-phase or three-phase TEFC motor. Blower to be mounted on type 316 stainless steel base and skid frame, adaptable to Unistrut channel. Blower base shall be provided with vibration isolators to minimize transference of vibrations from the blower to the GST dome.

C. Final placement and mounting of the blower skid, ducting, and sealed air penetration shall be per manufacturer’s recommendations. Securement of the blower skid shall be made with M12 stainless steel threaded rod and Simpson Strong-Tie Set22 Epoxy to the roof or dome of the GST. Air ducting shall connect the blower outlet flange to the existing opening currently used for one of the fiberglass vents and shall provide a downward air injection toward the water surface. Ducting shall be 316 type stainless steel to prevent rusting inside and out. Ducting reducers may be necessary to connect to the flanged connection on the Blower discharge. A flexible joint and damper shall be installed at or near the blower connection. MANUFACTURER/CONTRACTOR shall coordinate with tank manufacturer (CROM) for the proper placement of the air duct supports on the tank roof (if required).

13.00 AERATION SYSTEM CONTROL PANEL (AMCP)

A. The AMCP shall be a free-standing single local NEMA 4X, stainless steel enclosure for the complete system, located adjacent to the GST and shall be mounted at a convenient height (eye level) above grade for monitoring and service purposes.

B. The AMCP shall be powered from a 480 VAC 3-phase, 60Hz power source.
C. The AMCP shall contain as a minimum the following components, (a) A Starter for a floating spray aerator, (b) A Starter for the off-gas blower, (c) Front panel mounted controls and indicators to allow complete, local manual control of all components and (d) Provide each motor with a front panel mounted switch to select the local controls or allow remote control.

14.00 ENERGIZING THE SYSTEM

A. After all the components of the system are installed the MANUFACTURER/CONTRACTOR shall provide start-up service which shall include, but not limited to, energizing, testing, and adjusting the system for optimum performance. This start-up service shall be coordinated with the OWNER.

15.00 DISINFECTION

A. Equipment shall be disinfected before installation in accordance with AWWA and FDEP requirements. The MANUFACTURER/CONTRACTOR shall be responsible for disposal of all heavily chlorinated water resulting from the disinfection procedure.

B. For in-the-wet installations, all equipment, materials, and personnel entering the tank shall be thoroughly disinfected prior to entering the tank. All such disinfection efforts shall be in conformance with AWWA C-652.

16.00 PERFORMANCE TESTING

A. Water quality testing shall be conducted by the OWNER.

B. Samples shall be measured for water temperature and chlorine residual from grab samples collected from GST roof hatch at 3 depth levels. Samples shall be collected and analyzed at intervals determined by the AMS system manufacturer to show complete mixing of the GST contents.

C. The OWNER shall measure THMs from grab samples collected from GST tank inlet, outlet and at the Utilities Commission’s regular testing locations of the Glencoe WTP Distribution System. THM samples shall be taken daily (5 days/week) for the first two weeks of AMS system operation.

D. Should the AMS system not meet specified performance requirements as described in in Section 8.00 of the PERFORMANCE STANDARD after 30 days of operation, the MANUFACTURER/CONTRACTOR shall provide all necessary equipment and labor to provide an AMS system which meets the performance requirements.
17.00 AMS ACCEPTANCE

A. The GST AMS system provided will be accepted by the OWNER when the samples collected per Section 16.00 of the PERFORMANCE TESTING meet the criteria described in Section 8.00 of the PERFORMANCE STANDARD.

B. Within 30 days following acceptance of the equipment, the MANUFACTURER/CONTRACTOR shall provide “as-built” drawings of the installed AMS system upon completion, including, (a) A letter certifying compliance with this specification as well as local codes as applicable, (b) Complete operating and maintenance instructions for all equipment as provided. The instructions shall be prepared specifically for this installation and shall include all cuts, drawings, equipment lists, descriptions, etc. that are required to instruct operation and maintenance personnel unfamiliar with such equipment. The maintenance instructions shall include trouble shooting data and full preventative maintenance schedules.
## BID TABULATION

**BIDDER NAME:**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Est. Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supply and Installation of Trihalomethane Reduction System</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Start-up Services</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Permitting (If Required)</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Annual Service Cost</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL BASE BID COST: $**

*Insert Contractor & Manufacturer warranties and Qualification documents after this page.*

*Installer shall be certified by Manufacturer.*

Material Lead-Time: ____________________________

Estimated Start Date: ____________________________

Estimated Days to Completion: ______________________

**BIDDERS must sign BID FORM.**
BIDDER NAME: ________________________________

Pursuant to, and in compliance with, COMMISSION’S ADVERTISEMENT FOR BID dated May 28, 2019 and the INFORMATION FOR BIDDERS AND OTHER CONTRACT DOCUMENTS relating hereto, the undersigned hereby proposes to furnish all tools, labor, equipment and materials to perform all the work necessary for the Trihalomethane Reduction System for the UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, VOLUSIA COUNTY, FLORIDA, all as required by and in strict accordance with the Contract Documents, Schedules, Scope of Work and Construction Plan, at the prices listed in the Bid Tabulation enclosed.

The undersigned BIDDER agrees to commence work within FOURTEEN (14) CALENDAR DAYS after the date of the Notice-to-Proceed letter, and shall complete the Work described in the Bid Scope of Work and the Bid Tabulation within THIRTY (30) CONSECUTIVE CALENDAR DAYS thereafter.

