



Indian River County Purchasing Division

1800 27th Street

Vero Beach, FL 32960

Phone (772) 226-1416

Invitation to Bid

Project Name: Oslo Water Treatment Plant Blower Replacement
Bid #: 2020009
Bid Bond Required: 5% if bid over \$35,000
Public Construction Bond Required: Yes, if total award is over \$100,000

Bid Opening Date: **October 23, 2019**

Bid Opening Time: **2:00 P.M.**

All bids must be received by the Purchasing Division, 1800 27th Street, Vero Beach, Florida 32960 prior to the date and time shown above. Late bids will be returned unopened.

PLEASE SUBMIT (1) ONE MARKED ORIGINAL AND (1) COPY OF YOUR BID.

Refer All Questions to:

Email: purchasing@ircgov.com

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ADVERTISEMENT FOR BID

Notice is hereby given that the Indian River County Board of County Commissioners is calling for and requesting bids for the following:

Indian River County Bid # 2020009 Oslo Water Treatment Plant Blower Replacement

Detailed specifications are available at: www.demandstar.com or by selecting "Current Solicitations" at <http://www.ircgov.com/Departments/Budget/Purchasing>.

Deadline for receipt of bids has been set for **2:00 P.M. on October 23, 2019**. Only bids received before the time and date listed will be considered. Bids should be addressed to Purchasing Division, 1800 27th Street, Vero Beach, Florida 32960. All bids will be opened publicly and read aloud at 2:00 PM. Bids submitted after 2:00 PM on the day specified above, will not be accepted or considered.

A pre-bid meeting will be held on October 2, 2019 at 1:00 at Oslo Water Treatment Plant, located on the north side of Oslo Road east of 20th Avenue specifically 1500 9th Street SW, Vero Beach, FL. Attendance at the pre-bid is strongly encouraged but not mandatory.

BID Security in the sum of not less than five percent (5%) of the total bid must accompany each bid over \$35,000.00.

The Board of County Commissioners reserves the right to accept or reject any and all bids in whole or in part and to waive any technicality or irregularity.

**PURCHASING MANAGER
INDIAN RIVER COUNTY**

Published on Demandstar and Vendor Registry September 23, 2019

Statement of No Bid

Should you elect not to bid, please complete and send this page by email (purchasing@ircgov.com), fax (772-770-5140) or by mail to Indian River County Purchasing, 1800 27th Street, Vero Beach, FL 32960.

Please select all of the following that apply. Our decision not to bid on the subject project was based on:

- Project is located too far from our base of operations
- Project value too low
- Project specifications unclear (please explain below)
- Material availability may be a challenge
- Our current schedule will not allow us to perform
- Unable to meet insurance requirements
- Other:
- Other:

General comments regarding the bid and/or plans and specifications:

Instructions to Bidders

General Terms and Conditions

Cone of Silence. Potential bidders/respondents and their agents must not communicate in any way with the Board of Commissioners, County Administrator or any County staff other than Purchasing personnel in reference or relation to this solicitation. This restriction is effective from the time of bid advertisement until the Board of County Commissioners meets to authorize award. Such communication may result in disqualification.

Sealed Bids and Envelope Markings: All bids must be submitted in a sealed opaque envelope. The outside of the envelope must be clearly marked with the Sealed Bid #, Title of the Bid, Date of the Bid opening, and Time of the Bid Opening and name of firm submitting.

Opening Location: It will be the sole responsibility of the Bidder to deliver personally or by mail or other delivery service, their proposal to the office of the Indian River County Purchasing Division. Bids should be delivered to 1800 27th Street, Vero Beach, FL 32960, on or before the closing hour and date shown for receipt of bids. Bids received in person or by mail after the stated time and date will not be considered.

Bid Submission: All bids must be signed with the legal Firm name and by an Officer or employee having authority to bind the company or firm by his / her signature. Bids must be submitted on forms provided by Indian River County. **Bids not submitted on the attached form(s) shall be rejected.** Submittal of one marked original bid and one copy is required unless otherwise instructed.

Bid Security and Public Construction Bond: Bid security must accompany each Bid over \$35,000, and must be in the form of an AIA Document A310 Bid Bond, properly executed by the Bidder and by a qualified surety, or a certified check or a cashier's check, drawn on any bank authorized to do business in the State of Florida. Bid Security for bids over \$35,000 must be in the sum of not less than five percent (5%) of the total amount of the bid, made payable to Indian River County Board of County Commissioners. In the event the Contract is awarded to the Bidder, Bidder will enter into a Contract with the County and furnish the required 100% Public Construction Bond/Payment and Performance Bonds and insurance certificates within the timeframe set by the County. If Bidder fails to do so, the Bid Security will be retained by the County as liquidated damages and not as a penalty. If bid does not exceed \$100,000, no Public Construction/Payment or Performance Bond will be required. Bid Security of other Bidders whom OWNER believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

Withdrawal of Bids: A bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time of opening of bids. If, within 24 hours after Bids are opened,

any bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that bidder may withdraw its bid and bid security will be returned. Thereafter, if the work is rebid, that bidder may be disqualified from further bidding on the work.

Delivery Requirements: Delivery is “FOB Destination” unless delivery terms are specified otherwise in the specifications. If County agrees in writing to reimburse Seller for transportation costs, County shall have the right to designate the method of shipment. In either case, the title and all risk of loss of the goods shall remain with the Seller until the goods are received and accepted by the County. Rejected materials will be returned to Seller at the Seller’s risk and expense.

Price and Discount Requirements: Quote net prices after deducting trade discounts. All discounts must be incorporated in the prices contained in the bid, and not shown separately. Invoices submitted must agree with the prices formally bid.

Direct Purchase: Indian River County reserves the option to purchase certain tangible materials necessary for the performance of the Contract, and thereby save the amount of the sales tax thereon by virtue of the Owner's status as a Tax Exempt Institution. For the purpose of these procedures, the Contractor will assign to the County any rights the Contractor may have under quotes, contracts or commitments received from the particular vendor or supplier for the materials described in the requisition. The invoiced amount of County Purchased Materials and applicable sales tax, had the purchases not been tax exempt, once finalized through the Owner’s Purchase Order and after confirmation of completed delivery and acceptance, will be deducted from the Contractor’s Contract price via Change Order.

Taxes: Indian River County is exempt from any taxes imposed by State and / or Federal Government. Exemption Certificates, if required, are to be furnished by the successful bidder and will be filled out by the County.

Delivery and Completion Dates: Indicate delivery and completion dates. This may be a determining factor in the award of the bid. The County may, at its option, grant additional time for any delay or failure to perform hereunder if the delay will not adversely affect the best interests of the County and is due to causes beyond the control of the Bidder. Such grant must be in writing and made part of the resulting Agreement.

Irrevocable Offer: Bidder warrants by virtue of bidding that the prices quoted in this bid will remain firm and be considered an irrevocable offer for a period of sixty (60) days, during which time one or more of the bids received may be accepted by Indian River County.

Assignment/Delegation: No right, obligation or interest in an awarded Agreement may be assigned or delegated by the Bidder without prior written consent of the County, without prejudice to County’s other rights and remedies.

Consideration of Bids: Verbal, emailed or faxed bids will not be considered.

Affirmative Steps: [required for all federal contracts] CONTRACTOR must take the following affirmative steps to ensure minority business, women's business enterprises and labor surplus area firms are used when possible:

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists.
2. Ensuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources.
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises.
4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises.
5. Using the services and assistance of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

Indemnification: The successful Bidder shall indemnify and hold harmless the County, and its commissioners, officers and employees, from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the contractor and persons employed or utilized by the contractor in the performance of the construction contract.

Public Access: The Bidder shall allow public access to all documents and materials in accordance with the provisions of Chapter 119, Florida Statutes. If this project is federally-funded, the Department of Homeland Security (DHS) seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials shall not be used by the Bidder without specific FEMA pre-approval.

Records/Audit: The Bidder shall maintain books, records and documents pertinent to performance under this Invitation and any resulting Agreement in accordance with generally accepted accounting principles consistently applied. The County and the Florida Office of the Inspector General shall have inspection and audit rights to such records for audit purposes during the term of the contract and for three years following the termination of obligations hereunder. Records which relate to any litigation, appeals or settlements of claims arising from performance under this work or purchase shall be made available until a final disposition has been made of such litigation, appeals, or claims.

Acceptance: Receipt of an item shall not be an indication that the items are acceptable. Final acceptance and authorization of payment shall be given after a thorough inspection indicates that the item is delivered in accordance with the Bid Specifications. Suppliers are advised that in the event the delivered item does not meet specifications, payment will be withheld until such time the supplier takes necessary corrective action.

Permits, Impact and Inspection Fees. In accordance with Florida Statutes Section 218.80, the "Public Bid Disclosure Act", Indian River County as OWNER is obligated to disclose all license, permit, impact, or inspection fees that are payable to Indian River County in connection with the construction of the Work by the accepted bidder. All permit, impact, or inspection fees payable to Indian River County in connection with the work on this County project will be paid by Indian River County, with the exception of re-inspection fees. The Bidder shall not include ANY PERMIT, IMPACT, NOR INSPECTION FEES payable to **Indian River County** in the bid.

Descriptive Information: Descriptive literature including Specifications must accompany your bid. Manufacturer's name and model numbers are used herein solely for the purpose of establishing a standard of design, quality, and use of the merchandise required. Products of other manufacturers will be acceptable if they meet or exceed established standards with the exception of those items specified "NO SUBSTITUTION".

Variations to Specifications: Items specifically described, as alternates shall be reviewed as an alternative bid to be considered by the County, in lieu of the primarily specified item(s). However, item(s) varying from the published specifications shall be considered substitutes, and the County reserves the right to consider or not to consider substitute bids. Substitutes shall be subject to disqualification if the County does not approve the substitution.

Interpretations: No oral interpretations will be made to any Bidder as to the meaning of the Specifications. Every request for such an interpretation shall be made in writing, addressed and forwarded to Indian River County (purchasing@ircgov.com) ten (10) or more days before the date fixed for opening of the bids. The County shall not be responsible for oral interpretations given by any County employee. Every interpretation made to bidder will be in the form of an Addendum to the specifications, which if issued, will be sent promptly as is practical to all persons to whom specifications have been issued. All such Addenda shall become part of the specifications. Further, it shall be the responsibility of each bidder, prior to submitting their bid, to contact Indian River County's Purchasing Division at (772) 226-1416 to determine if addenda were issued and to make such addenda a part of their bid.

Default Provision: In case of default by the Bidder, Indian River County may procure the articles or services from other sources and hold the Bidder responsible for excess costs incurred thereby, and may take such action, as it deems appropriate, including legal action for Damages or Specific Performance.

Manufacturer's Certification: Indian River County reserves the right to request from the Bidder a separate manufacturer's certification of all statements made in the proposal.

Signed Bid Considered an Offer: This signed bid shall be considered an offer on the part of the Bidder. Indian River County Board of County Commissioners shall deem the offer accepted upon approval.

Non-Collusion: By signing and submitting the Bid Form, the Bidder certifies that,

- This bid has been arrived at by the Bidder independently and has been submitted without collusion, and without any agreement, understanding, or planned common course, or action with, any vendor of materials, supplies, equipment, or services described in the invitation to bid, designed to limit independent bidding or competition, and
- The contents of the bid have not been communicated by the Bidder or its employees or agents to any person not an employee or an agent of the bidder or its surety on any bond furnished with the bid, and will not be communicated to any such person prior to the official opening of the bid.
- No attempt has been made or will be made by the Bidder to induce any other person(s) or firm(s) to submit or not to submit a bid for the purpose of restricting competition.

Public Entity Crimes: Pursuant to Florida Statutes Section 287.133(2)(a), all Bidders are hereby notified that 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, proposal, or reply on a contract to provide any goods or services to a public entity (defined as the State of Florida, any of its departments or agencies, or any political subdivision); may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Florida Statutes Section 287.017 for CATEGORY TWO [currently \$35,000] for a period of 36 months from the date of being placed on the convicted vendor list. A "public entity crime" means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid, proposal, reply, or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

Suspension and Debarment: Indian River County will not make award to parties listed on the government-wide exclusions in the System for Award Management (SAM). The bidder agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder

or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Scrutinized Companies Lists: The bidder certifies that it and those related entities of respondent as defined by Florida law are not on the Scrutinized Companies that Boycott Israel List, created pursuant to s. 215.4725 of the Florida Statutes, and are not engaged in a boycott of Israel. In addition, if this agreement is for goods or services of one million dollars or more, Contractor certifies that it and those related entities of respondent as defined by Florida law are not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to Section 215.473 of the Florida Statutes and are not engaged in business operations in Cuba or Syria. The County may terminate this Contract if Company is found to have submitted a false certification as provided under section 287.135(5), Florida Statutes, been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or been engaged in business operations in Cuba or Syria, as defined by section 287.135, Florida Statutes. County may terminate this Contract if Company, including all wholly owned subsidiaries, majority-owned subsidiaries, and parent companies that exist for the purpose of making profit, is found to have been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel as set forth in section 215.4725, Florida Statutes.

Accordingly, firms responding to this solicitation shall return with their response an executed copy of the attached "Certification Regarding Prohibition Against Contracting With Scrutinized Companies." Failure to return this executed form with submitted bid/proposal/statement of qualifications will result in the response being deemed non-responsive and eliminated from consideration.

Non-Discrimination: Indian River County will not knowingly do business with vendors or contractors who discriminate on the basis of race, color or national origin, sex, sexual orientation, gender identity, age and/or disability. Through the course of providing services to the County, Contractors shall affirmatively comply with all applicable provisions of Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987 and the Florida Civil Rights Act of 1992, as well as all other applicable regulations, guidelines and standards. Any person who believes their rights have been violated should report such discrimination to the County's Title VI/Nondiscrimination Coordinator through the office of the County Attorney.

