INVITATION TO BID

BID NO. 16-0119-4

TIDE GATE MONITORING AT PIPEMAKERS CANAL

PRE-BID CONFERENCE: 10:00 AM, JANUARY 17, 2017 MANDATORY – ON SITE

BID OPENING: 2:00 PM, FEBRUARY 2, 2017

THE COMMISSIONERS OF CHATHAM COUNTY, GEORGIA

ALBERT J. SCOTT, CHAIRMAN

COMMISSIONER HELEN J. STONE COMMISSIONER JAMES J. HOLMES COMMISSIONER TONY CENTER COMMISSIONER PATRICK J. FARRELL COMMISSIONER YUSUF K. SHABAZZ COMMISSIONER LORI L. BRADY COMMISSIONER DEAN KICKLIGHTER COMMISSIONER PRISCILLA D. THOMAS

R. JONATHAN HART, COUNTY ATTORNEY

CHATHAM COUNTY, GEORGIA

DOCUMENT CHECK LIST

The following documents, when marked, are contained in and made a part of this Bid Package or are required to be submitted with the bid. It is the responsibility of the bidder to read, complete and sign, where indicated, and return these documents with his/her bid. FAILURE TO DO SO MAY BE CAUSE FOR DISQUALIFYING THE BID.

X GENERAL INFORMATION AND INSTRUCTIONS TO BID WITH ATTACHMENTS

X SURETY REQUIREMENTS - A Bid Bond of 5% with this ITB.

X PROPOSAL

- PLANS/SPECIFICATIONS Plan Sheets <u>must be</u> purchased at Clayton Digital Reprographics by logging into <u>www.cdrepro.com</u>. Login to DFS. New users must register. For technical support contact CDR at (912) 447-5445, fax (912) 233-7020 or email: cdrwest@cdrepro.com.
- X BID SCHEDULE

PERFORMANCE BOND – Rquired at the time of contract.

PAYMENT BOND – Required at the time of contract.

CONTRACT

X LEGAL NOTICE

X ATTACHMENTS: A. DRUG FREE WORKPLACE; B. NONDISCRIMINATION STATEMENT; C. DISCLOSURE OF RESPONSIBILITY STATEMENT; D. CONTRACTOR & SUBCONTRACTOR AFFIDAVIT AND AGREEMENT, E. BIDDER'S CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION, F. M/WBE PARTICIPATION REPORT, G. SYSTEMATIC ALIEN VERIFICATION FOR ENTITLEMENTS,

<u>X</u> DOCUMENTATION OF ABILITY TO PERFORM BID REQUIREMENTS. THIS MAY BE REQUIRED OF BIDDERS AFTER SUBMISSION OF BIDS.

<u>COUNTY TAX CERTIFICATE REQUIREMENT</u> - Contractor must supply a copy of their Tax Certificate from their location in the State of Georgia, as proof of payment of the occupational tax where their office is located.

CURRENT TAX CERTIFICATE NUMBER	
CITY	
COUNTY	
OTHER	_

The Chatham County of Commissioners have established goals to increase participation of minority and woman owned businesses. In order to accurately document participation, businesses submitting bids or proposals are encouraged to report ownership status. A minority or woman owned business is defined as a business with at least 51% ownership by one or more minority/female individuals and whose daily business operations are managed and directed by one (1) or more of the minority/female owners. Please check ownership status as applicable:

African-American	Asian American_	Hispani	ic

Native American or Alaskan Indian_____ Woman_____

In the award of "Competitive Sealed Proposals", minority/female participation may be one of several evaluation criteria used in the award process when specified as such in the Request for Proposal.

RECEIPT IS HEREBY ACKNOWLEDGED OF ADDENDA NUMBER(S)_____

The undersigned bidder certifies that he/she has received the above listed and marked documents and acknowledges that his/her failure to return each, completed and signed as required, may be cause for disqualifying his/her bid.