The undersigned BIDDER hereby represents that the Drawings and the Contract, including all Contract Documents, have been carefully examined and the BIDDER will execute the Contract and perform all its items, covenants and conditions, all in strict compliance with the requirements of the specifications and drawings. The BIDDER, by and through the submission of his bid, agrees that he has examined and that he shall be held responsible for having heretofore examined the site, the location and route of all proposed work and for having satisfied himself as to the character of the route, the location, surface and underground obstruction, the nature of the groundwater conditions, and all other physical characteristics of the Work, in order that he may include in the prices which he bid, all costs pertaining to the Work and thereby provide for the satisfactory completion thereof, including the removal, relocation or replacement of any objects or obstructs which will be encountered in doing the proposed Work.

BIDDERS must sign BID FORM.
The undersigned hereby declares that the following list states any and all variations from, and exceptions to, the requirements of the instruction and specifications.

________________________________________________________________________

These Prices are valid for orders placed within ninety (90) days from date of fully executed Contract Documents.

Submitted By:

Company

Name and Title __________________________ Signature __________________________

Telephone No. __________________________ e-mail __________________________

The COMMISSION reserves the right to award the contract to the Bidder(s) that the COMMISSION deems to offer the best overall bid. The COMMISSION is therefore not bound to accept a bid on the basis of lowest price. In addition, the COMMISSION at its sole discretion, reserves the right to cancel this Bid, to reject any and all bids, to waive any and all informalities and/or irregularities, to re-advertise with either the identical or revised specifications, or not award a contract at all if it is deemed to be in the best interest of the COMMISSION to do so. The COMMISSION also reserves the right to make multiple or split awards if it is deemed to be in the COMMISSION’S best interest. The COMMISSION shall not be responsible for any cost or expense incurred by the Bidder in preparing or submitting a bid or any cost prior to the execution of a contract agreement.

As representative for the PROPOSER, I have read and understand this statement.

Name and Title __________________________ Signature __________________________

BIDDER MUST SIGN BID FORM.
If you do NOT intend to bid on this requirement/project, please return this form immediately. Thank you, Utilities Commission, City of New Smyrna Beach, Florida

We, the undersigned have declined to submit a bid due to the following reason(s):

☐ Specifications too “tight”, i.e. geared toward one brand/manufacturer service only (explain below).
☐ Unable to meet time period for responding to bid.
☐ We do not offer this product or service.
☐ Our schedule would not permit us to perform.
☐ Unable to meet specifications.
☐ Unable to meet Bond/Insurance requirement(s).
☐ Specifications unclear (explain below).
☐ Unable to meet insurance requirements.
☐ Please remove us from your “bidder’s list”.
☐ Other (specify below).

REMARKS: ___________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

We understand that if the “No Bid” letter is not executed and returned our name may be deleted from the bidder’s list of the Utilities Commission, City of New Smyrna Beach, FL.

Company Name: ___________________________   E-mail: ___________________________
Bid Number: ___________________________   Date: ___________________________
Signature: ___________________________   Fax: ___________________________
Telephone: ___________________________
UTILITIES COMMISSION  
CITY OF NEW SMYRNA BEACH, FLORIDA  

ITB# 21-19  
TRIHALOMETHANE REDUCTION SYSTEM SOUTH BEACH PUMPING STATION  

BID BOND – SECTION 00410  

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned,  
_____________________________ as Principal, and ____________________________  
_____________________________ as Surety, are hereby held and firmly bound unto  
the Utilities Commission, City of New Smyrna Beach, Florida as Owner in the penal sum of, (ten percent (10%) of the Contract Bid) ____________________________  
for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns to pay Owner upon default of Bidder the penal sum set forth on the face of this Bond.  

Signed, this ______________________ day of ____________________, 20_______  

The condition of the above obligation is such that whereas the Principal has submitted to the Utilities Commission, City of New Smyrna Beach, Florida a certain Bid, attached hereto and hereby made a part hereof, to enter into a contract in writing, for the Project Name Project.  

NOW THEREFORE,  

1. Default of Bidder shall occur upon failure of Bidder to deliver within the time required by the Bidding Documents the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the bidding documents and Contract Documents.  

2. This obligation shall be null and void if:  

2.1 Owner accepts Bidder’s bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by paragraph 5 hereof).  

2.2 All bids are rejected by the Owner, or
2.3 Owner fails to issue a notice of award to bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by paragraph 5 hereof).

3. Payment under this bond will be due and payable upon default of Bidder and within thirty (30) calendar days after receipt of Bidder and Surety of written notice of default from Owner which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

4. Surety waives notice of any and all defenses based on or arising out of any time extension to issue notice of award agreed to in writing by Owner and Bidder, provided that the time for issuing notice of award including extensions shall not in the aggregate exceed one hundred twenty (120) days from Bid Due without Surety’s written consent.

5. No suit or action shall be commenced under this Bond prior to thirty (30) calendar days after the notice of default required in paragraph 3 above is received by Bidder and Surety, and in no case later than one year after Bid Due Date.

6. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in Volusia County, Florida.

7. Notice required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

8. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent or representative who executed this Bond on behalf of Surety to execute, seal and deliver such Bond and bind the Surety thereby.
9. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of the Bond conflicts with any applicable provision of any applicable statute, then the provisions of said statute shall govern and the remainder of the Bond that is not in conflict therewith shall continue in full force and effect.