Local Preference: Indian River County has no local ordinance or preferences, as set forth in Florida Statutes section 255.0991(2) in place, therefore no preference prohibited by that section will be considered in the acceptance, review or award of this bid.

Energy Policy and Conservation Act – The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

Regulations: It shall be the responsibility of the bidder to assure compliance with any OSHA, EPA and / or other Federal or State of Florida rules, regulations, or other requirements, as each may apply.

Applicable Law and Venue: The resulting Agreement and all rights and duties of the parties hereto shall be governed by the laws of the State of Florida, including but not limited to the provisions of the Florida Uniform Commercial Code Chapters 671-679 F.S., for any terms and conditions not specifically stated within. Venue for any lawsuit brought by either party against the other party or otherwise arising out of this Contract shall be in Indian River County, Florida, or, in the event of a federal jurisdiction, in the United States District Court for the Southern District of Florida.

Conflict of Interest: Any entity submitting a bid or proposal or entering into a contract with the County shall disclose any relationship that may exist between the contracting entity and a County Commissioner or a County Employee. The relationship with a County Commissioner or a County Employee that must be disclosed is as follows: *father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, daughter-in-law, son-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, or grandchild*. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of the entity. The disclosure of relationships shall be a sworn statement made on a County approved form. Failure to submit the form may be cause for rejection of the bid or proposal.

Cancellation: It is the intention of Indian River County to purchase material and / or services from sources of supply that will provide prompt and convenient shipment and service. Any failure of the supplier to satisfy the requirements of the County shall be reason for termination of the award.

Errors: When an error is made in the bid extension of generating total bid prices or in any other process of completing the bid, the original unit prices submitted will govern. Carelessness in quoting prices, or in preparation of the bid otherwise, will not relieve the bidder from performance.

Bid Rejection: Failure to comply with all the above instructions *may* result in rejection of the bid.

Bid Protest: Any actual or prospective bidder or proposer who is aggrieved in connection with a competitive selection process may protest to the Purchasing Manager. The protest shall be submitted to the Purchasing Manager in writing within seven (7) calendar days after the bidder or proposer knows or should have known of the facts giving rise to the protest. If the protest is not resolved by mutual agreement, the Purchasing Manager shall promptly issue a decision in writing, after consulting the using Department and the Office of the County Attorney.

Co-Operative Purchasing: It is the intent of the Invitation of Bid to secure goods or services to be used by Indian River County. However, by virtue of bidding, the bidder accepts the right of other Florida Governmental agencies to purchase from this bid proposal. The successful bidder and the requesting Governmental agency, apart from Indian River County, shall handle any such purchases separately. Further, Indian River County assumes no liability for materials or services ordered by any other Governmental agency by virtue of this bid. (*Bidders that find this condition unsatisfactory should indicate this by showing exception on the Bid Form.*)

Supplemental Information: The County reserves the right to conduct such investigations as it deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed subcontractors, suppliers, and other relevant parties to perform and furnish the work. To demonstrate qualifications to perform the work, each Bidder must be prepared to submit, within 5 days of Owner's request, written evidence, such as financial data, previous experience, present commitments, and other such data as may be necessary to prove to the satisfaction of the Owner that the Bidder is qualified by experience to do the work and is prepared to complete the work within the stated time period. Failure to provide any requested information may result in the determination of the Bidder as non-responsible.

Awards: The County reserves the right to cancel the bid, accept or reject any and all bids or waive any irregularity or technicality in bids received. When it is determined there is no competition to the lowest responsive, responsible Bidder, evaluation of other bids is not required. Bidders are cautioned to make no assumptions unless their bid has been evaluated as being responsive. The County reserves the right to not make any award(s) under this bid.

Termination by the County: The County reserves the right to terminate a contract by giving thirty (30) days notice, in writing, of the intention to terminate, if at any time the contractor fails to abide by or fulfill any of the terms and conditions of the contract. The County also reserves the right to terminate this contract for convenience of the County and / or with or without cause.

Compliance with Laws and Regulations: Bidder agrees that they will comply with all Federal, State, and Local Laws and Regulations applicable to the production, sale, and delivery of the goods or the furnishing of any labor or services called for by the resulting Agreement, and any provisions required thereby to be included herein shall be deemed to be incorporated herein by reference. Noncompliance may be considered grounds for termination of contracts.

Public Record Law: Correspondence, materials, and documents received pursuant to this Invitation for Bid become public records subject to the provisions of Chapter 119, Florida Statutes. Should the Bidder assert any exemptions to the requirements of Chapter 119, Florida Statutes, and related statutes, the burden of establishing such exemption, by the way of injunctive or other relief as provided by law, shall be upon the Bidder.

Licensure: Bidder must possess State of Florida General Contractor’s license and be registered with the Indian River County Building Division. The general contractor must use a licensed mechanical contractor or class A contractor to install the mechanical motors.

Insurance:

- **Owners and Subcontractors Insurance:** The Contractor shall not commence work until they have obtained all the insurance required under this section, and until such insurance has been approved by the owner, nor shall the contractor allow any subcontractor to commence work until the subcontractor has obtained the insurance required for a contractor herein and such insurance has been approved unless the subcontractor’s work is covered by the protections afforded by the Contractor’s insurance.
- **Worker’s Compensation Insurance:** The Contractor shall procure and maintain worker’s compensation insurance to the extent required by law for all their employees to be engaged in work under this contract. In case any employees are to be engaged in hazardous work under this contract and are not protected under the worker’s compensation statute, the Contractor shall provide adequate coverage for the protection of such employees.
- **Public Liability Insurance:** The Contractor shall procure and maintain broad form commercial general liability insurance (including contractual coverage) and commercial automobile liability insurance in amounts not less than shown below. The owner shall be an additional named insured on this insurance on this insurance with respect to all claims arising out of the operations or work to be performed.

Commercial General (Public) Liability, other than Automobile \$1,000,000.00 Combined single limit for Bodily Injury and Property Damage	Commercial General A. Premises / Operations B. Independent Contractors C. Products / Completed Operations D. Personal Injury E. Contractual Liability F. Explosion, Collapse, and Underground Property Damage
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Automobile \$1,000,000.00 Combined single limit Bodily Injury and Damage Liability	A. Owner Leased Automobiles B. Non-Owned Automobiles C. Hired Automobiles D. Owned Automobiles
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- **Proof of Insurance:** The Contractor shall furnish the owner a certificate of insurance in a form acceptable to the owner for the insurance required. Such certificate or an endorsement provided by the contractor must state that the owner will be given thirty (30) days written

notice prior to cancellation or material change in coverage. Copies of an endorsement-naming owner as Additional Insured must accompany the Certificate of Insurance.

Indian River County reserves the right to accept or reject any or all bids in whole or in part and waive all any technicality or irregularity.

Note: Any and all special conditions attached hereto, which may vary from these General Conditions, shall have precedence.

End of General Terms and Conditions

TECHNICAL SPECIAL PROVISION
FOR
OSLO WATER TREATMENT PLANT BLOWER REPLACEMENT

Prepared By: Nick Black, P.E.
Date: July 21, 2019
Fla. License No.: _____
Firm Name: Kimley-Horn and Associates
Firm Address: 1920 Wekiva Way, Suite 200
City, State, Zip Code: West Palm Beach, FL, 33411
Certificate of Authorization: _____
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SECTION 01000

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SECTION 01010

SUMMARY OF WORK

PART 1 - GENERAL

1.1 WORK COVERED BY THESE CONTRACT DOCUMENTS

- A. Furnish all labor, equipment and materials necessary to construct all improvement elements at the South Oslo Water Plant described in the plans and these specifications:
 - 1. Installation of new degasifier blowers with FRP composite blades and ductwork modifications necessary to provide a complete and functional system.
 - 2. Except as specifically noted, provide and pay for:
 - a. Mobilization and demobilization.
 - b. Labor, materials, and equipment.
 - c. Tools, construction equipment, and fuel.
 - d. Electric, water and utilities required for construction.
 - e. Freight and sales tax.
 - f. Testing and laboratory services.
 - g. Record Information in electronic form (both AutoCAD and PDF) and a hardcopy. Information will be used by the Engineer for Record Drawing development.

1.2 CONTRACTS

- A. Construct the Work under a Lump Sum Price contract in accordance with the contract documents and with the Owner.
- B. Subcontractors (when used) shall work directly for the contractor.

1.3 WORK BY OTHERS AND FUTURE WORK

- A. The Owner reserves the right to add to the work in accordance with the Contract Documents.
- B. The Owner reserves the right to direct purchase significant pieces of equipment and/or materials included in this contract by means of a deductive Change Order to this Contract and issuance of a Purchase Order to the supplier or vendor of the equipment or materials for the purpose of the sales tax end use savings.

1.4 WORK SEQUENCE

- A. Sequence of work will be discussed and decided prior to the start of the project. The contractor shall proceed in a manner that is logical for the progression of work.
- B. Certain areas may be assigned priority to accommodate Owner's needs.

-
- C. The contractor shall be required to coordinate the work sequence and schedule with the water treatment plant operations.
 - D. The Contractor shall follow the sequence of work described herein:
 - 1. All material must be onsite prior to any work commencing or removal of equipment.
 - 2. Remove one (1) blower, motor, frame, and associated ductwork as shown on the plans.
 - 3. Construct new blower support pad.
 - 4. Install new blower assembly including all necessary electrical conductors and conduit. Re-connect existing grounding wire to new blower.
 - 5. Install new ductwork and perform visual leak inspection of new joints.
 - 6. Coordinate startup testing date for newly installed blower with engineer of record and blower manufacturer field service technician. The following components will be tested during startup:
 - a. Air flow rate
 - b. Pressure (intake and discharge)
 - c. Voltage readings, Leg to neutral and leg to leg
 - d. Current readings
 - e. Megger testing
 - 7. The engineer will review the startup data and make recommendations for corrective measures to be performed by the Contractor, if necessary. All costs associated with re-testing of the blowers shall be borne by the Contractor.
 - 8. Upon completion of corrective measures to newly installed blower, the Contractor is permitted to begin demolition of the second blower.
 - 9. Repeat steps 1.4.D.2 through 1.2.D.8 for the second blower.
 - 10. Repeat steps 1.4.D.2 through 1.2.D.8 for the third blower.
 - E. The Contractor is herein notified that no more than one (1) blower may be out of service at one time.
 - F. Coordinate all equipment and service removal with operations staff. Water treatment plant to remain in service at all times.
 - G. Dispose of existing blowers. Furnish existing motors to owner.

1.5 CONTRACTOR-FURNISHED PRODUCTS AND RESPONSIBILITIES

- A. Products furnished to the site and paid for by Contractor: All products necessary to complete the work described herein these contract documents and specifications to provide a complete and functional system.
- B. Contractor's Responsibilities:
 - 1. Review and incorporate Owner-reviewed shop drawings, product data, and samples into the construction of the project.
 - 2. Schedule with the Owner and attend plant site safety training provided by water plant staff. All contractor and subcontractor staff that are working on site are

-
- required to attend the training.
3. Provide any items determined by the Owner to be salvaged to the Owner's on-site staging area.
 4. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
 5. Repair or replace items damaged after receipt.
 6. Arrange and pay for product delivery to site.
 7. Handle, store, protect and install all delivered products.
 8. Submit claims for transportation damage and replace damaged, defective, or deficient items.
 9. Arrange for manufacturers' warranties, inspections, and service.
 10. Provide the Owner with a one-year warranty on all equipment and workmanship from the date of substantial completion.
 11. Obtain any permits that may be required to execute the project. No building permit is expected to be required as part of this project.
 12. Coordinate all startup testing with the Owner, Engineer of record and the Blower manufacturer's field service technician. The sequence of demolition and construction described herein requires a minimum of three (3) startup dates to be attended by the Contractor, the Owner, the Engineer, and the Blower manufacturer's field service technician. All costs associated with performing additional startup testing shall be borne by the Contractor.

1.6 CONTRACTOR'S USE OF THE PREMISES

- A. All work shall be within the limits of the County owned water treatment plant facility. Contractor shall be responsible for maintenance of traffic when working within the public rights of way.
- B. The Contractor shall coordinate with the County for material lay down and equipment storage areas on site. The contractor shall maintain access to County facilities at all times and not interfere with the operations of other contractors who may also be working within the facility. Any damage caused by the contractor within staging areas shall be completely restored by the contractor to the Owner's satisfaction at no additional cost to the Owner.
- C. All Contractor and subcontractor workers and laborers shall be required to wear clothing that identifies them with their respective contractors. All workers and laborers shall remain in their designated work areas and at no time shall be wandering the site.