BY:

DATE

SIGNATURE

TITLE:		
	the second se	

COMPANY:_____

CHATHAM COUNTY, GEORGIA OFFICE OF THE PURCHASING DIRECTOR 1117 EISENHOWER DRIVE - SUITE C SAVANNAH, GEORGIA 31406 (912) 790-1622

Date: December 21, 2016

BID NO. 16-0119-4

GENERAL INFORMATION FOR INVITATION FOR BID

This is an invitation to submit a bid to supply Chatham County with construction, equipment, supplies and/or services as indicated herein. Sealed bids will be received at the Office of the Purchasing Agent, at <u>The Chatham County Citizens Service Center, 1117 Eisenhower Drive,</u> <u>Suite C, Savannah, Georgia 31406 up to 2:00PM local time, FEBRUARY 2, 2017, at which time they will be opened and publicly read.</u> The County reserves the right to reject <u>all bids</u> that are non-responsive or not responsible.

Instructions for preparation and submission of a bid are contained in this Invitation To Bid package. Please note that specific forms for submission of a bid are required. Bids must be typed or printed in ink.

A <u>MANDATORY Pre-bid Conference</u> has been scheduled to be conducted ON-SITE at <u>Georgia Ports Authority, Annex 2 Auditorium, located at 100 Main Street (S.R. 25), Garden</u> <u>City, Georgia, on JANUARY 17, 2017, at 10:00 AM.</u>, to discuss the specifications and resolve any questions and/or misunderstanding that may arise. Your firm <u>must be</u> represented at this conference to be allowed to submit a bid for this project.

Any changes to the conditions and specifications must be in the form of a written addendum to be valid; therefore, the Purchasing Director will issue a written addendum to document each approved change. Generally when addenda are required, the bid opening date will be changed.

Chatham County has an equal opportunity purchasing policy. Chatham County seeks to ensure that all segments of the business community have access to supplying the goods and services needed by County programs. The County affirmatively works to encourage utilization of disadvantaged and minority business enterprises in our procurement activities. The County provides equal opportunity for all businesses and does not discriminate against any persons or businesses regardless of race, color, religion, age, sex, national origin or handicap. The terms "disadvantaged business," "minority business enterprise," and "minority person" are more specifically defined and explained in the <u>Chatham County Purchasing Ordinance and Procedures Manual</u>, Article VII - Disadvantaged Business Enterprises Program.

This project <u>IS</u> a Special Purpose Local Option Sales Tax (SPLOST) Project. See paragraph 2.25 for MBE/WBE participation goals.

INSTRUCTIONS TO BIDDERS

1.1 **Purpose:** The purpose of this document is to provide general and specific information for use in submitting a bid to supply Chatham County with equipment, supplies, and/or services as described herein. All bids are governed by the <u>Code of Chatham County</u>, Chapter 4, Article IV, and the laws of the State of Georgia.

1.2 How to Prepare Bids: All bids shall be:

- a. Prepared on the forms enclosed herewith, unless otherwise prescribed, and all documents must be submitted.
- b. Typewritten or completed with pen and ink, signed by the business owner or authorized representative, with all erasures or corrections initialed and dated by the official signing the bid. ALL SIGNATURE SPACES MUST BE SIGNED.

Bidders are encouraged to review carefully all provisions and attachments of this document prior to submission. Each bid constitutes an offer and may not be withdrawn except as provided herein.

- 1.3 **How to Submit Bids:** All bids shall be:
 - a. An original and <u>duplicate</u> copy must be submitted in a sealed opaque envelope, plainly marked with the bid number and title, date and time of bid opening, and company name.
 - b. Mailed or delivered as follows in sufficient time to ensure receipt by the Purchasing Director on or before the time and date specified above.
 - 1. Mailing Address: Chatham County Purchasing and Contracting, 1117 Eisenhower Drive, Suite C, Savannah, Georgia 31406.
 - 2. Hand Delivery: Purchasing Director, Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia 31406.

BIDS NOT RECEIVED BY THE TIME AND DATE SPECIFIED WILL NOT BE OPENED OR CONSIDERED.