10. The term “bid” as used herein includes a bid, offer or proposal as applicable.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal (Print Full Name)    Surety (Print Full Name)
______________________________    __________________________

By:___________________________(L. S.)    By:___________________________
Signature (attach power of attorney)

Title:__________________________    Title:__________________________

Attest: ________________________    Attest: ________________________
Signature and Title               Signature and Title

IMPORTANT – Surety companies executing bonds must appear on the Treasury Department’s most current list (Circular 570 as amended) and be authorized to transact business in the State of Florida.

END OF SECTION
PUBLIC CONSTRUCTION BOND

Bond No. (enter bond number)

BY THIS BOND, We _________________, as Principal and _________________, a corporation, as Surety, are bound to UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FL., herein called Owner, in the sum of ______________________, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the contract dated _________________, 2019, between Principal and Owner for construction of _________________, the contract being made a part of this bond by reference, at the times and in the manner prescribed in the contract; and

2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and

3. Pays Owner all losses, damages, expenses, costs, and attorney’s fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contract; and

4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise it remains in full force.

Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

Any changes in or under the contract documents and compliance or noncompliance with any formalities connected with the contract or the changes does not affect Surety’s obligation under this bond.

DATED ON _________________, 2019.

(Name of Principal) _______________________
By: _______________________

(Name of Surety) _______________________
By: _______________________

Attorney in Fact

END OF SECTION
PART 1 - GENERAL

1.00 DESCRIPTION
   A. This Section includes:
      1. Protection and Restoration of Property.
      2. Change Orders.
      4. Traffic Control.
      5. Survey Work.
      6. Existing Utilities.
      7. Special Conditions.
      8. Coordination.
      9. Abbreviations and Symbols.
   B. Related work specified elsewhere includes:
      Application for Payment - Section 01027.

1.01 PROTECTION AND RESTORATION OF PROPERTY
   A. The Contractor shall not enter upon private property for any purpose without first obtaining permission and he shall use every precaution necessary to prevent damage or injury to any public or private property, trees, fences, monuments, and underground structures, etc., on and adjacent to the site of the work.
   B. The Contractor shall not do any work that would affect any pipeline, telephone, telegraph, or electric transmission line, or other structure. The Contractor shall not enter upon the right-of-way or other lands appurtenant thereto, until authority therefore has been secured from the proper persons.
   C. The Contractor shall be responsible for all damage or injury to property of any person or entity resulting from any act, omission, neglect or misconduct in his manner or method of executing said work, from his non-execution of said work, or from defective work or materials. The Contractor shall not be released from said responsibility until the work shall have been completed and accepted and the contract requirements fulfilled.
   D. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof on the part of the Contractor, or any act in the proper completion of work, the Contractor shall restore such property, at his own expense, to a condition equal or better to that existing before such damage or injury was done by repairing, rebuilding, or otherwise restoring, as may be directed. If not possible, the Contractor shall make good such damage or injury in a manner acceptable to the damaged or injured party.
1.02 CHANGE ORDERS
A. The Owner or Engineer may at any time make changes within the general scope of the project, issue additional instructions, require additional work or direct the omission of portions of the work; provided, however, that the Contractor shall not proceed with any change involving an increase or decrease in contract sum, without prior written authorization from the Owner or Engineer in accordance with the procedure outlined hereunder.

B. The Owner or Engineer shall order changes in the project by giving the Contractor a written change order request ("Change Order Request"), setting forth in detail the nature of the requested change. Within ten (10) days of receipt of a Change Order Request, the Contractor shall furnish to the Owner or Engineer a statement setting forth in detail, with a suitable break-down by quantity and unit price the Contractor’s estimate of the changes in the contract sum. If the Owner approves in writing such estimate by the contractor, such Change Order Request and such estimate shall constitute a Change Order, and the contract sum shall be adjusted as set forth in the Contractor’s estimate. This procedure shall apply to both additive and deductive change orders.

C. The Owner or Engineer may make minor changes to the work not involving a change in the contract sum without the use of a Change Order.

D. Additional work performed by the Contractor without authorization of a Change Order is done at its own risk and will not entitle it to an increase in the Contract Price or an extension of the Contract Time.

1.03 PUBLIC ACCESS AND CONVENIENCE
A. At all points in the work where public access to any building, house, place of business, public road, or sidewalk would be obstructed by any section of the Contractor in executing the work required by this Contract, the Contractor shall provide such temporary structure, bridges or roadway as may be necessary to maintain public access at all times. At least one lane for vehicular traffic shall be maintained in streets on which the Contractor is working unless otherwise authorized by the Engineer in writing.

B. Prior to temporarily cutting off access to driveways and garages, the Contractor shall give 24 hours notice to affected property owners. Interruptions to use of private property shall be kept to a minimum. The Contractor is responsible for and may make other suitable arrangements with owners of private driveways in lieu of the requirement of this Section.

C. Materials stored at the site of the work shall be so placed and the work shall at all times be so conducted as to cause minimum obstruction to vehicular or pedestrian traffic. No roadway shall be closed or opened except by express permission of the City, County or such other authorized public agency having jurisdiction.