1.7 PERMITS REQUIRED

Not used.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

- END OF SECTION

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SECTION 01030

HURRICANE PREPAREDNESS

PART 1 - GENERAL

1.1 HURRICANE PREPAREDNESS PLAN

- A. The Contractor’s attention is drawn to the possibility of hurricane or severe storm conditions occurring at the site of work during the course of Contract Work.
- B. Within fourteen (14) days of the date of the Notice to Proceed, the Contractor shall submit to the Engineer and Owner a Hurricane Preparedness Plan specific to this project. The plan should outline the necessary measures which the Contractor proposes to perform at no additional cost to the Owner in case of a hurricane or severe weather warning.
- C. In the event of inclement weather, or whenever the Owner shall direct, the Contractor shall, and will, cause Subcontractors to protect carefully the Work and materials against damage or injury. Work and materials damaged due to inclement weather shall be removed and replaced at the expense of the Contractor.
 - 1. Hurricane Watch: Upon designation of a hurricane watch, the Contractor shall be responsible for storing all loose supplies and strapping down or removing large materials and equipment on the job site that may pose a danger. In addition, the Contractor shall remove all bulkheads and plugs in pipelines that would impede drainage in the case of flooding. Structures that may be in danger of floatation shall be flooded. The Contractor shall also cooperate with the Owner in protecting any other structures at the site.
 - 2. Hurricane Warning: No mobile “temporary facility” under the control of or on the property of the Owner shall be staffed during a hurricane warning. Contractor facilities meeting these criteria shall be evacuated. Reasonable steps shall be taken to protect all such facilities and their contents from damage and to avoid the facility causing damage to the surroundings.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

- END OF SECTION

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SECTION
01300

SUBMITTALS

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. Contractor shall submit to the Engineer, shop drawings, project data and samples required by specification sections.

1.2 SCHEDULES

- A. Prepare and submit a Construction Schedule.
- B. Prepare and submit a separate schedule listing dates for submission of shop drawings and projected return dates.
- C. Schedules shall be updated and re-submitted on a monthly basis throughout the duration of the project.
- D. Prepare and submit two-week look ahead schedules bi-weekly throughout duration of the project.
- E. Coordinate all work with OWNER operations staff. Construction activities that impact operations require 48 hours advance notice and approval from the OWNER. No WTP shutdowns will be permitted as part of this project.

PART 2 - PRODUCTS

2.1 SHOP DRAWINGS

- A. Original drawings, prepared by Contractor, Subcontractor, Supplier or Distributor, which illustrate portions of the Work; showing fabrication, layout, setting or erection details including, but not limited to the following:
 - 1. Blower assembly including, but not limited to, blowers, motors, frame, etc.
 - 2. FRP ductwork, EPDM sleeves with hose clamps
 - 3. Concrete mix designs (with specific locations), grouts, etc.
 - 4. Concrete reinforcement
 - 5. Electrical conductors
 - 6. Electrical conduit
 - 7. Miscellaneous metals
- B. Prepare submittals by a qualified detailer.
- C. Identify details by reference to sheet numbers and detail shown on Contract Drawings.

2.2 PROJECT DATA

- A. Manufacturer's standard schematic drawings:
 - 1. Modify drawings to delete information which is not applicable to project.

2. Supplement standard information to provide additional information applicable to project.
- B. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.
 1. Clearly mark each copy to identify pertinent materials, products or models.
 2. Show dimensions and clearances required.
 3. Show performance characteristics and capacities.
 4. Show wiring diagrams and controls.

2.3 SAMPLES

- A. Physical examples to illustrate materials, equipment or workmanship, and to establish standards by which completed work is judged.
- B. Office samples of sufficient size and quantity to clearly illustrate:
 1. Functional characteristics of product or material, with integrally related parts and attachment devices.
 2. Full range of color samples.

2.4 PAY REQUESTS

- A. Pay Requests shall be made in accordance with the requirements of the Agreement between Owner and Contractor. Payment requests shall include updated schedules as required in required 01300-1.2.

PART 3 - EXECUTION

3.1 SUBMISSION REQUIREMENTS

- A. Schedule submissions at least 14 days before dates reviewed submittals will be needed.
- B. Submit number of copies of Shop Drawings, Project Datum and Samples which Contractor requires for distribution plus 4 copies for the Owner and Engineer.
- C. Accompany submittals with transmittal letter, in duplicate, containing:
 1. Date.
 2. Project title and number.
 3. Contractor's name and address.
 4. Notification of deviations from Contract Documents.
 5. Other pertinent data.
- D. Submittals must include:
 1. Date of submittal and revision dates.
 2. Project title and number.
 3. The names of:
 - a. Engineer.
 - b. Contractor.
 - c. Subcontractor.
 - d. Supplier.

- e. Manufacturer.
- f. Separate detailer when pertinent.
- 4. Identification of product or material.
- 5. Relation to adjacent structure or materials.
- 6. Field dimensions, clearly identified as such.
- 7. Identification of deviations from Contract Documents.
- 8. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of field measurements and compliance with Contract Documents.

3.2 RESUBMISSION REQUIREMENTS

- A. Shop Drawings:
 - 1. Revise initial drawings as required and resubmit as specified for initial submittal.
 - 2. Clearly indicate on shop drawings all changes or revisions which have been made other than those requested by Engineer.
 - 3. Re-submittals without all comments from original review addressed will be returned to the contractor.
- B. Project Data and Samples:
 - 1. Submit new datum and samples as required for initial submittal.

3.3 DISTRIBUTION OF SUBMITTALS AFTER REVIEW

- A. Distribute copies of Shop Drawings and Project Datum which carry Engineer's stamp, to:
 - 1. Contractor's file.
 - 2. Job site file.
 - 3. Record Documents file.
 - 4. Other prime contractors.
 - 5. Subcontractors.
 - 6. Supplier.
 - 7. Fabricator.
- B. Distribute samples as directed.

- END OF SECTION

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SECTION
01410

TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Contractor shall employ and pay for services of an Independent Testing Laboratory to perform specified services.
- B. Inspection, Sampling and Testing is required for:
 - 1. Cast-in-place Concrete (slump and compressive strength)
 - 2. Other operations specified in these specifications or as required by the Engineer.
- C. Contractor's employment of Testing Laboratory shall in no way relieve Contractor of their obligation to perform Work in accordance with Contract.

1.2 QUALIFICATION OF LABORATORY

- A. Meet "Recommended Requirements for Independent Laboratory Qualification", latest edition, published by American Council of Independent Laboratories.
- B. Meet basic requirements of ASTM E 329-90 "Standard Practice for Use in the Evaluation of Testing Agencies for Concrete and Steel as Used in Construction".
- C. Certified in the State of Florida in accordance with FDEP requirements.

1.3 LABORATORY DUTIES; LIMITATIONS OF AUTHORITY

- A. Cooperate with Engineer and Contractor; provide qualified personnel promptly on notice.
- B. Perform specified inspections, sampling and testing of materials and methods of construction:
 - 1. Comply with specified standards; ASTM, other recognized authorities, and as specified.
 - 2. Ascertain compliance with requirements of Contract Documents.
- C. Promptly notify Engineer, and Contractor, of irregularities or deficiencies of Work which are observed during performance of services.
- D. Promptly submit 2 copies of reports of inspections and tests to Engineer, including:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Testing Laboratory name and address.
 - 4. Name of Inspector
 - 5. Date of inspection or sampling.
 - 6. Record of temperature and weather.
 - 7. Date of test.
 - 8. Identification of product and specification section.
 - 9. Location in project.

- 10. Type of inspection or test.
- 11. Observations regarding compliance with Contract Documents.

- E. Laboratory is not authorized to:
 - 1. Release, revoke, alter, or enlarge on, requirements of Contract Documents.
 - 2. Approve or accept any portion of Work.
 - 3. Perform any duties of the Contractor.

1.4 CONTRACTOR'S RESPONSIBILITIES

- A. Select laboratory, and coordinate testing with Lab and Engineer's representative.
- B. Cooperate with Laboratory personnel, provide access to Work.
- C. Provide to Laboratory, preliminary representative samples of materials to be tested, in required quantities.
- D. Furnish copies of mill test reports.
- E. Furnish casual labor and facilities:
 - 1. To provide access to Work to be tested.
 - 2. To obtain and handle samples at the site.
 - 3. To facilitate inspections and tests.
 - 4. For Laboratory's exclusive use for storage and curing of test samples.
- F. Notify Laboratory sufficiently in advance of operations to allow for his assignment of personnel and scheduling of tests.
- G. Pay for services of the Testing Laboratory to perform additional inspections, sampling and testing required:
 - 1. For Contractor's convenience.
 - 2. When initial tests indicate Work does not comply with Contract Documents.
 - 3. Such payment shall be made directly by the Contractor.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

- END OF SECTION

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SECTION 01600
MATERIAL AND EQUIPMENT

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The contractor is responsible for transportation, handling, storage, and protection of all proposed equipment to be delivered to the site as part of this project.
- B. The contractor is responsible for coordinating all deliveries to the project site with the OWNER.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.1 TRANSPORTATION AND HANDLING

- A. Deliver manufactured materials and products to the project site as needed for installation, undamaged, in original packages, containers, or bundles, as packaged by the manufacturer with manufacturer's name, brand, seals, and labels intact. Materials other than those designated within the specifications shall not be delivered to the project site.

3.2 STORAGE AND PROTECTION

- A. Protect and preserve all materials until final acceptance of the project. Store all materials in a manner to facilitate inspection and to prevent damage, contamination, intermixing, or theft.
- B. Miscellaneous metal, reinforcement bars, welded wire fabric, and masonry reinforcement materials shall be stored to prevent contact with the ground and from being damaged by its own weight or by other loads. Reinforcement which has become muddy shall be cleaned before use.
- C. Store cementitious materials in weathertight sheds on elevated floors away from damp surfaces.
- D. Do not use and dispose of materials that have been stored for longer than their maximum recommended shelf life or beyond their recommend shelf date.
- E. Store and protect all material and equipment in accordance with manufacturer's recommendations.

3.3 PROTECTION OF EQUIPMENT

- A. Keep products clean by elevating above ground or floor and by using suitable coverings. Take such precautions as are necessary to protect apparatus and materials from damage. Failure to protect materials is sufficient cause for rejection of the apparatus or material in question.
- B. Protect factory finish from damage during construction operations and until acceptance of the project. Satisfactorily restore any finishes that become stained or damaged.

- END OF SECTION

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SECTION 01700
PROJECT CLOSEOUT

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Comply with requirements stated in the Agreement between Owner and Contractor and in Specifications for administrative procedures in closing out the Work.

1.2 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Section 01720 - Project Record Drawings
- B. Section 01730 – Operating and Maintenance Manuals

1.3 SUBSTANTIAL COMPLETION

- A. Substantial completion shall be defined as beneficial use of all proposed equipment. Beneficial use will not occur until all three (3) blowers have been installed, tested, and accepted by the Owner and Engineer of record.
- B. The Contractor shall deliver to the Engineer the Record Drawings and a draft copy of the Operations and Maintenance manuals for review and deliver to the Owner a complete set of all spare parts.
- C. When Contractor considers the Work is substantially complete, Contractor shall submit to Engineer:
 - 1. A written notice that the Work or designated portion thereof, is substantially complete.
- D. Within a reasonable time after receipt of such notice, Engineer will perform a field investigation to determine the status of completion.
- E. Should Engineer determine that the Work is not substantially complete:
 - 1. Engineer will promptly notify the Contractor in writing, giving the reasons therefore.
 - 2. Contractor shall remedy the deficiencies in the Work, and send a second written notice of substantial completion to the Engineer.
 - 3. Engineer will reinvestigate the Work.
- F. When the Engineer finds that the Work is substantially complete, he will:
 - 1. Prepare and deliver to Owner a tentative Certificate of Substantial Completion, with a tentative list of items to be completed or corrected before final payment.
 - 2. After consideration of any objections made by the Owner and when Engineer considers the Work substantially complete, he will execute and deliver to the Owner and the Contractor a definite Certificate of Substantial Completion with a revised tentative list of items to be completed or corrected.

1.4 FINAL SITE REVIEWS

- A. When Contractor considers Work is complete, he shall submit written certification that:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been investigated for compliance with Contract Documents.
 - 3. Work has been completed in accordance with Contract Documents.
 - 4. Equipment and systems have been tested in the presence of the Owner's representative and are operational.
 - 5. Work is completed and ready for Final Investigation.
- B. Engineer will perform a field investigation to verify the status of completion with reasonable promptness after receipt of such certification.
- C. Should Engineer consider that the Work is incomplete or defective:
 - 1. Engineer will promptly notify the Contractor in writing, listing the incomplete or defective work.
 - 2. Contractor shall take immediate steps to remedy the stated deficiencies and send a second written certification to Engineer that the Work is complete.
 - 3. Engineer will reinvestigate the Work.
- D. When the Engineer finds that the Work is acceptable under the Contract Documents, he shall request the Contractor to make closeout submittals.

1.5 CONTRACTOR'S CLOSEOUT SUBMITTALS TO ENGINEER

- A. Project Record Drawings to the requirements specified.
- B. Operating and Maintenance Manuals to the requirements specified.
- C. Contractor's affidavit of payment of debts and claims.
 - 1. Contractor's release or waiver of liens.
- D. Separate releases or waivers of liens for subcontractors, suppliers and others with lien rights against property of Owner, together with list of those parties.

1.6 FINAL ADJUSTMENTS OF ACCOUNTS

- A. Submit a final statement of accounting to Engineer.
- B. Statement shall reflect all adjustments to the Contract Sum:
 - 1. The original Contract Sum.
 - 2. Additions and deductions resulting from:
 - a. Previous Change Orders.
 - b. Allowances.
 - c. Unit Prices.
 - d. Deductions for uncorrected Work.
 - e. Deductions for liquidated damages.
 - f. Deductions for re-inspection payments.
 - g. Other adjustments.
 - 3. Total Contract Sum, as adjusted.

- 4. Previous payments.
- 5. Sum remaining due.
- C. Engineer will prepare a final Change Order reflecting approved adjustments to the Contract Sum which was not previously made by Change Orders.

1.7 FINAL APPLICATION FOR PAYMENT

- A. Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated in the Condition of the Contract.

1.8 FINAL CERTIFICATE FOR PAYMENT

- A. Engineer will issue final certificate in accordance with provisions of the Contract Documents.