1.4 **How to Submit an Objection:** Objections from bidders to this invitation to bid and/or these specifications should be brought to the attention of the County Purchasing Director in the following manner:

- a. When a pre-bid conference is scheduled, bidders shall either present their oral objections at that time or submit their written objections at least two (2) days prior to the scheduled pre-bid conference.
- b. When a pre-bid conference is not scheduled, the bidder shall submit any objections he may have in writing not less than five (5) days prior to the opening of the bid.
- c. The objections contemplated may pertain to form and/or substance of the invitation to bid documents. Failure to object in accordance with the above procedure will constitute a waiver on the part of the business to protest this invitation to bid.
- 1.5 **Failure to Bid:** If a bid is not submitted, the business should return this invitation to bid document, stating reason therefore, and indicate whether the business should be retained or removed from the County's bidders list.
- 1.6 **Errors in Bids:** Bidders or their authorized representatives are expected to fully inform themselves as to the conditions, requirements, and specifications before submitting bids. Failure to do so will be at the bidder's own risk. In case of error in extension of prices in the bid, the unit price will govern.
- 1.7 **Standards for Acceptance of Bid for Contract Award:** The County reserves the right to reject any or all bids and to waive any irregularities or technicalities in bids received whenever such rejection or waiver is in the best interest of the County. The County reserves the right to reject the bid of a bidder who has previously failed to perform properly or complete on time contracts of a similar nature, or a bid from a bidder whom investigation shows is not in a position to perform the contract.
- 1.8 **Bid Tabulation:** Tabulations for all bids will be posted for thirty (30) days after the bid opening in the Office of Purchasing and Contracting, 1117 Eisenhower Drive, Suite C, Savannah, Georgia 31406 or can be reviewed on the Purchasing web site 24/48 hours after opening at http://purchasing.chathamcounty.org.
- 1.9 **Bidder:** Whenever the term "bidder" is used it shall encompass the "person," "business," "contractor," "supplier," "vendor," or other party submitting a bid or proposal to Chatham County in such capacity before a contract has been entered into between such party and the County.
- 1.10 **Responsible / Responsive Bidder:** *Responsible Bidder* means a person or entity that has the capability in all respects to perform fully and reliably the contract requirements. *Responsive Bidder* means a person or entity that has submitted a bid or proposal that conforms in all material respects to the requirements set forth in the invitation for bids or request for proposals.

- 1.11 **Compliance with Laws:** The bidder and/or contractor shall obtain and maintain all licenses, permits, liability insurance, workman's compensation insurance and comply with any and all other standards or regulations required by federal, state or County stature, ordinances and rules during the performance of any contract between the contractor and the County. Any such requirement specifically set forth in any contract document between the contractor and the County shall be supplementary to this section and not in substitution thereof.
- 1.12 **Contractor:** Contractor or subcontractor means any person or business having a contract with Chatham County. The Contractor/Vendor of goods, material, equipment or services certifies that they will follow equal employment opportunity practices in connection with the awarded contract as more fully specified in the contract documents.
- 1.13 Local Preference: On 27 March 1998, the Board of Commissioners adopted a "Local Vendor" Preference Ordinance that gives the lowest Chatham County vendor submitting a responsible bid/quote the opportunity to match the lowest price offered by an out-of-County vendor. If the County vendor confirms in writing to match within 24 hours, the award will be made to the Chatham County vendor. The lowest Chatham County responsive bidder will be afforded the "right to first refusal". "Local Vendor" is defined as a business or supplier which operates and maintains a regular place of business within the geographical boundaries of Chatham County or one of the local Municipalities of the County AND all real and personal property taxes are paid prior to award of a contract or purchase. "NOT APPLICABLE TO PUBLIC WORKS CONSTRUCTION PROJECTS AND REVENUE PRODUCING BIDS." However, contractors are encourage to apply the same method when awarding bids to local M/WBE businesses whenever possible in order to promote growth in Chatham County's economy.
- 1.14 **Debarred Firms and Pending Litigation:** Any potential proposer/firm listed on the Federal or State of Georgia Excluded Parties Listing (Barred from doing business) **will not** be considered for contract award. Proposers **shall disclose** any record of pending criminal violations (Indictment) and/or convictions, pending lawsuits, etc., and any actions that may be a conflict of interest occurring within the past five (5) years. Any proposer/firm previously defaulting or terminating a contract with the County will not be considered.

** All bidders or proposers are to read and complete the Disclosure of Responsibility Statement enclosed as an Attachment to be returned with response. Failure to do so may result in your solicitation response being rejected as non-responsive.

Bidder acknowledges that in performing contract work for the Board, bidder shall not utilize any firms that have been a party to any of the above actions. If bidder has engaged any firm to work on this contract or project that is later debarred, Bidder shall sever its relationship with that firm with respect to Board contract.