D. The Contractor shall exercise precaution at all times for the protection of persons and property. The safety provisions of applicable laws, building codes and construction codes shall be observed.
1.04 TRAFFIC CONTROL
A. It shall be the responsibility of the Contractor in performance of the work elements of the Contract to furnish all traffic control equipment and personnel.
B. The Contractor shall provide bypasses, crossings, and other means for the maintenance of one-way traffic in all streets, and two-way traffic wherever possible, in all streets where work is in progress. The Contractor shall plan and schedule his operations to impose the least possible interference with normal traffic flow. Any such interference shall be cleared with the applicable local, County or State agency prior to beginning construction.
C. The Contractor shall provide, erect, and maintain effective barricades, danger signals, and signs on all intercepted streets or highways and in other locations where required for the protection of the work and the safety of the public. Barricades or obstructions which encroach on, or are adjacent to public rights-of-way shall be provided with lights which shall be kept burning at all times between sunset and sunrise. Conformity with State, County and local laws and regulations is required in the use of streets and highways. The Contractor shall be responsible for all damages resulting from any neglect or failure to meet these requirements. Watchmen shall be provided as required by local regulations or as necessary to fulfill the requirements stated herein.
D. The State of Florida Department of Transportation "Utility Accommodation Guide Procedure 616-400" and its "Uniform Manual for Traffic Control Devices" shall be followed as applicable. Additionally, traffic control requirements shall meet all local, State and Federal requirements.

1.05 SURVEY WORK
A. Prior to commencing work, the Contractor shall satisfy himself as to the accuracy of all survey or existing site information as indicated in the Drawings or Specifications. Should the Contractor discover any errors, inaccuracies or omissions in the survey data, he shall immediately notify the Engineer. The commencing of any of the work by the Contractor shall be held as the Contractor's acceptance that all survey or existing site information is correct and accurate, without any reasonably inferable errors, inaccuracies or omissions.
B. The Contractor shall carefully preserve all control stakes, benchmarks, reference points and property corner and will be responsible for any mistake or loss of time caused by their unnecessary loss or disturbance. If the loss or disturbance of the stakes or marks cause a delay in the Work, the Contractor shall have no claim for damages or extension of time. Control stakes, benchmarks, reference points and property corners disturbed by the Contractor's work shall be replaced by a Florida Registered Land Surveyor and Mapper, at the Contractor's expense. In the event the Owner must provide the services of the Florida Registered Surveyor and Mapper to perform this replacement work, the cost of the surveying services will be deducted from any sums due the Contractor for the work performed under this Contract.
C. All survey work shall be performed under the guidance and direction of a Florida Registered Surveyor and Mapper.
D. All survey work for Record Drawings shall be performed by a Florida Registered Surveyor and Mapper.

1.06 EXISTING UTILITIES

A. All existing utilities shown on the Drawings are located according to the information available to the Engineer at the time the Drawings were prepared and have not been independently verified by the Owner or the Engineer. Guarantee is not made that all existing underground utilities are shown or that the locations of those shown are accurate. The locations shown are for bidding purposes only. Finding the actual location of any existing utilities is the Contractor's responsibility and shall be done before he commences any work in the vicinity. Furthermore, the Contractor shall be fully responsible for any and all damages which might be occasioned by the Contractor's failure to exactly locate and preserve any and all underground utilities. The Owner or Engineer will assume no liability for any damages sustained or costs incurred because of the Contractor's operations in the vicinity of existing utilities or structures, nor for temporary bracing and shoring of same. If it is necessary to shore, brace, or swing a utility, the utility company or department affected shall be contacted and their permission obtained regarding the method to use for such work.

B. It is the Contractor's responsibility to locate all underground utilities before beginning work.

C. The Contractor shall schedule and execute all work involving existing utilities in order to minimize necessary interruption of services. Whenever such interruption is necessary for completion of the work the Contractor is responsible for notifying the Engineer and the appropriate utility at least 48 hours in advance. All work to repair/restore utility service shall be performed to the satisfaction of the appropriate utility. All costs related to service maintenance, interruption, and restoration shall be included in the appropriate line item in the Contract, and will not be paid as an additional item.
1.07  SPECIAL CONDITIONS

A. Visits to the construction site may be made by representatives of local regulatory agencies. The Contractor shall submit details of all instructions from the above to the Engineer immediately. The Work will not be accepted by the Owner until final acceptance has been received from the various departments of the Regulatory Agencies having jurisdiction.

B. The Contractor shall furnish sufficient labor, construction equipment and materials, and shall work such hours, including night shifts and overtime operations, as may be necessary to insure the prosecution of the work in accordance with the approved progress schedule. If, in the opinion of the Engineer, the Contractor falls behind the progress schedule, the Contractor shall take such steps as may be necessary to improve his progress and the Engineer may require him to increase the number of shifts and/or overtime operation, days of work and/or the amount of construction equipment and materials, all without additional cost to the Owner. The Contractor shall be responsible for any additional costs incurred by the Owner or Engineer due to the overtime work. The failure of the Contractor to comply with the requirements of the Engineer under this provision shall be grounds for determination of the Engineer that the Contractor is not prosecuting the work with such diligence as will insure completion within the time specified. Upon such determination, the Engineer may recommend to the Owner to seek such legal remedy as is deemed necessary to protect the Owner's interest.

C. In addition to these Specifications all work must comply with the requirements of the local governing agency, Department of Transportation, Water Management District, Department of Environmental Protection, and all other applicable State or Federal agencies' Specifications and Permits. In the event of a conflict the more stringent specification or requirement shall govern.

D. The items of work on this project are to proceed in the sequence of work items listed hereinafter and shall be operable within the time frame stated from the date of the Notice to Proceed. No work is to start that involves the modification to existing facilities without prior approval and authorization from the Owner or his designated representative. An advance notice of 48 hours is required to the Owner prior to start of any work that involves modifications to existing structures, piping or appurtenances.

E. The Contractor is responsible for notifying all permitting agencies of his intentions to begin construction. Proper notification to each agency shall be given within the time frame required by that agency.