1.9 POST-CONSTRUCTION INSPECTION

- A. Prior to expiration of one year from Date of Substantial Completion, Engineer will make visual field investigation of Project in company with Owner and Contractor to determine whether correction of Work is required, in accordance with provisions of the Contract Documents.
- B. For Guarantees beyond one year, Engineer will make field investigations at request of Owner, after notification to Contractor.
- C. Engineer will promptly notify Contractor, in writing, of any observed deficiencies.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

- END OF SECTION

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SECTION

01720

PROJECT RECORD DRAWINGS

PART 1 - GENERAL

1.1 PROJECT RECORD DOCUMENTS

- A. Maintain at the site for the Owner one record copy of:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other Modifications to the Contract.
 - 5. Engineer Field Orders or written instructions.
 - 6. Reviewed Shop Drawings.
 - 7. Field test records.

1.2 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Conditions of the Contracts
- B. Section 01700 – Project closeout

1.3 MAINTENANCE OF DOCUMENTS

- A. Store documents in approved location apart from documents used for construction.
- B. Maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.
- C. Make documents available at all times for inspection by Engineer and Owner. Record drawing information shall be maintained concurrently with Pay Requests and updated project schedules.

1.4 MARKING DEVICES

- A. Provide ink marking pens for recording information in a color code.

1.5 RECORDING

- A. Label each document "PROJECT RECORD" in neat large printed letters.
- B. Record information currently with construction progress.
 - 1. Do not conceal any work until required information is recorded.
- C. Drawings shall be drawn to record actual construction:
 - 1. Field changes of dimension and detail.
 - 2. Changes made by Field Order or by Change Order.
 - 3. Details not on original Contract Drawings.
- D. Specifications and Addenda; Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and supplier of each item actually installed.

2. Changes made by Field Order or by Change Order.

1.6 SUBMITTAL

- A. At Contract Close-out, Record Documents shall be submitted to Engineer in the following formats for Owner:
 1. One set on 24" x 36".

- B. Accompany submittal with transmittal letter in duplicate, containing:
 1. Date.
 2. Project title and number.
 3. Contractor's name and address.
 4. Title and number of each record document.
 5. Signature of Contractor or his authorized representative.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

- END OF SECTION

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SECTION
01730

OPERATION AND MAINTENANCE MANUALS

PART 1 - GENERAL

1.1 RELATED INFORMATION

- A. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under the Contract.
 - 1. Prepare operating and maintenance data as specified in this Section and as referenced in other pertinent sections of Specifications.
- B. Instruct Owner's personnel in the maintenance of products and in the operation of equipment and systems.
- C. Related Requirements Specified in Other Sections.
 - 1. Section 01300 - Submittals
 - 2. Section 01720 - Project Record Drawings
 - 3. Section 11310 – Ductwork and Blowers

1.2 FORM OF SUBMITTALS

- A. Prepare data in the form of an instructional manual and electronic format for use by Owner's personnel.
- B. Hard-Copy Format:
 - 1. Size: 8-1/2 in. x 11 in.
 - 2. Text: Manufacturer's printed data, or neatly typewritten.
 - 3. Drawings:
 - a. Provide reinforced punch binder tab, bind in with text.
 - b. Fold larger drawings to the size of the text pages.
 - 4. Provide fly-leaf for each separate product, or each piece of operating equipment.
 - a. Provide typed description of product, and major component parts of equipment.
 - 5. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List:
 - a. Title of Project.
 - b. Identity of separate structure as applicable.
 - c. Identity of general subject matter covered in the manual.
- C. Binders:
 - 1. Commercial quality expandable catalog binders with durable and cleanable plastic covers.
 - 2. When multiple binders are used, correlate the data into related consistent groupings.
- D. Electronic format shall be in .pdf file format. Copies of specific manuals shall either be scanned or converted to .pdf format and submitted on CD disc to Owner. Submit after approval of hard copies from Engineer.

1.3 CONTENT OF MANUAL

- A. Neatly typewritten table of contents for each volume, arranged in a systematic order.
 - 1. Contractor, name of responsible principal, address and telephone number.
 - 2. A list of each product required to be included, indexed to the content of the volume.
 - 3. List, with each product, the name, address and telephone number of:
 - a. Subcontractor or installer.
 - b. Maintenance contractor, as appropriate.
 - c. Identify the area of responsibility of each.
 - d. Local source of supply for parts and replacement.
 - 4. Identify each product by product name and other identifying symbols as set forth in Contract Documents.
- B. Product Data:
 - 1. Include only those sheets which are pertinent to the specific product.
 - 2. Annotate each sheet to:
 - a. Clearly identify the specific product or part installed.
 - b. Clearly identify the data applicable to the installation.
 - c. Delete references to inapplicable information.
- C. Drawings:
 - 1. Supplement product data with drawings as necessary to clearly illustrate relations of component parts of equipment and systems.
 - 2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
 - 3. Do not use Project Record Documents as maintenance drawings.
- D. Written text, as required to supplement product data for the particular installation:
 - 1. Organize in a consistent format under separate headings for different procedures.
 - 2. Provide a logical sequence of instructions for each procedure.
- E. Copy of each warranty issued.
 - 1. Provide information sheet for Owner's personnel, give:
 - a. Proper procedures in the event of failure.
 - b. Instances which might affect the validity of warranties.

1.4 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Submit six (6) complete copies of manual in final form and two compact discs (CD) in PDF format. CD shall include bookmarks and chapters to closely duplicate that of the paper copy.
- B. Content, for each unit of equipment and system, as appropriate:
 - 1. Description of unit and component parts.
 - a. Function, normal operating characteristics, and limiting conditions.
 - b. Performance curves, engineering data and tests.
 - c. Complete nomenclature and commercial number of all replaceable parts.
 - 2. Operating procedures:

-
- a. Start-up, break-in, routine and normal operating instructions.
 - b. Regulation, control, stopping, shut-down and emergency instructions.
 - c. Summer and winter operating instructions.
 - d. Alignment, adjusting and checking.
 - 3. Servicing and lubrication schedule:
 - a. List of lubricants required for each piece of equipment.
 - b. Schedule for manufacturer recommended maintenance.
 - 4. Manufacturer's printed operating and maintenance instructions.
 - 5. Original manufacturer's parts list, illustrations, assembly drawings and diagrams required for maintenance.
 - 6. Other data as required under pertinent sections of specifications.

1.5 SUBMITTAL SCHEDULE

- A. Submit one copy of completed data in final form fifteen days prior to final inspection or acceptance. Electronic submittal for initial review is acceptable.
 - 1. Copy will be returned after final inspection or acceptance, with comments.
- B. Submit specified number of copies of approved data in final form 10 days after final inspection or acceptance.

1.6 INSTRUCTION OF OWNER'S PERSONNEL

- A. Prior to final inspection or acceptance, fully instruct Owner's designated operating and maintenance personnel in the operation, adjustment and maintenance of all products, equipment and systems.
- B. Operating and maintenance manual shall constitute the basis of instruction.
 - 1. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

- END OF SECTION

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SECTION 02065

DEMOLITION

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The Contractor shall furnish all supervised labor, materials, equipment, and incidentals required for the removal of all items necessary to be removed in order construct the project as indicated on the plans and in accordance with the specifications.
- B. The Contractor is responsible for removal of all debris from the site and proper disposal of debris.

1.2 CONDITION OF STRUCTURES

- A. By submitting a bid, the Contractor affirms that the Contractor has carefully examined the site and all conditions affecting the Work. Conditions existing at the time of inspection for bidding purposes will be maintained by the Owner insofar as practicable.

1.3 RULES AND REGULATIONS

- A. The Building Code of the State of Florida shall control the demolition, modification or alteration of the existing site.
- B. No blasting shall be done on site.

1.4 SUBMITTALS

- A. Contractor shall follow sequence of demolition and construction of proposed equipment as described herein. Contractor is NOT permitted to take more than one (1) blower out of service at any time.
- B. Provide a detailed sequence of demolition and removal work as part of the Contractor's schedule.

1.5 ACCESS

- A. Conduct demolition and modification operations, and the removal of equipment and debris to ensure minimum interference with roads and walks both on-site and off-site and to ensure minimum interference with occupied or used facilities.
- B. Special attention is directed towards maintaining safe and convenient access to the existing facilities by Owner's operations personnel and associated vehicles.
- C. Do not close or obstruct streets, walks or other occupied or used facilities without permission from the Engineer. Provide alternate routes around closed or obstructed traffic in access ways.

1.6 PROTECTION

- A. The Contractor shall conduct construction activities to minimize damage to adjacent buildings, structures, utilities, storm drainage, and other facilities, including persons.

1.7 DAMAGE

- A. The Contractor shall immediately report damage caused to adjacent facilities by demolition operations. The Contractor shall promptly make all required repairs as directed by the Engineer and at no cost to the Owner.

1.8 UTILITIES

- A. It shall be the Contractor's responsibility to maintain existing utilities in service and protect against damage during demolition operations.

1.9 POLLUTION CONTROL

- A. For pollution control, use sprinkling, temporary enclosures, and other suitable methods as necessary to limit the amount of dust and dirt rising and scattering in the air to the lowest level of air pollution practical for the conditions of work. Comply with the governing regulations.
- B. Clean adjacent structures and improvements of all dust, dirt, and debris caused by demolition operations. Return areas to conditions existing prior to the start of work.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.1 REMOVAL OF EXISTING EQUIPMENT, PIPING AND APPURTENANCES

- A. Subject to the constraints of maintaining the existing utilities in operation; existing blower equipment, flex sleeves, ductwork, and appurtenances not necessary for the operation of the newly modified facilities shall remain the property of the Owner unless otherwise directed by the Owner. The Contractor shall remove, clean, and prepare for storage all equipment to remain as directed by the Owner. If the Owner elects not to retain ownership of a certain item, the item shall become the property of the Contractor and shall be removed from the site at the Contractor's expense.
- B. All equipment and materials to be stored for reinstallation or salvage shall be properly protected from damage.
- C. Any items of equipment damaged or lost due to the Contractor's carelessness, mishandling, or faulty procedures and/or workmanship shall be repaired or replaced in kind to the satisfaction of the Engineer.

- END OF SECTION

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SECTION 03100
CONCRETE FORMWORK

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. Formwork for cast-in place concrete, with shoring, bracing, and anchorage.
- B. Openings for other work.
- C. Form accessories.
- D. Form stripping.

1.2 RELATED SECTIONS SPECIFIED ELSEWHERE

- A. Section 03200 - Concrete Reinforcement
- B. Section 03300 - Cast-in-Place Concrete

1.3 REFERENCES

- A. ACI 301 - Structural Concrete for Buildings.
- B. ACI 318 - Building Code Requirements for Reinforced Concrete.
- C. ACI 347 - Recommended Practice for Concrete Formwork.
- D. PS 1 - Construction and Industrial Plywood.
- E. 2017 Florida Building Code

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 318.
- B. Maintain one copy of each document on site.

1.5 REGULATORY REQUIREMENTS

- A. Conform to applicable code for design, fabrication, erection, and removal of formwork.

1.6 COORDINATION

- A. Coordinate this Section with other Sections of work which require attachment of components to formwork.
- B. Coordinate formwork with reinforcement installation to provide sufficient concrete cover over reinforcement.

1.7 DESIGN

- A. All formwork shall be designed by a Florida Registered structural engineer. Special attention shall be given to the additional hydraulic pressures imparted by concrete containing superplasticizer admixture. The contractor is specifically cautioned that not all of the specified superplasticizer admixtures will cure at the same rate.

PART 2 - PRODUCTS**2.1 WOOD FORM MATERIALS**

- A. Form Materials: At the discretion of the Contractor.
- B. All form lumber shall be free from warp, holes, loose knots, dressed to uniform width and thickness. All forming shall conform to ACI 347.
 - 1. Unexposed concrete surfaces: No. 2 common lumber or better lumber
 - 2. Exposed concrete surfaces: commercial standard, moisture resistant, concrete form plywood.

2.2 FORMWORK ACCESSORIES

- A. Wall Form Ties: Removable Snap-off type, 316 stainless steel, fixed length, cone type, with waterproofing rubber washer, 1-1/2 inch back break dimension, free of defects that could leave holes larger than 1-inch in concrete surface.
- B. Form Release Agent: Colorless mineral oil which will not stain concrete, or absorb moisture, or impair natural bonding or color characteristics of coating intended for use on concrete. Diesel oil or motor oil will not be permitted.
- C. Corners Chamfer, wood strip type; 3/4 x 3/4 inch size; maximum possible lengths.
- D. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.

PART 3 - EXECUTION**3.1 EXAMINATION**

- A. Verify lines, levels, and centers before proceeding with formwork. Ensure that dimensions agree with drawings.

3.2 EARTH FORMS

- A. Earth forms are not permitted.

3.3 ERECTION - FORMWORK

- A. Erect formwork, shoring, and bracing to achieve design requirements, in accordance with requirements of ACI 318.
- B. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to overstressing by construction loads.
- C. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.
- D. Align joints and make watertight. Keep form joints to a minimum.
- E. Obtain approval before framing openings in structural members which are not indicated on Drawings.
- F. Provide chamfer strips on external corners of all exposed concrete elements.
- G. Induce camber on existing roof slab structure prior to casting concrete.

3.4 APPLICATION - FORM RELEASE AGENT

- A. Apply form release agent on formwork in accordance with manufacturer's recommendations.
- B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.
- C. Do not apply form release agent where concrete surfaces will receive special finishes applied coverings which are affected by agent. Soak inside surfaces of untreated forms with clean water.
- D. Keep surfaces coated prior to placement of concrete.

3.5 INSERTS, EMBEDDED PARTS, AND OPENINGS

- A. Provide formed openings where required for items to be embedded in passing through concrete work.
- B. Locate and set in place items which will be cast directly into concrete.
- C. Coordinate with work of other sections in forming and placing openings, slots, regrets, recesses, sleeves, bolts, anchors, other inserts, and components of other Work.
- D. Install accessories in accordance with manufacturer's instructions, straight, level, and plumb. Ensure items are not disturbed during concrete placement.
- E. Install waterstops continuous without displacing reinforcement. Heat seal joints watertight. Conform to manufacturers recommendations.
- F. Provide temporary ports or openings in formwork where required to facilitate cleaning and inspection. Locate openings at bottom of forms to allow flushing water to drain.
- G. Close temporary openings with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces.

3.6 CONSTRUCTION JOINTS

- A. Construct and locate as indicated on the drawings and so as not to impair the strength of the structure and only at locations approved by the Engineer. Form keys in cold joints shown on the drawings.

3.7 FORM CLEANING

- A. Clean forms as erection proceeds, to remove foreign matter within forms.
- B. Clean formed cavities of debris prior to placing concrete.
- C. Use compressed air to remove remaining foreign matter.

3.8 FORMWORK TOLERANCES

- A. Construct formwork to maintain tolerances required by ACI 318.
- B. Camber slabs and beams 1/4 inch per 10 feet in accordance with ACI 318.

3.9 FIELD QUALITY CONTROL

- A. Inspect erected formwork, shoring, and bracing to ensure that work is in

accordance with formwork design, and that supports, fastenings, wedges, ties, and items are secure.

- B. Do not reuse wood formwork more than three times for concrete surfaces to be exposed to view.

3.10 FORM REMOVAL

- A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads. Determination of form removal timing is the Contractor's responsibility and shall be in accordance with ACI 347, except that the Engineer reserves the right to delay form removal for a period not to exceed 14 days after the pour.
- B. Do not remove forms, shores and bracing until concrete has gained sufficient strength to carry its own weight, and construction and design loads which are liable to be imposed upon it. Verify strength of concrete by compressive test results.
- C. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- D. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.
- E. Remove formwork progressively and in accordance with code requirements and so that no shock loads or unbalanced loads are imposed on the structure.
- F. Re-shore structural members where required due to design requirements of construction conditions and as required to permit progressive construction.

- END OF SECTION

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SECTION 03200
CONCRETE REINFORCEMENT

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. Reinforcing steel bars, wire fabric, and accessories for cast-in-place and precast concrete.

1.2 RELATED SECTIONS SPECIFIED ELSEWHERE

- A. Section 01300 - Submittals
- B. Section 03100 - Concrete Formwork
- C. Section 03300 - Cast-in-Place Concrete

1.3 REFERENCES

- A. ACI 301 - Structural Concrete for Buildings.
- B. ACI 318 – Building Code Requirements for Reinforced Concrete
- C. ACI SP-66 - American Concrete Institute -Detailing Manual.
- D. ANSI/ASTM A82 - Cold Drawn Steel Wire for Concrete Reinforcement.
- E. ANSI/ASTM A185 - Welded Steel Wire Fabric for Concrete Reinforcement.
- F. ANSI/AWS D1.4 - Structural Welding Code for Reinforcing Steel.
- G. ASTM A615 - Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
- H. ASTM A704 - Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement.
- I. AWS D12.1 - Welding Reinforcement Steel, Metal Inserts, and Connections in Reinforced Concrete Construction.
- J. CRSI -Concrete Reinforcing Steel Institute -Manual of Practice.
- K. CRSI 63 -Recommended Practice For Placing Reinforcing Bars.
- L. CRSI 65 - Recommended Practice For Placing Bar Supports, Specifications, and Nomenclature.
- M. 2017 Florida Building Code

1.4 SUBMITTALS

- A. Submit shop drawings under provisions of Section 01300.
- B. Shop Drawings: Indicate bar sizes, spacings, locations, and quantities of reinforcing steel and wire fabric, bending and cutting schedules, and supporting and spacing devices.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 318.
- B. Maintain one copy of document on site.

1.6 QUALIFICATIONS

- A. Welders' Certificates: Submit under provisions of Section 01300 Manufacturer's Certificates, certifying welders employed on the Work, verifying AWS qualification within the previous 12 months.

1.7 COORDINATION

- A. Coordinate with placement of formwork, formed openings, and other Work.

1.8 STORAGE

- A. Reinforcing steel shall be clean, new stock, properly marked and tagged for identification prior to placing. Store reinforcing to avoid excessive rusting or coating with grease, oil, dirt, or other objectionable materials.

PART 2 - PRODUCTS**2.1 REINFORCEMENT**

- A. Reinforcing Steel: ASTM A615, 60-ksi yield grade; deformed billet steel bars, unfinished.
- B. Welded Steel Wire Fabric: ASTM A185 Plain Type; in flat sheets unfinished.
- C. Ties: Shall be No. 16 gauge minimum, fully annealed, black steel wire.
- D. Hooks and Bends in Reinforcement shall conform to ACI 315 unless otherwise noted on the drawings.

2.2 ACCESSORY MATERIALS

- A. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions including load bearing pad on bottom to prevent vapor barrier puncture.
- B. Special Chairs, Bolsters, Bar Supports, Spacers Adjacent to Weather-exposed Concrete Surfaces: Plastic coated steel or stainless steel type; size and shape as required.

2.3 FABRICATION

- A. Fabricate concrete reinforcing in accordance with ACI 318.
- B. Locate reinforcing splices not indicated on drawings, at point of minimum stress. Review location of splices with Engineer.

PART 3 - EXECUTION**3.1 PLACEMENT**

- A. Fabrication, detailing and placement of reinforcing steel shall conform to CRSI Manual of Standard Practice, ACI 315 and ACI 318. Reinforcement shall be carefully placed, rigidly supported and well tied with bar supports and spacers.
- B. Reinforcement shall be accurately placed and securely tied at intersections with 16 gauge black annealed wire. It shall be maintained in proper position by chairs, bar

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- supports, or other devices approved by the Engineer.
- C. All splices and laps shall be as shown on the drawings, or 36 bar diameters, whichever is greater.
 - D. Concrete protection of reinforcing shall be not less than the following or as shown on the drawings if greater:
 - 1. Concrete cast against and permanently exposed to earth or exposed to corrosive environment -- 3 inches.
 - 2. Concrete cast against forms, but exposed to earth or weather:
 - a. No. 6 through No. 11 bars -- 2 inches
 - b. No. 5 bars, or equivalent, and smaller -- 1-1/2 inches.
 - 3. Concrete cast against forms, but not exposed to earth or weather (interior construction):
 - a. Slabs, walls and joists:
 - 1) No. 14 and No. 18 bars -- 1-1/2 inches
 - 2) No. 11 bars and smaller for liquid retaining structures -- 2 inches
 - 3) No. 11 bars and smaller elsewhere -- 3/4 inch
 - b. Beams and Columns, including primary reinforcement, ties, stirrups, and spirals -- 1-1/2 inches.
 - E. The clear distance between parallel bars in a layer shall be the nominal diameter of the bar, but not less than one inch. Wherever conduits, piping, inserts or sleeves interfere with the placing of reinforcing steel as shown, the Contractor shall consult with the Engineer before pouring concrete. The bending or field cutting of bars around openings or sleeves will not be permitted.
 - F. Clean bars of loose scale, heavy deposits or rust and oil, wax or other coatings that may reduce or destroy bonding, before placing. Check and clean again if necessary before concrete is poured.
 - G. Concrete beam sizes may be increased as required for architectural details or to fit block coursing, subject to Engineer approval.
 - H. Reinforcing steel in footings shall be assembled as mats with bars equally spaced and wired together at each intersection before concrete is placed.
 - I. Center all footings on wall, pier or column above unless otherwise indicated.
 - J. Dowel column and wall reinforcing to footing or pile cap with same size and number of dowels as vertical bars above.
 - K. Dowels shall be hooked "L" at bottom and shall be lapped 36 bar diameter with the column or wall reinforcing above.
 - L. Concrete columns shall be tied columns unless otherwise indicated.
 - M. Provide one layer 6 x 6 - W2.9 x W2.9 WWF in slabs on grade including walkways and sidewalks unless otherwise indicated.

3.2 COORDINATION

- A. Coordinate work with other trades in order to eliminate interference before concrete is poured.

3.3 CLEANUP

- A. In accordance with General Conditions.

- END OF SECTION

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SECTION 03300

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 NOTICE

- A. Engineer shall be given a minimum of 48 hours advance notice to all concrete placements and no concrete shall be placed without approval of Engineer.

1.2 WORK INCLUDED

- A. Cast-in-place concrete foundations, walls, slab-on-grade, equipment pads, underground concrete vaults and structures, pipe supports, curbs, and sidewalks. All cast-in-place concrete for this project shall be ready mix per this specification. Pre-mixed, bagged mixes shall not be utilized for any purpose on the project unless specifically approved by the engineer.

1.3 RELATED SECTIONS SPECIFIED ELSEWHERE

- A. Section 01300 – Submittals
- B. Section 01410 – Testing Laboratory Services
- C. Section 03100 - Concrete Formwork
- D. Section 03200 - Concrete Reinforcement

1.4 REFERENCES

- A. ACI 301 - Specifications for Structural Concrete for Buildings.
- B. ACI 318 - Building Code Requirements for Reinforced Concrete
- C. ASTM C33 - Concrete Aggregates.
- D. FDOT Standard Specifications for Road and Bridge Construction
- E. ASTM C94 - Ready-mixed Concrete.
- F. ASTM C150 - Portland cement.
- G. ASTM C260 - Air Entraining Admixtures for Concrete.
- H. ASTM C494 – Chemical Admixtures for Concrete
- I. ASTM C618 – Pozzolonic Materials.

1.5 QUALITY ASSURANCE

- A. Perform Work: in accordance with ACI 301 and FDOT Standard Specifications.
- B. Obtain materials for same source throughout the Work.
- C. Submit manufacturer's certification that materials meet specification requirements.
- D. Submit ready-mix delivery tickets, ASTM C94-78.

1.6 TESTS

- A. Testing and analysis of concrete will be performed under provisions of this Section and Section 01410.

- B. Submit proposed mix design of each class of concrete to Engineer for review prior to commencement of work in accordance with Submittal Section. Submittal shall include proposed location for each class of concrete.
- C. Independent Testing laboratory shall take cylinders and perform slump and air entrainment tests in accordance with ACI 301.
- D. Provide 5 cylinders per set. Test one at 3 days, one at 7 days, two at 28 days, and hold one.
- E. Slump tests shall be taken for every truck delivery and each set of test cylinders taken.
- F. In general, cylinders shall be taken for each concrete pour event, and every 50 cubic yards placed.
- G. All tests failing minimum specified criteria shall be billed to and paid for by the Contractor.

1.7 SUBMITTALS

- A. Submit product data under provisions of Section 01300 for Fine and Coarse aggregates, admixtures, concrete mix design, joint devices, attachment accessories, and curing compounds.
- B. Field test reports: Submit field test reports for all cylinder tests.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

- A. Cement: ASTM C150 -Type II Cement.
- B. Fine and Coarse Aggregates: ASTM C33.
 - 1. Conform to ASTM C33: Local aggregates not complying with this standard may be used provided it can be shown by special test or a record of past performance these aggregates produce concrete of adequate strength and durability.
 - 2. Fine Aggregate: Clean, washed natural sand of hard, sound, uncoated grains. Manufactured clean, washed, hard sand may be used for structures other than water retention structures.
 - 3. Course Aggregates: Clean, washed, sound and crushed.
 - 4. Aggregate Size Requirements: Use largest practicable aggregate size for each condition of placement subject to limitations stipulated in paragraph 3.3, ACI Code 318.
- C. Water: Clean potable water.

2.2 ADMIXTURES

- A. Air Entrainment: All concrete shall entrain from two to four percent air, whether batched with or without other admixtures. Conform to ASTM C260. Use Darex II AEA or equal.
- B. Water-reducing admixture may be used and must meet ASTM C-494 as a Type A and Type D. Use WRDA 64 or equal. Add in accordance with ACI-350.
- C. Use of calcium chloride is not permitted.

- D. Air entraining agent to normal weight concrete mix if used, shall not exceed 4%.
- E. Superplasticizer: A superplasticizer admixture may be used on all structures if approved by the Engineer. Superplasticizer shall be used on all water retention structures. The superplasticizer shall satisfy the following requirements.
 - 1. Conform to ASTM C494, Type F or Type G.
 - 2. Superplasticizer admixture shall be added to the mix at the batch plant unless otherwise approved by the Engineer.
 - 3. Provide documentation showing, at a 6-inch slump plus or minus 1-inch, the relative durability factors of air entrained concrete as determined in accordance with ASTM C-666, Procedure A, as compared to the same air entrained concrete mix at a 2-inch slump or minus 1-inch without superplasticizer admixture.
 - 4. A qualified concrete technician employed by the manufacturer shall be available to assist in proportioning concrete materials for optimum use, to advise on proper use of the superplasticizer admixture and adjustment of concrete mix proportions to meet job site and climatic conditions.
 - 5. Approved Products:
 - a. Sikament 300, Sika Chemical Corp. or Engineered approved equal.
 - b. Pozzolith 440 N, Master Builders Company, or Engineer approved equal.