F. The Contractor shall give the Engineer 10 days minimum notice before beginning work on the Project.

G. Before performing tests, the Contractor shall provide the Engineer with a minimum of 48 hours notice.

H. Before performing any work outside the designated limits of the work site, the Contractor shall secure any necessary permits and/or authorization from the
applicable Owner, or verify that such has been previously obtained. All requirements of any said permits or authorization shall be followed.

I. Contractor shall not work overtime unless authorized to do so by Owner. If overtime is required, Contractor shall provide seven (7) days minimum notice to Engineer and Owner.

1.08 COORDINATION
The Contractor shall be fully responsible for the coordination of his work and the work of his employees, subcontractors, and suppliers and to assure compliance with schedules.

1.09 ABBREVIATIONS AND SYMBOLS
A. Referenced Standards
   1. Any reference to published specifications or standards of any organization or association shall comply with the requirements of the specification or standard which is current on the date of Advertisement for Bids. In case of a conflict between the referenced specifications or standards, the one having the more stringent requirements shall govern.
   2. In case of conflict between the referenced specifications or standards and the Contract Documents, the Contract Documents shall govern.

END OF SECTION
APPLICATIONS FOR PAYMENTS – SECTION 01027

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.02 SUMMARY

A. This section specifies administrative and procedural requirements necessary to prepare and process the Contractor’s Applications for Payment.
   1. Coordinate the Schedule of Values and Applications for Payment with the Contractor’s Construction Schedule, List of Subcontracts, and Submittal Schedule.
B. The Contractor’s Construction Schedule and Submittal Schedule are included in section “Submittals”.

1.03 SCHEDULE OF VALUES

A. Coordinate preparation of the Schedule of Values with preparation of the Contractor’s Construction Schedule.
   1. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:
      a. Application for Payment form
      b. List of subcontractors
      c. Schedule of submittals.
   2. Submit the Schedule of Values to the Owner at the earliest feasible date, but in no case later than 7 days before the date scheduled for submittal of the initial Application for Payment.
   3. Where work is separated into phases, provide sub-schedules showing values correlated with each phase of payment.
B. Format and Content: Use the Project Manual Table of Contents as a guide to establish the line items for the Schedule of Values. Provide at least one line item for each specification section.
   1. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide several line items for principal subcontract amounts, when appropriate.
   2. Schedule Updating: Update and resubmit the Schedule of Values when Change Orders or Construction Change Directives result in a change in the Contract Sum.
1.04 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as certified by the Engineer and paid for by the Owner.
   1. The initial Application for Payment, the Application for Payment at time of Substantial Completion, and the final Application for payment involve additional requirements.

B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.

C. Payment Application Forms: Use AIA forms for Applications for Payment.

D. Application Preparation: Complete every entry on the form, including notarization and execution by person authorized to sign legal documents on behalf of the Owner. Incomplete applications will be returned without action.
   1. Entries shall match data on the Schedule of Values and Contractor’s Construction Schedule. Use updated schedules if revisions have been made.
   2. Include amounts of Change Orders and construction Change Directives issued prior to the last day of the construction period covered by the application.

E. Transmittal: Submit 5 signed and notarized copies of each Application for Payment to the Engineer by means ensuring receipt within 24 hours; one copy shall be complete, including waivers of lien and similar attachments, if required.
   1. Transmit each copy with a transmittal form listing attachments, and recording appropriate information related to the application.

F. Waivers of Mechanics Lien: When required by the Owner, submit waivers of mechanics liens from subcontractors or sub-subcontractors and suppliers for the construction period covered by the previous application with each Application for Payment.
   1. Submit partial waivers on each item for the amount requested, prior to deduction for retainage, on each item.
   2. When an application shows completion of an item, submit final or full waivers.
   3. Waiver Delays: Submit each Application for Payment with the Contractor’s waiver of mechanics lien for the period of construction covered by the application.
      a. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of Work covered by the application who could lawfully be entitled to a lien.
   4. Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to Owner.
G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of the first Application for Payment include the following;
1. List of subcontractors.
2. Schedule of Values.
3. Contractor’s Construction Schedule.
4. Submittal Schedule.
5. Certificates of insurance and insurance policies.
7. Copy of Building Permit.

H. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment; Administrative actions and submittals that shall proceed or coincide with this application include:
1. Warranties (guarantees) and maintenance agreements.
3. Start-up performance reports.
4. Change-over information related to Owner’s occupancy, use, operation and maintenance.
5. Final cleaning.
6. List of incomplete Work, recognized as exceptions to Engineer’s Certificate of Substantial Completion.

I. Final Payment Application: Administrative actions and submittals which must precede or coincide with submittal of the final payment Application for Payment include the following:
1. Evidence of completion of project closeout requirements.
2. Evidence of completion of items specified for completion after Substantial Completion.
3. AIA Document G706, “Contractor’s Affidavit of Payment of Debts and Claims”: or other evidence acceptable to the Owner.
5. AIA Document G707, “Consent of Surety to Final Payment”.
6. Assurance that work not complete and accepted will be completed without undue delay.
7. Transmittal of required project construction records to Owner.
8. Removal of temporary facilities and services.
10. Change of door locks to Owner’s access.
PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.02 SUMMARY

A. This Section specifies requirements of photographic documentation of the project conditions before construction. The video tape and photographs will serve as record of existing conditions for disputes arising from restoration, and should therefore be taken along the lines of construction at such frequency as necessary to depict details of existing conditions.