2.3 CURING MATERIALS

- A. Chemical Curing: Curing compounds shall be liquid, membrane forming and shall conform to ASTM C309, as approved by the Engineer. The liquid compound shall not reduce the adhesion of tile, paint, roofing, waterproofing or other material to be applied to the concrete. No liquid compound shall be allowed to cure a first pour of concrete that will receive a second pour. The use of a curing compound in lieu of water spray curing is subject to the Engineer's approval and will, generally, not be approved as an alternate to impervious membrane and spray mist curing.
- B. Impervious Membrane Sheeting: Kraft paper or 4 mil polyethylene sheeting, in accordance with ASTM C171 may be used with approval of the Engineer.

2.4 CONCRETE MIX

- A. Mix concrete in accordance with ASTM C94.
- B. Provide concrete to satisfy the following requirements:
 - 1. Compressive Strength (28 days): 3000 psi for sidewalks and curbs, 4000 psi all other locations.
 - 2. Water/Cement ratio: maximum 0.45 without admixtures by weight.
 - 3. Fly Ash Content: maximum 15% of cement content, Type F only.
 - 4. Slump 4 ± 1 inch regular, 6 ± 1 inch with superplasticizer, 6-8 inch pea rock pump mix.
- C. Use set-retarding admixtures during hot weather only when approved by Engineer.
- D. Air entrainment: Total air content required (air-entrained and entrapped air) shall be as follows, and as measured in accordance with ASTM C231:

Nominal Maximum Size of Coarse aggregate, in.	Total Air Content Percentage by volume
3/8	6 to 10
2	5 to 9
3/4	4 to 8
1	3.5 to 6.5
1-1/2	3 to 6
2	2.5 to 5.5
3	1.5 to 4.5

- E. Superplasticizer shall be used in all reinforced concrete walls that are water holding structures; i.e., clearwell, containment walls, etc.

2.5 ACCESSORIES

- A. Vapor Barrier: 10 mil thick clear polyethylene film, type recommended for below-grade application.
- B. Non-Shrink Grout: Premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; capable of developing minimum compressive strength of 2,400 psi in 48 hours and 7,000 psi in 28 days.
- C. Water Stop (PVC): 4" x 3/16" water stop, Dumbell polyvinylchloride Greenstreak - Style 741 or approved equivalent.
- D. Water Stop (Other): Bentonite type strips Rx101, or applicable to condition, as manufactured by Volclay, or equal.
- E. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions including load bearing pad on bottom to prevent vapor barrier puncture.
- F. Special Chairs, Bolsters, Bar Supports, Spacers Adjacent to Weather Exposed Concrete Surfaces: Plastic coated steel or Stainless steel type; size and shape as required. Do not use concrete or clay bricks to support reinforcing.
- G. Backing rod and sealant as indicated on drawings for construction joints.
- H. Sealing Materials: Material for sealing and filling joints and for sealing pre-molded filler strip, shall conform to ASTM D1190 for "Concrete Joint Sealer; Hot-Poured Elastic Type."
- I. Curbs: Construct roadway and sidewalk curbs as shown on the drawings and in accordance with local codes and regulations. Construct all other curbs that support equipment or structural wall systems as indicated on the drawings.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Verify reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not cause hardship in placing concrete.
- B. Verify site dewatering conditions. All foundations shall be cast in the dry.
- C. Verify requirements for concrete cover over reinforcement.
- D. Clean forms of trash, wood, excess steel, and deleterious materials.

3.2 PREPARATION

- A. Install vapor barrier under all slabs, footings, and other concrete exposed to earth. Lap joints a minimum of 6 inches. Do not disturb or damage vapor barrier while placing concrete. Repair damaged vapor barrier.
- B. In locations where new concrete is dowelled to existing work, drill holes in existing concrete, clean holes, insert steel dowels and epoxy in accordance with manufacturer's installation instructions keeping the minimum embedment depth specified on drawings.
- C. Coordinate the placement of joint devices with erection of concrete formwork and placement of form accessories.

3.3 PLACING CONCRETE

- A. Notify Engineer and Owner's Representative minimum 48 hours prior to commencement of concreting operations.
- B. Place concrete in accordance with ACI 301 and FDOT Standard Specifications.
- C. Hot Weather Placement ACI 301.
- D. Cold Weather Placement ACI 301.
- E. Ensure reinforcement, inserts, embedded parts, formed joints are not disturbed during concrete placement.
- F. Use Ready-Mixed Concrete: Conform to ASTM C94. Plant and truck mixers subject to examination by Engineer.
- G. Water and Mixing: Mix concrete at least 10 minutes, 5 minutes of which is at the job, after the last addition of water. Retempering in truck is prohibited. Any concrete in truck longer than 1- 1/2 hours after the water has been added at the plant, or any that has become harsh or non- plastic, shall be rejected based solely upon the Engineer's discretion.
- H. Load Tickets: Shall include all information required by ASTM C94 and be legible, showing quantities of all constituents in the batch, and bearing signature of plant inspector or bonded weighmaster. Maintain all tickets on file for inspection by the Engineer. All tickets shall show the mix number. Tickets not showing the mix number shall cause the load to be immediately rejected.
- I. Slumps: At point of delivery to forms the concrete slump requirements shall conform

to this section of the specifications.

- J. Place concrete continuously between predetermined construction and control joints. Do not break or interrupt successive pours such that cold joints occur.
- K. Contractor shall be responsible for means and methods to ensure concrete is poured in a dry area.
- L. All concrete shall be placed with the aid of mechanical vibrating equipment supplemented by hand forking or spading. Contractor needs to use mechanical vibrating equipment for consolidating concrete and should have a minimum of (2) two operable vibrators on the job. Vibration shall be transmitted directly to the concrete and not through the forms.
- M. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- N. Saw cut curb joints within 24 hours after placing. Use 3/16 inch thick blade, cut 1/4 of slab thickness.
- O. Screed floors level, maintaining surface flatness of maximum 1/4 inch in 10 ft.

3.4 FINISHING

- A. Provide formed concrete walls, columns, beams, Class 5 finish above the water line.
- B. Finish building slabs and miscellaneous horizontal concrete surfaces in accordance with ACI 301, steel trowel finish.
- C. Sidewalks shall have a light broom finish.

3.5 CURING AND PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury. Concrete shall be kept moist for fourteen days after pouring. Vertical forms may be left in place and horizontal surfaces continuously moistened with water via spray misting. If forms are removed, impervious membrane sheeting or chemical curing may be used if approved by the Engineer. The Engineer shall have the right to determine when the forms may be removed and whether a curing compound can be used in lieu of spray misting.
- B. Water cure concrete surfaces in accordance with ACI 301 for 7 days or apply curing compound.
- C. Contractor shall use curing compounds for vertical surfaces.

3.6 PATCHING

- A. Notify Engineer immediately upon removal of forms. No surfaces are to be patched or backfilled prior to being reviewed by the Engineer.
- B. Patch imperfections as requested by the Engineer or his field representative in accordance with ACI 301 and FDOT Standard Specifications.
- C. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Engineer upon discovery.

3.7 DEFECTIVE CONCRETE

- A. Modify or replace concrete not conforming to required levels, lines, details, elevations, dimensions, tolerances, or specified requirements.
- B. Repair or replace concrete not properly placed will be determined by the Engineer or Owner's Representative.
- C. Unless the removal of a defective slab is required by the Engineer, defective surfaces, such as honeycomb, shall be cut out entirely until homogeneous concrete is met, even if it means going through the slab.
- D. Such areas shall be coated with an approved epoxy bonding material, which shall be applied in accordance with the manufacturer's instruction, before damp packing the area with a mix consisting of one part of Portland cement and two parts of sand and fine gravel, epoxy and sand mix, or any combination of materials and mixes as the situation dictates in the opinion of the Engineer.
- E. The water content of the damp-pack material shall be such that a ball of the mix may be squeezed in the hand without bringing free water to the surface.
- F. Damp-pack material shall be tamped into place and finished to match adjacent concrete surfaces.
- G. Particular care shall be taken that no sagging of the material will occur.
- H. The bond between any two layers of damp-pack shall be improved through the use of an approved epoxy bond agent.
- I. Surfaces which have been damp-packed shall be kept continuously damp during and for a period of not less than seven days after completing the damp-pack operation, by polyethylene coverings thoroughly taped to the original concrete surface in a manner that loss of moisture, evidence by lack of water droplets on the inside surface of the polyethylene, is avoided. If this moisture condition cannot be maintained, a continuous water cure may be required by the Engineer.
- J. Under no circumstances shall Contractor apply a plaster coat over the honeycomb areas to conceal the existence of the honeycomb in the concrete.
- K. Neither Embecco nor calcium chloride shall be used for filling honeycomb areas, nor shall they be mixed with damp-pack material.
- L. Any concrete with excess air entraining agent will be rejected.

3.8 FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed under provisions of Section 01410.
- B. Contractor will be required to contact Testing Lab to be present for concrete deliveries.
- C. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

- END OF SECTION

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SECTION 11310

DUCTWORK AND BLOWERS

PART 1 - GENERAL

1.1 SCOPE

- A. This specification section includes demolition, furnishing, modifying and installing ductwork and blowers for the South Oslo Road water plant permeate degasifiers and scrubbers.

1.2 QUALITY ASSURANCE

- A. Equipment and materials of similar type shall be the product of the same manufacturer and match existing components.
- B. Inspection and Testing Requirements: The Engineer reserves the right to reject acceptance of delivery of any or all pieces of ductwork found, upon inspection, to have any or all of the following: blisters, chips, crazing, exposed glass, cracks, burned areas, dry spots, foreign matter, surface porosity, shop discontinuity or entrapped air at the surface of the laminate.
- C. Prior to any exterior gel coating performed after fabrication, notification must be given to the Engineer. The Engineer reserves the right to be present at the fabricators facility for visual inspection of equipment to be supplied.
- D. The manufacturer and/or local representative shall have more than ten (10) years of experience with dual laminate construction and have at least fifteen (15) similar installations on water treatment plants of which five (5) installations are in the State of Florida which were installed more than five (5) years ago.

1.3 REFERENCES

- A. NBS PS 15-69: Custom-Contact-Molded Reinforced Polyester Chemical Resistant Process Equipment.
- B. ASTM-D4167: Standard Specification for Fiber Reinforced Plastic Fans and Blowers
- C. ASTM-C582: Standard Specification for Contact-Molded Reinforced Thermosetting Plastic (RTP) Laminates for Corrosion-Resistant Equipment

1.4 SUBMITTAL

- A. The Contractor shall submit shop drawings of the FRP ducting and blowers. Shop drawings shall be submitted detailing field verified (by Contractor) dimensions of existing conditions as shown on the drawings, including duct transitions, piping, and fittings required for a complete system.
- B. Field verify ALL dimensions prior to submitting shop drawings.
- C. Provide manufacturers data on all supplied and installed equipment as indicated above.
- D. Provide Operations and Maintenance information. Manuals shall include start-up,

normal operation, normal shutdown, emergency shutdown and safety sections as well as process description and operation.

PART 2 - PRODUCTS

2.1 DUCTWORK CONSTRUCTION

- A. Furnish and install FRP transition for blower inlet and outlet connection to existing FRP ductwork.
- B. Filament-wound ductwork with minimum design working pressure as specified herein shall conform to ASTM D 2310, Type 1, Grade 2, Class E.
- C. Fabricator shall be responsible for the basic design of FRP duct, based on these Specifications and the Drawings.
- D. Mechanical properties of contact molded reinforced laminate shall meet or exceed all requirements of PS 15-69 and ASTM C 582.
- E. Squares of ends, fittings, elbows, and butt joints shall meet or exceed requirements of PS 15- 69.
- F. Duct and fittings shall be shop spooled as much as possible. Use of flanges shall be kept to a minimum, with field welded bell and spigot joints where required for installation. Use butt joints for shop and field welded joints is also acceptable.
- G. Butt joints in duct over 20 inches in diameter shall have an internal overlay.
- H. Flanges and fittings shall have a thickness based on PS 15-69, rated for specified pressure and vacuum.
- I. For flanged fittings, bolt circle number and diameter shall be per Product Standard PS 15-69 for air service. Coordinate flange provisions with interconnecting equipment and fittings.
- J. Fabricator shall provide all information details and requirements for installation and support of duct and torque values for flange bolting.
- K. Contractor shall provide all FRP duct supports as recommended by Fabricator.
- L. Back face of all flanges shall be spot-faced, flat and parallel to the flange face, and be of sufficient diameter to accept an SEA metal washer under the bolt head or nut.
- M. Design Conditions:
 - 1. Ductwork fabricated to these Specifications, in general, shall operate at ambient temperatures.
 - 2. Sulfide stripper ductwork will be subjected to, and shall be designed to withstand the following conditions:
 - a. Design Temperature: 40 to 100 degrees F.
 - b. Design Vacuum Rating: 9-inch water gauge
 - c. Location: Outdoors.
 - d. Chemical Composition of the Process Vapors: 0 to 250 PPM H₂S.
- N. Laminate shall consist of an inner surface (corrosion barrier) on an interior layer, and a

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- structural layer.
- O. Laminate Quality: Meet the requirements of the visual acceptance criteria in ASTM D2563, Level III for the interior and Level III for the exterior.
 - P. Reinforce inner surface with a resin-rich surfacing veil of 20 mils thick.
 - Q. Construct interior layer with resin reinforced with at least two plies of chopped strand mat. Thickness of interior layers shall be at least 100 mils.
 - R. Glass content of combined inner surface and interior layer shall be 27 percent plus or minus 5 percent.
 - S. The structural layer may be either filament wound or contact molded as follows:
 - 1. Filament winding shall be with continuous strand roving to provide a glass content of 50 to 80 percent.
 - 2. Contact molding shall consist of alternate layers of chopped strand mat and woven roving, providing a glass content of 25 to 40 percent.
 - T. The structural layer shall be filament wound with an exterior resin-rich gel coat layer.
 - U. Exterior Gel Coat Color: Provide pigmented gel coat color on all exterior ductwork. Coordinate gel coat color with work in previous paragraphs.
 - V. Resin System: Premium grade and corrosion resistant vinyl ester such as Dow Darken 411, or equivalent.
 - 1. Exterior Exposed Ducting: Add ultraviolet absorbers to exterior gel coat layer to improve weather resistance. Absorber shall be American Cyanamid Company, CYASBORB UV-9, or approved equal.
 - 2. Interior Ducting: Construct with fire-rated resin.
 - 3. Color: No dyes, pigments, or colorants shall be used except in the exterior gel coat.
 - 4. The resin shall not contain fillers or thixotropic agents unless specified. Use manufacturer's currently recommended cure system unless otherwise agreed upon by the fabricator and Engineer.
 - W. Reinforcement:
 - 1. Inner Surface: Chemical surfacing mat, Type C (chemical) glass, 20 mils thick, with finish and binder compatible and layup resin.
 - 2. Corrosion Barrier: Resin-rich interior surface of nominal 100 to 120 mils thick, using chopped strand mat backing the veil. Use no additive in the corrosion barrier.
 - 3. Chopped Strand Mat: Type E glass, minimum 1-1/2 ounces per square foot, with silane finish and styrene soluble binder.
 - 4. Continuous roving used in chopper gun for spray-up shall be Type E glass.
 - 5. Woven Roving: Type E glass, nominal 24 ounces per square yard, 4 by 5 weave, with silane type finish.
 - 6. Continuous roving used for filament winding shall be Type E glass with a silane type finish.
 - X. Duct fittings shall conform to National Bureau of Standards PS 15-69, except as specified herein. Bends shall be long-radius (1-1/2 times pipe diameter), formed over a removable mold. Mitered bends will be allowed for pipes greater than 24 inches in

diameter. Filament wound fittings shall be of the same thickness specified for adjoining pipe or duct. Hand lay-up fittings shall be of the minimum pipe or duct wall thickness specified in PS 15-69 for the applicable pressure class.

- Y. Duct flanges shall be fiberglass reinforced plastic of thickness specified in Commercial Standard PS 15-69 faced and drilled to match 125-pound, ANSI B16.1 standard.
- Z. Gaskets shall be full-faced, 1/8 inch thick, fabricated from EPDM. When mating flange has raised face, use flat ring gasket and provide filler gasket between OD of raised face and flange OD to protect FRP flange from bolting moment.
- AA. All duct flange hardware shall be 316 stainless steel.

2.2 BLOWERS

- A. Three (3) replacement blowers and motors shall be provided at locations shown on the drawings.
- B. The blowers shall be 30 HP minimum squirrel cage induction capable of moving 13,000 cfm at 10 inches w.c.
- C. The fan wheel shall be the backwardly inclined design of all fiberglass reinforced premium vinyl ester with antimony construction. The shaft shall be stainless steel and be encapsulated through the fan shaft seal. The fan wheel shall be fabricated of alternated layers of fiberglass cloth and fiberglass resin or PVC, and the shaft Type 316 stainless steel.
- D. The fan shall be furnished with a flanged outlet, plain-end inlet for flexible sleeve, and a pipe coupling type drain. Flange shall be shipped undrilled.
- E. Access door will be gasketed and bolted to the fan housing with Type 316 stainless steel hardware.
- F. Bearings shall be grease lubricated ball or roller bearings in housing that allow easy bearing replacement.
- G. Shaft seal shall be neoprene gasketed FRP plate attached to the fan housing with Type 316 stainless steel hardware.
- H. Blower frames shall be fabricated of Type 316 stainless steel. Hot-dipped galvanized frames or any construction of this material is not permitted as part of the blower system.
- I. Provide easy access belt guards on all fans.
- J. Contractor shall provide new conductors and flexible conduit from the existing motor disconnects to the proposed blower drives. Electrical installation shall comply with all applicable NEC codes and local requirements.
- K. Blowers shall be CLUB-3000 Model FRP Fan as manufactured by Verantis Corporation or approved equal. Contractor is fully responsible for all dimensional variations associated with an approved equivalent blower.
- L. Exterior finish shall be UV-protected.
- M. Rotation shall be clockwise with up-blast discharge.

PART 3 - EXECUTION

3.1 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. All parts shall be properly protected so that no damage or deterioration will occur during a prolonged delay from the time of shipment until installation is completed, and the units and equipment are ready for operation.
- B. The equipment shall be delivered on-site as fully assembled as transportation will allow.
- C. Finished surfaces of all exposed openings shall be protected.

3.2 INSTALLATION

- A. The ductwork shall be installed in accordance with the manufacturer's technical data and printed instructions, and in the locations shown on the drawings and in accordance with the final shop drawings.
- B. The installation of the additional ductwork shall be done with minimal interruption to the existing operating water plant and degasification system.
- C. All service interruptions of the existing water plant and degasification system shall be approved and scheduled by the Engineer and Owner 24-hours before the requested interruption of service.
- D. All field joints, if used, to be butt wrapped and welded must meet NBS PS-69 requirements for wall strength. Gel-coating of duct interior shall be performed in order to prevent exposure of FRP matting.

3.3 SURFACE PREPARATION AND SHOP PAINTING

- A. The FRP ductwork shall be coated with a polyester gel coat on all exterior surfaces at the factory. Other equipment to be supplied under this Section requiring surface preparation and shop priming shall be performed as part of the work of this Section. Color to match existing ductwork.
- B. Provide field touch up of all material affected by work, matching existing material and color, i.e., gel-coat, paint, fiberglass, etc. to all impacted areas.

3.4 START-UP SERVICE

- A. The equipment manufacturer shall furnish the services of a qualified factory trained field service engineer for 8-hour working day(s) at the site to inspect the installation, perform start-up and instruct the owner's personnel on the operation and maintenance of the blower units.
- B. The Contractor shall coordinate the startup dates with the qualified factory trained field service engineer. Startup of each blower will occur on separate dates to comply with the sequence of construction. Refer to the summary of work and plans for proposed demolition and construction sequence.

3.5 SPARE PARTS AND EQUIPMENT

- A. The blowers' supplier shall supply the following test equipment and spare parts for the treatment system.
 - 1. Blower belts (6 sets, matched).
 - 2. Three (3) fan bearing sets
 - 3. One (1) spare motor.

- END OF SECTION

=

BID FORM

Project Name: Oslo Water Treatment Plant Blower Replacement

Bid #: 2020009
 Bid Opening Date and Time: October 23, 2019 2:00 P.M.
 Bid Opening Location: Purchasing Division
 1800 27th Street
 Vero Beach, FL 32960

The following addenda are hereby acknowledged:

Addendum Number	Date
_____	_____
_____	_____
_____	_____
_____	_____

In accordance with all terms, conditions, specifications, and requirements, the Bidder offers the following:

Item No.	Bid Item Description	Estimated Quantity	Unit of Measure	Bid Item Total
1	INSTALLATION OF NEW DEGASIFIER BLOWERS WITH FRP COMPOSITE BLADES AND DUCTWORK MODIFICATIONS NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM. FURNISH ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT ALL IMPROVEMENT ELEMENTS AT THE SOUTH OSLO WATER PLANT DESCRIBED IN THE PLANS AND THESE SPECIFICATIONS.	1	LS	\$
2	FORCE ACCOUNT	1	LS	\$ 10,000.00
		TOTAL BID AMOUNT		\$
Total Price in Words:				

All materials and installation shall be per Indian River County Department of Utility Services (IRCDUS) Standards and Specifications, latest revision, unless otherwise noted in the bid documents. The unit price(s) bid will include any and all labor & materials, listed or not listed, necessary to furnish the County a complete & working system as indicated on the construction plans & bid documents.

Project completion time after receipt of "Notice to Proceed" or PO: 240 DAYS

The undersigned hereby certifies that they have read and understand the contents of this solicitation and agree to furnish at the prices shown any or all of the items above, subject to all instructions, conditions, specifications, and attachments hereto. Failure to have read all the provisions of this solicitation shall not be cause to alter any resulting contract or request additional compensation.

Company Name: _____

Company Address: _____

City, State _____ Zip Code _____

Telephone: _____ Fax: _____

E-mail: _____

Business Tax Receipt Number: _____ FEIN Number: _____

Authorized Signature: _____ **Date:** _____

Name: _____ Title: _____
(Type / Printed)

Sworn Statement Under the Florida Trench Safety Act

THIS FORM MUST BE SIGNED BY THE BIDDER WHO WILL BE RESPONSIBLE FOR THE EXCAVATION WORK ("BIDDER"), OR ITS AUTHORIZED REPRESENTATIVE, IN THE PRESENCE OF A NOTARY PUBLIC AUTHORIZED TO ADMINISTER OATHS AND SUBMITTED WITH EACH BID.

1. This Sworn Statement is submitted with Project No. 2020009
for Oslo Water Treatment Plant Blower Replacement
(Name of Project)
 2. This Sworn Statement is submitted by _____
(Legal Name of Entity Submitting Sworn Statement)
_____, hereinafter
"BIDDER". The BIDDER's address is _____

BIDDER's Federal Employer Identification Number (FEIN) is _____.
 3. My name is _____ and my relationship to the BIDDER
(Print Name of Individual Signing)
is _____.
(Position or Title)
- I certify, through my signature at the end of this Sworn Statement, that I am an authorized representative of the BIDDER.
4. The Trench Safety Standards that will be in effect during the construction of this Project are contained within the Trench Safety Act, Section 553.60 et.seq. Florida Statutes and refer to the applicable Florida Statute(s) and/or OSHA Regulation(s) and include the "effective date" in the citation(s). Reference to and compliance with the applicable Florida Statute(s) and OSHA Regulation(s) is the complete and sole responsibility of the BIDDER. Such reference will not be checked by OWNER or ENGINEER and they shall have no responsibility to review or check the BIDDER's compliance with the Trench Safety Standards.
 5. The BIDDER assures the OWNER that it will comply with the applicable Trench Safety Standards.
 6. The BIDDER has allocated and included in its bid the total amount of \$_____, based on the linear feet of trench to be excavated over five (5) feet deep, for compliance with the applicable Trench Safety Standards, and intends to comply with said standards by instituting the following specific method(s) of compliance on this Project: _____

The determination of the appropriate method(s) of compliance is the complete and sole responsibility of the BIDDER. Such methods will not be checked by the OWNER or ENGINEER for accuracy, completeness, or any other purpose. The OWNER and ENGINEER shall have no responsibility to review or check the BIDDER's compliance with the Trench Safety Standards.

7. The BIDDER has allocated and included in its bid the total amount of \$_____ based on the square feet of shoring to be used for compliance with shoring safety requirements and intends to comply with said shoring requirements by instituting the following specific method(s) of compliance on this Project: _____

The determination of the appropriate method(s) of compliance is the complete and sole responsibility of the BIDDER. Such methods will not be checked by the OWNER or ENGINEER for accuracy, completeness or any other purpose. The OWNER and ENGINEER shall have no responsibility to review or check the BIDDER's compliance with the Trench Safety Standards.

8. The BIDDER, in submitting this bid, represents that it has obtained and considered all available geotechnical information, has utilized said geotechnical information and that, based on such information and the BIDDER's own information, the BIDDER has sufficient knowledge of the Project's surface and subsurface site conditions and characteristics to assure BIDDER's compliance with the applicable Trench Safety Standards in designing the trench safety system(s) for the Project.

BIDDER: _____

By: _____

Position or Title: _____

Date: _____

STATE OF _____

COUNTY OF _____

Personally appeared before me, the undersigned authority, _____ who after first being sworn by me, affixed his/her signature in the space provided above on this _____ day of _____, 20____.

 Notary Public, State at large
 My Commission Expires:

DRUG-FREE WORKPLACE CERTIFICATION

(Please include this form with your bid)

The undersigned vendor in accordance with Florida Statute 287.087 hereby certifies that _____ does:

(Name of Business)

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 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 Section 287.087.

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

Company Name

Bidder's Signature

Date: _____

**SWORN STATEMENT UNDER SECTION 105.08, INDIAN RIVER COUNTY CODE,
ON DISCLOSURE OF RELATIONSHIPS**

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

1. This sworn statement **MUST** be submitted with Bid, Proposal or Contract No. 2020009 for
Oslo Water Treatment Plant Blower Replacement

2. This sworn statement is submitted by: _____

(Name of entity submitting Statement)

whose business address is:

and its Federal Employer Identification Number (FEIN) is _____

3. My name is _____
(Please print name of individual signing)

and my relationship to the entity named above is _____

4. I understand that an “affiliate” as defined in Section 105.08, Indian River County Code, means:

The term “affiliate” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of the entity.

5. I understand that the relationship with a County Commissioner or County employee that must be disclosed as follows:

Father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, daughter-in-law, son-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, or grandchild.

6. Based on information and belief, the 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, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the

entity, have any relationships as defined in section 105.08, Indian River County Code, with any County Commissioner or County employee.

_____ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents, who are active in management of the entity have the following relationships with a County Commissioner or County employee:

Name of Affiliate or entity	Name of County Commissioner or employee	Relationship
_____	_____	_____
_____	_____	_____
_____	_____	_____

(Signature)

(Date)

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 20____, by _____, who is personally known to me or who has produced _____ as identification.