B. Payment: All cost for photographs and video tapes including processing, indexing and cataloging shall be on a lump sum basis, and shall be paid for by the Contractor, excepting photographs taken by the Engineer or the Owner.

1.03 SUBMITTALS

A. Photographs and Digital Video Disks: capable of being viewed in Windows XP Based Software.

B. Provide full-size narrated DVD with label to identify subject areas.

C. Provide photographs, as necessary, to supplement DVD to clearly depict existing conditions.

1.04 QUALITY ASSURANCE

A. Video narration shall completely (location, orientation, etc.) identify each scene.

B. Index and catalog photographs in such a manner that each scene is readily identifiable.

C. Photographs shall indicate the orientation of view and shall indicate date and time the photograph was made.

PART 2 - PRODUCTS (NOT APPLICABLE)
PART 3 - EXECUTION

3.01 CONSTRUCTION DOCUMENTATION

A. Pre-Construction Conditions: Take photographs and video tape all areas where construction is to take place within two weeks prior to the start of construction. Submit processed photographs to the Engineer before construction commences.

B. During construction or when major equipment is installed or where problems occur, the Contractor shall take pictures and videotape.

C. Post-Construction Conditions: Upon completion of construction work and before final payment, the contractor shall take photographs and video tapes of all completed construction and of all areas disturbed or restored by construction activities.

D. Unusual Conditions encountered during construction shall be photographed and video taped if not already a matter of photographic record.

END OF SECTION
PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.02 SUMMARY

A. This Section specifies administrative and procedural requirements for project closeout, including but not limited to:
   1. Field review procedures.
   2. Project record document submittal.
   3. Operating and maintenance manual submittal.
   4. Submittal of warranties.
   5. Final cleaning.

B. Closeout requirements for specific construction activities are included in the appropriate specifications.

1.03 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting a Substantial Completion meeting, Contractor shall complete the following.
   1. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.
   2. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities; include occupancy permits, operating certificates and similar releases.

B. Field Review Procedures: On receipt of a notice that the facilities are substantially complete, the Engineer will proceed with field review meeting with the Contractor and Owner or Owner’s representative present. The Engineer will review documentation provided by the Contractor and the Owner’s representative. From field observations and the documentation provided, the Engineer will prepare a “punch list” of items that must be completed or corrected before the work can be considered complete and the final payment is made. The work which is substantially complete will be considered cleared for partial utilization and turned over to the Owner. These items may be put into service by the Owner and shall not be altered by the Contractor.
1.04 FINAL COMPLETION

A. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, Contractor shall complete the following.
1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
3. Submit a copy of the Engineer's final inspection list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance.
4. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion, or when the Owner took possession of and responsibility for corresponding elements of the Work.
5. Submit consent of surety to final payment.
6. Submit a final liquidated damages settlement statement.
7. Submit evidence of final, continuing insurance coverage complying with insurance requirements.

B. Re-inspection Procedure: The Engineer will schedule a final completion meeting to review the work identified in the punch list upon receipt of notice from the Contractor that the work has been completed.
1. Upon completion of Final Completion review, the Engineer will prepare a notification for the Contractor and Owner of final completion, or advise the Contractor of work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance. This notification of final completion only implies that through examination of records and visual inspection the work appears to meet the requirements of the drawings and specifications as all construction activities are not observed by the Engineer. If the Engineer must perform another review of any work identified on the punch list because the Contractor failed to complete all work before the final completion inspection, the Contractor will be responsible for paying all of the Engineer's cost for another field review.

1.05 RECORD DOCUMENT SUBMITTALS

A. General: Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Engineer's reference during normal working hours.

B. Record Drawings: Maintain a clean, undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date. An independent Florida licensed land surveyor must be retained to locate all subsurface and surface improvements including
potable water mains and fittings, reclaimed water mains and fittings, force mains and fittings, extent of any paving, and all pipe inverts and structure top elevations for sanitary sewer and stormwater improvements. All record and as-built drawings must meet the COMMISSION’s “Potable Water Rules, Design, and Construction Specifications”, “Reclaimed Water Rules, Design, and Construction Specifications”, and “Wastewater Rules, Design, and Construction Specifications”, Final Acceptance Section. Section 7, Section 7 and Section 8 respectively. All files shall be submitted to the COMMISSION digitally in both Adobe PDF and AutoDesk DWG format (meeting AutoDesk 2014 edition or later.)

1. Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the Work.
2. Mark new information that is important to the Owner, but was not shown on Contract Drawings or Shop Drawings.
3. Note related Change Order numbers where applicable.
4. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set.

C. Record Specifications: Maintain one complete copy of the Project Manual, including addenda, and one copy of other written construction documents such as Change Orders and modifications issued in printed form during construction. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data. Upon completion of the Work, submit record Specifications to the Engineer for the Owner's records.

D. Record Product Data: Maintain one copy of each Product Data submittal. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site, and from the manufacturer's installation instructions and recommendations. Give particular attention to concealed products and portions of the Work which cannot otherwise be readily discerned later by direct observation. Note related Change Orders and mark-up of record drawings and Specifications. Upon completion of mark-up, submit complete set of record Product Data to the Engineer for the Owner's records.

E. Record Sample Submitted: Immediately prior to the date or dates of Substantial Completion, the Contractor will meet at the site with the Engineer and the Owner's personnel to determine which of the submitted Samples that have been maintained during progress of the Work are to be transmitted to the Owner for record purposes. Comply with delivery to the Owner's Sample storage area.

F. Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record-keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Engineer for the Owner's records.
G. Maintenance Manuals: Organize operating and maintenance data into suitable sets of manageable size. Bind properly indexed data in individual heavy-duty 2-inch, 3-ring vinyl-covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder. Include the following types of information:

1. Emergency instructions.
2. Spare parts list.
4. Wiring diagrams.
5. Recommended "turn around" cycles.
6. Inspection procedures.
7. Shop Drawings and Product Data.
8. Fixture lamping schedule.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 CLOSEOUT PROCEDURES

A. Operating and Maintenance Instructions: Arrange for each installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. If installers are not experienced in procedures, provide instruction by manufacturer's representatives. Include a detailed review of the following items:

1. Maintenance manuals.
2. Record documents.
3. Spare parts and materials.
4. Tools.
5. Lubricants.
6. Fuels.
7. Identification systems.
8. Control sequences.
9. Hazards.
10. Cleaning.
11. Warranties and bonds.
12. Maintenance agreements and similar continuing commitments.
B. As part of instruction for operating equipment, demonstrate the following procedures:
1. Start-up.
2. Shutdown.
3. Emergency operations.
5. Safety procedures.
7. Effective energy utilization.

3.02 FINAL CLEANING

A. General: General cleaning during construction is required by the General Conditions and included in Section "Temporary Facilities".

B. Before the completion of the project, the Contractor shall, unless otherwise especially directed or permitted in writing:
1. Tear down and remove all temporary buildings and structures which he built;
2. Remove all temporary works, tools, and machinery or other construction equipment furnished by him;
3. Remove, acceptably disinfect, and cover all organic matter and material containing organic matter in, under, and around privies, houses, and other buildings used by him;
4. Remove all rubbish from any grounds which he has occupied; and
5. Leave the roads, all parts of the premises and adjacent property affected by his operations, in a neat and satisfactory condition.

C. The Contractor shall restore or replace any public or private property damaged by his work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of the operations. To this end, the Contractor shall restore all highway, roadside and landscaping work within any right-of-way, platted or prescriptive. Acceptable materials, equipment, and methods shall be used for such restoration.

D. The Contractor shall thoroughly clean all materials and equipment installed by him and his subcontractors and on completion of the work shall deliver the facilities undamaged and in fresh and new-appearing condition.

E. It is the intent of the Specifications to place the responsibility on the Contractor to restore to their original condition all items disturbed, destroyed or damaged during construction.

F. When finished surfaces require cleaning with cleaning materials the Contractor shall use only those cleaning materials which will not create hazards to health or property and which will not damage the surfaces. Cleaning materials shall be used only on those surfaces recommended by the manufacturer. The manufacturer’s directions and recommendations shall be followed at all times.

G. The Contractor shall do everything in his power to keep the amount of dust produced during his construction activities to a minimum. If required by the Engineer, the Contractor, at his expense, shall spray water or other dust control agents over the areas which are producing the dust. Construction operations shall be scheduled so that dust and other contaminants will not fall on wet or newly-coated surfaces.
H. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner. Where extra materials of value remaining after completion of associated Work have become the Owner's property, arrange for disposition of these materials as directed.

I. Inspection
Prior to final completion, the Owner, Engineer and Contractor shall review the site with regards to site cleanup, restoration and maintenance of the system. The Contractor shall clean and/or restore all items determined to be unsatisfactory by the Owner or Engineer, at his expense.

END OF SECTION
LOCATION MAP FOR:
NEW SMYRNA BEACH, FLORIDA
I.O. M.G. RESERVOIR
JOB No. 8303

1 M. G. RESERVOIR
UTILITIES COMMISSION
CITY OF NEW SMYRNA BEACH, FLORIDA
CAMP, DRESSER & McKEE, INC.
CONSULTING ENGINEERS
MAITLAND, FLORIDA

TABLE OF CONTENTS
1. TITLE SHEET
2. PLAN, SECTION - ELEVATION & NOTES
3. TYPICAL WALL DETAILS & PRESTRESSING SCHEDULE
4. PIPING DETAILS
5. PIPING & DOME HANDRAIL DETAILS
6. ACCESSORY DETAILS
7. ACCESS HATCH & LIQUID LEVEL INDICATOR
8. LADDER DETAILS

THE CROM CORPORATION
250 S.W. 36TH TERRACE
GAINESVILLE, FLORIDA 32607

DESIGNERS & BUILDERS OF PRESTRESSED TANKS

DATE: 3-63
DRAWN:
CHKD:
APPO:
FILE NO.
SHEET
MATERIALS & SERVICES FURNISHED BY THE CROM CORPORATION:

1. Clearing of the site, excavation, fill, compaction to an elevation 1 ft below top of finish grade on a 90° diameter circle.
2. Demolition of the 90° diameter work area if required.
3. Water and electricity for construction.
4. Testing and disinfection.

A. CONCRETE:

1. Use Type II cement.
2. 7500 psi with 3½" aggregate for floor.
3. 6000 psi with 3½" aggregate pump mix for dome.
4. 5000 psi for pipe encasement.
5. 4000 psi for precast concrete.

B. SHOTCRETE MIXES:

1. Use Type II cement. E6 = 4000 psi E8 = 1610 psi
2. First coat on steel and prestressing wire - 1 to 3 mix.
3. All other shotcrete - 1 to 4 mix.

C. MATERIAL TESTING:

1. Concrete: (3 cylinders per set) Test one at 7 days, one at 28 days, and hold one.
2. Shotcrete: (3 cylinders per set) Test one at 7 days, one at 28 days, and hold one.