NOTARY PUBLIC

SIGN: _____

PRINT: _____

Notary Public, State at large
My Commission Expires:

(Seal)

CERTIFICATION REGARDING PROHIBITION AGAINST CONTRACTING WITH SCRUTINIZED COMPANIES

(This form MUST be submitted with your bid)

I hereby certify that neither the undersigned entity, nor any of its wholly owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of such entities or business associations, that exists for the purpose of making profit have been placed on the Scrutinized Companies that Boycott Israel List created pursuant to s. 215.4725 of the Florida Statutes, or are engaged in a boycott of Israel.

In addition, if this solicitation is for a contract for goods or services of one million dollars or more, I hereby certify that neither the undersigned entity, nor any of its wholly owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of such entities or business associations, that exists for the purpose of making profit are on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to s. 215.473 of the Florida Statutes, or are engaged in business operations in Cuba or Syria as defined in said statute.

I understand and agree that the County may immediately terminate any contract resulting from this solicitation upon written notice if the undersigned entity (or any of those related entities of respondent as defined above by Florida law) are found to have submitted a false certification or any of the following occur with respect to the company or a related entity: (i) it has been placed on the Scrutinized Companies that Boycott Israel List, or is engaged in a boycott of Israel, or (ii) for any contract for goods or services of one million dollars or more, it has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or it is found to have been engaged in business operations in Cuba or Syria.

Name of Respondent: _____

By: _____
(Authorized Signature)

Title: _____

Date: _____

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements
(This form MUST be submitted with each bid or offer exceeding \$100,000)

The undersigned Contractor certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

Name and Title of Contractor's Authorized Official

Date

Warranty Information Form

(All Blanks must be filled in and Submitted with your Bid)

Indian River County Bid # 202009 for _____

Make and Model of Proposed Equipment: _____

Is there a warranty on the proposed equipment? Yes No

Does the warranty apply to all components or only part? *(Please specify)* _____

Warranty period for parts: _____

Warranty period for service: _____

Nearest source to Indian River County for parts and service: _____

Who will provide service and where in the event of failure within warranty period?

Company Name: _____ Phone: _____

Address: _____

Contact person: _____

Will any voluntary service follow installation or delivery? Yes No

If so, by whom? _____ When? _____

Who is the highest authority (manufacturer, distributor, dealer, etc...) fully behind this warranty?

A copy of the complete warranty statement is submitted herewith: Yes No

Sample Agreement

THIS AGREEMENT is by and between INDIAN RIVER COUNTY, a Political Subdivision of the State of Florida organized and existing under the Laws of the State of Florida, (hereinafter called OWNER)

and _____
(hereinafter called CONTRACTOR). OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 - WORK

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The proposed work generally consists of furnishing all labor, materials, tools and equipment required to remove and install new degasifier blowers with FRP composite blades and ductwork modifications necessary to provide a complete and functional system.

ARTICLE 2 - THE PROJECT

The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

Project Name:	Oslo Water Treatment Plant Blower Replacement
Bid Number:	2020009
Project Address:	1500 9 th Street SW, Vero Beach, FL 32962

ARTICLE 3 - CONTRACT TIMES

3.01 Time of the Essence

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the specifications are of the essence of the Agreement.

3.02 Days to Achieve Substantial Completion, Final Completion and Final Payment

- A. The Work will be completed and ready for final payment on or before the 240th day after the date when the Contract Times commence to run.

3.03 Liquidated Damages

- A. CONTRACTOR and OWNER recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 3.02 above, plus any extensions thereof allowed in writing as a change order to this Agreement. Liquidated damages will commence for this portion of work. The parties also recognize the delays, expense, and difficulties involved in proving in a legal proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay OWNER \$450 for each calendar day that expires after the time specified in paragraph 3.02 for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 4 - CONTRACT PRICE

4.01 OWNER shall pay CONTRACTOR for completion of the Work an amount in current funds equal to the sum of the amounts determined pursuant to paragraph 4.01.A and summarized in paragraph 4.01.B, below:

- A. For all Work, at the prices stated in CONTRACTOR's Bid, attached hereto as an exhibit.
- B. THE CONTRACT SUM subject to additions and deductions provided in the Contract Documents:

Numerical Amount: \$ _____

Written Amount: _____

ARTICLE 5 - PAYMENT PROCEDURES

5.01 *Progress Payments.*

- A. The OWNER shall make progress payments to the CONTRACTOR on the basis of the approved partial payment request as recommended by ENGINEER in accordance with the provisions of the Local Government Prompt Payment Act, Florida Statutes section 218.70 et. seq. The OWNER shall retain ten percent (10%) of the payment amounts due to the CONTRACTOR until fifty percent (50%) completion of the work. After fifty percent (50%) completion of the work is attained as certified to OWNER by ENGINEER in writing, OWNER shall retain five percent (5%) of the payment amount due to CONTRACTOR until final completion and acceptance of all work to be performed by CONTRACTOR under the Contract Documents. Pursuant to Florida Statutes section 218.735(8)(b), fifty percent (50%) completion means the point at which the County as OWNER has expended fifty percent (50%) of the total cost of the construction services work purchased under the Bid and Specification

Documents, together with all costs associated with existing change orders and other additions or modifications to the construction services work provided under the Contract Documents.

5.02 *Pay Requests.*

- A. Each request for a progress payment shall contain the CONTRACTOR'S certification. All progress payments will be on the basis of progress of the work measured by the schedule of values established, or in the case of unit price work based on the number of units completed. After fifty percent (50%) completion, and pursuant to Florida Statutes section 218.735(8)(d), the CONTRACTOR may submit a pay request to the County as OWNER for up to one half (1/2) of the retainage held by the County as OWNER, and the County as OWNER shall promptly make payment to the CONTRACTOR unless such amounts are the subject of a good faith dispute; the subject of a claim pursuant to Florida Statutes section 255.05(2005); or otherwise the subject of a claim or demand by the County as OWNER or the CONTRACTOR. The CONTRACTOR acknowledges that where such retainage is attributable to the labor, services, or materials supplied by one or more subcontractors or suppliers, the Contractor shall timely remit payment of such retainage to those subcontractors and suppliers. Pursuant to Florida Statutes section 218.735(8)(c)(2005), CONTRACTOR further acknowledges and agrees that: 1) the County as OWNER shall receive immediate written notice of all decisions made by CONTRACTOR to withhold retainage on any subcontractor at greater than five percent (5%) after fifty percent (50%) completion; and 2) CONTRACTOR will not seek release from the County as OWNER of the withheld retainage until the final pay request.

5.03 Paragraphs 5.01 and 5.02 do not apply to construction services work purchased by the County as OWNER which are paid for, in whole or in part, with federal funds and are subject to federal grantor laws and regulations or requirements that are contrary to any provision of the Local Government Prompt Payment Act. In such event, payment and retainage provisions shall be governed by the applicable grant requirements and guidelines.

5.04 *Acceptance of Final Payment as Release.*

- A. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER from all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with the work under this Agreement and for every act and neglect of the OWNER and others relating to or arising out of the work. Any payment, however, final or otherwise, shall not release the CONTRACTOR or its sureties from any obligations under this Agreement, the Invitation to Bid or the Public Construction Bond.

ARTICLE 6 - INDEMNIFICATION

6.01 CONTRACTOR shall indemnify and hold harmless the OWNER, and its officers and employees, from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the CONTRACTOR and persons employed or utilized by the CONTRACTOR in the performance of the Work.

ARTICLE 7 - CONTRACTOR'S REPRESENTATIONS

7.01 In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

- A. CONTRACTOR has examined and carefully studied the Contract Documents and the other related data identified in the Invitation to Bid documents.
- B. CONTRACTOR has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. CONTRACTOR is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, including applying the specific means, methods, techniques, sequences, and procedures of construction, if any, expressly required by the Contract Documents to be employed by CONTRACTOR, and safety precautions and programs incident thereto.
- E. CONTRACTOR does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- F. CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Contract Documents.
- G. CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the Site, reports and drawings identified in the

Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

- H. CONTRACTOR has given OWNER written notice of all conflicts, errors, ambiguities, or discrepancies that CONTRACTOR has discovered in the Contract Documents, and the written resolution thereof by OWNER is acceptable to CONTRACTOR.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 8 - CONTRACT DOCUMENTS

8.01 *Contents*

A. The Contract Documents consist of the following (where applicable):

1. This Agreement (pages __ to __, inclusive);
2. Notice to Proceed
3. Public Construction Bond (page ____);
4. Certificate of Liability Insurance
5. Invitation to Bid 2018047
6. Addenda (numbers __ to __, inclusive);
7. CONTRACTOR'S Bid Form (pages ____ to __, inclusive);
8. Bid Bond (pages __ inclusive);
9. Sworn Statement on Trench Safety (pages _____)
10. Drug Free Workplace Form (page __)
11. Affidavit of Compliance (page __);
12. Sworn Statement Under Section 105.08, Indian River County Code, on Disclosure of Relationships (pages 34 to 35, inclusive);
13. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:

- a) Written Amendments;
- b) Work Change Directives;
- c) Change Order(s).

ARTICLE 9 - MISCELLANEOUS

9.01 *Terms*

- A. Terms used in this Agreement will have the meanings indicated in the Invitation to Bid.

9.02 *Assignment of Contract*

- A. No assignment by a party hereto of any rights under or interests in the Agreement will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

9.03 *Successors and Assigns*

- A. OWNER and CONTRACTOR each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

9.04 *Severability*

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

9.05 *Venue*

- A. This Agreement shall be governed by the laws of the State of Florida. Venue for any lawsuit brought by either party against the other party or otherwise arising out of this Agreement shall be in Indian River County, Florida, or, in the event of a federal jurisdiction, in the United States District Court for the Southern District of Florida.

9.06 *Public Records Compliance*

A. Indian River County is a public agency subject to Chapter 119, Florida Statutes. The Contractor shall comply with Florida's Public Records Law. Specifically, the Contractor shall:

(1) Keep and maintain public records required by the County to perform the service.

(2) Upon request from the County's Custodian of Public Records, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119 or as otherwise provided by law.

(3) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the County.

(4) Upon completion of the contract, transfer, at no cost, to the County all public records in possession of the Contractor or keep and maintain public records required by the County to perform the service. If the Contractor transfers all public records to the County upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the County, upon request from the Custodian of Public Records, in a format that is compatible with the information technology systems of the County.

B. IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE

CUSTODIAN OF PUBLIC RECORDS AT:

(772) 226-1424

publicrecords@ircgov.com

Indian River County Office of the County Attorney

1801 27th Street

Vero Beach, FL 32960

- C. Failure of the Contractor to comply with these requirements shall be a material breach of this Agreement.

Oslo Water Treatment Plant Blower Replacement

This Agreement will be effective on _____, 20__ (the date the Agreement is approved by the Indian River County Board of County Commissioners, which is the Effective Date of the Agreement).

OWNER:

INDIAN RIVER COUNTY

By: _____
_____, Chairman

By: _____
Jason E. Brown, County Administrator

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

By: _____
Dylan Reingold, County Attorney

Jeffrey R. Smith, Clerk of Court and Comptroller

Attest: _____
Deputy Clerk
(SEAL)

Designated Representative:
Name: Arjuna Weragoda, P.E.
Title: Capital Projects Manager
Address: 1801 27th Street, Vero Beach, FL 32960
Phone: 772-226-1821
Email: aweragoda@ircgov.com

CONTRACTOR:

By: _____
(Contractor)

(CORPORATE SEAL)

Attest _____

Address for giving notices:

License No. _____
(Where applicable)

Agent for service of process: _____

Designated Representative:
Name: _____
Title: _____
Address: _____

Phone: _____
Email: _____

(If CONTRACTOR is a corporation or a partnership, attach evidence of authority to sign.)

PUBLIC CONSTRUCTION BOND

INSTRUCTION FOR PUBLIC CONSTRUCTION BOND

The front or cover page to the required public construction payment and performance bond shall contain the information required by Fla. Stat. 255.05(1)(a), and be substantially in the format shown on the first page following this instruction.

The Public Construction Bond shall be in the form suggested by Fla. Stat. 255.05(3) as shown on the second page following this instruction.

A Power of Attorney from a surety insurer authorized to do business in Florida, authorizing the signature of the Attorney in Fact who executes the Public Construction Bond shall accompany that Bond.

**Public Work
F.S. Chapter 255.05 (1)(a)
Cover Page**

THIS BOND IS GIVEN TO COMPLY WITH SECTION 255.05 OR SECTION 713.23 FLORIDA STATUTES, AND 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) OR SECTION 713.23 FLORIDA STATUTES.

BOND NO: _____

CONTRACTOR NAME: _____

CONTRACTOR ADDRESS: _____

CONTRACTOR PHONE NO: _____

SURETY COMPANY NAME: _____

**SURETY PRINCIPAL
BUSINESS ADDRESS:** _____

SURETY PHONE NO: _____

OWNER NAME: _____

OWNER ADDRESS: _____

OWNER PHONE NO: _____

OBLIGEE NAME: _____

(If contracting entity is different from
the owner, the contracting public entity)

OBLIGEE ADDRESS: _____

OBLIGEE PHONE NO: _____

BOND AMOUNT: _____

CONTRACT NO: _____

(If applicable)

DESCRIPTION OF WORK: _____

PROJECT LOCATION: _____

LEGAL DESCRIPTION: _____

(If applicable)

FRONT PAGE

All other bond page(s) are deemed subsequent to this page regardless of any page number(s) that may be printed thereon.

PUBLIC CONSTRUCTION BOND

Bond No. _____
(enter bond number)

BY THIS BOND, We _____, as Principal and _____, _____ a corporation, as Surety, are bound to _____, herein called Owner, in the sum of \$_____, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the contract dated _____, _____, between Principal and Owner for 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 _____,

(Name of Principal)

By _____
(As Attorney in Fact)

(Name of Surety)