D. CURING:

1. Floor and walls to be water-cured during tank construction.
2. Dome to be water-cured until prestressing is complete.
3. Shotcrete: Use Type II cement.

E. REINFORCING STEEL:

1. ASTM A-615 Grade 40, Lap 24 diameters.

F. PAINT SCHEDULE:

2. Interior surfaces: None.

H. ACCESSORIES:

1. 30° Fiberglass Ventilator, 1 required.
2. 30° Fiberglass Ventilator, 1 required.
3. Precast access hatch with fiberglass cover, 1 required.
4. Aluminum handrail, 1 required.
5. Interior Fiberglass handrail with safety rail, 1 required.
6. Exterior aluminum ladder with safety rail, 1 required.
7. Fiberglass liquid level indicator with precut curb, 1 required.
8. Wall manhole, 1 required.
9. Type seal for overflow, 1 required.
10. Pipe: 8" drain, 8" influent, 18" effluent.
11. The brackets, 1 required.
12. Inter Tx plates, 1 required.
13. 3 level transmitter sleeve.

I. TESTING AND DISINFECTION:

1. Fill reservoir with water to which 65# of HTH (or equivalent) has been added to give 50 ppm available chlorine. Allow water to stand 24 hours before putting reservoir in service.

NOTES:

- Use standard specifications or as otherwise specified.
- Owner: M.G. Reservoir
- City of New Smyrna Beach, Florida
- Consulting Engineers: CAMP, DRESSER & McKee, Inc.
- Drawn: Maitland, Florida
- Appv'd: 05-26-82
- Date: 06-26-82
- File No.: 8303
- Scale: 3/32" = 1'-0"
- Where standard specifications are not used as conflict with CROM specifications or as otherwise specified, the standard specifications shall be superseded.
- This design and drawing originated by and the exclusive property of the CROM Corporation.
Prestressing wires to provide:
- 4 x 4 W40 x W40 wire mesh extend over diaphragm
- 4 x 4 W40 x W40 wire mesh extend over diaphragm

Floor-wall detail scale: 1'-0" = 1'-0"

Typical wall details:
- Core wall + 1/2" at top of wall
- Core wall + 4 1/2" at base of wall
- Outside vertical resteel
- Prestressing wires
- Shoot min. of 1" cover coat over prestressing wires
- Shoot min. 1/4" cover between vertical bars & prestressing wires

Horizontal wall section scale: 1'-0" = 1'-0"

Dome ring detail scale: 1'-0" = 1'-0"

Dome shell thickness: 3" at 4'-0" from wall
- 1/2" bolster w/s.s. legs (class D) all around at 3" & 5" from dome edge to support resteel
- Field bend outside vertical resteel to provide 1" minimum and 2" maximum cover

Limit of dome band

Springline

Prestressed composite wall, steel shell, shotcrete construction

Prestressed concrete dome with 4 x 4 W60 x W60 mesh

Access hatch with fiberglass cover

Prestressing schedule scale: 1/8" = 1'-0"

8303
VORTEX BREAKER

PLAN VIEW

PIPE Bracket (2 REQ'D @ 12') SEE DETAIL SHEET 5

PIPE SCHEDULE
1. 8" OVERFLOW
2. 8" D.I.P. x 23'-0" LG., FL.-FL.
3. 8" D.I.P. x 90° Base Bend, FL.-FL.
4. 8" D.I.P. x 8'-10" LG., FL.-FL.
5. 8" D.I.P. x 90° Bend, FL.-FL.
6. 8" D.I.P. x 3'-4" LG., FL.-PE.
7. FL. - FL.

18" D.I.P. EFFLUENT

OVERFLOW PIPE SUPPORT, SEE DETAIL SH. 6

8" D.I.P. OVERFLOW & 8" D.I.P. DRAIN

8" D.I.P. INFLUENT

18" D.I.P. EFFLUENT
AREA OF OPENING 200 SQ. IN.  
20/20 MESH F.G. SCREEN 
4 DOWELS

NOTE: KEEP SHOTCRETE REBOUND CLEANED OFF OF OVERFLOW. LEAVE PLYWOOD COVER IN PLACE UNTIL ALL SHOTCRETING IS COMPLETE.

WASH MANHOLE AND DIAPHRAGM WELL TO INSURE GOOD BOND
6-4 HOOPS AT 3"
PACK "THORITE" TIGHTLY BETWEEN MANHOLE FRAME AND DIAPHRAGM

ELEVATION 15.00
PERMATEX AND GASKET
BUILD UP SHOTCRETE ALL AROUND MANHOLE ON INSIDE FACE.
SEAL MANHOLE TO STEEL SHELL WITH EPOXY.

CAST STEEL FRAME
1" COVER COAT OVER PRESTRESSING WIRES

OVERFLOW PIPE SUPPORT (1 REQ'D)
SCALE: 1/16" x 1'-0"

ANCHOR BELOW FLOOR STEEL, 2" MINIMUM COVER
3-3 TIES
6-5 DOWELS 30\(\frac{1}{4}\)" / 6" MIN. FOR 2' EACH SIDE OF SUPPORT
S.S. ANCHOR BOLTS, 5/8" Dia. x 12" LG W/ NUTS & WASHERS (4 REQ'D)

PRECAST CONCRETE CURB
PRECAST OVERFLOW CURB
BOTTOM COVERED WITH 20/20 MESH REMOVABLE FIBERGLASS SCREEN

NOTE = MANHOLE PROVIDES A RECTANGULAR OPENING 15" x 27"