- 1.15 Performance Evaluation: On 11April 2008, the Chatham County Board of Commissioners approved a change to the County Purchasing Ordinance requiring Contractor/Consultant Performance Evaluations, as a minimum, annually, prior to contract anniversary date. Should Contractor/Consultant performance be unsatisfactory, the appointed County Project Manager for the contract may prepare a Contractor/Consultant Complaint Form or a Performance Evaluation to the County Purchasing Agent.
- 1.16 **Payment of Taxes**: No contract shall be awarded unless all real and personal property taxes have been paid by the successful contractor and/or subcontractors as adopted by the Board of Commissioners on 8 April 1994.
- 1.17 **State Licensing Board for General Contractors:** Pursuant to Georgia law, the following types of contractors must obtain a license from the State Licensing Board of Residential and General Contractors by <u>1 July 2008</u>:

***Residential - Basic Contractor** (Contractor work relative to detached one-family and two-family residences and one-family townhouses not over three stories in height).

***Residential - Light Commercial Contractor** (Contractor work or activity related to multifamily and multiuse light commercial buildings and structures).

*General Contractor (Contractor work or activity that is unlimited in scope regarding any residential or commercial projects).

See "Checklist for Submitting Bid" for the type of license required for this project.

1.18 Immigration: On 1 July, the Georgia Security and Immigration Compliance Act (SB 529, Section 2) became effective. All contractors and subcontractors with 100 or more employees entering into a contract or work must sign an affidavit that he/she has used the E-Verify System. E-Verify is a no-cost federal employment verification system to insure employment eligibility.

Affidavits are enclosed in this solicitation. You may download M-274 Handbook for Employers at <u>http://www.dol.state.ga.us/spotlight/employment/rules</u>. You may go to http://www.uscis.gov. to find the E-Verify information.

Systematic Alien Verification for Entitlements (SAVE) Program: O.C.G.A. 50-36-1, required Georgia's counties to comply with the federal **Systematic Alien Verification for Entitlements (SAVE) Program.** SAVE is a federal program used to verify that applicants for certain "public benefits" are legally present in the United States. Contracts with the County are considered "public benefits." Therefore, the successful bidder will be required to provide the Affidavit Verifying Status for Chatham County Benefit Application prior to receiving any County contract. The affidavit is included as part of this bid package but is only required of the successful bidder.

Protection of Resident Workers. Chatham County Board of Commissioners actively supports the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The Contractor shall establish appropriate procedures and controls so no services or products under the Contract Documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment.

1.19 **Chatham Apprentice Program Hiring:** Chatham County has established a Chatham Apprentice Program (CAP) to train area residents in the building trades. Successful Contractor shall be required to make a good faith effort to utilize labor from the CAP Program on this project when feasible. A Good Faith Effort will be demonstrated by documentation of inquiry into CAP labor available and resulting hiring of CAP labor or providing reasons for Contractor not utilizing any CAP labor. Form demonstrating Good Faith Effort is enclosed in this bid package. Contractor shall complete the form and return with their first pay request. All questions regarding CAP student hiring should be directed to Daniel Dodd-Ramirez at (912) 232-6747.

GENERAL CONDITIONS

- 2.1 **Specifications:** Any obvious error or omission in specifications shall not inure to the benefit of the bidder but shall put the bidder on notice to inquire of or identify the same from the County. Whenever herein mentioned is made of any article, material or workmanship to be in accordance with laws, ordinances, building codes, underwriter's codes, A.S.T.M. regulations or similar expressions, the requirements of these laws, ordinances, etc., shall be construed to be the minimum requirements of these specifications.
- 2.2 **Multiple Bids:** No vendor will be allowed to submit more than one (1) bid. Any alternate proposals must be brought to the Purchasing Agent's attention during the Pre-bid Conference or submitted in writing at least five (5) days preceding the bid opening date.
- 2.3 Not Used.
- 2.4 **Prices to be Firm:** Bidder warrants that bid prices, terms and conditions quoted in his bid will be firm for acceptance for a period of <u>sixty (60)</u> days from bid opening date, unless otherwise stated in the bid.
- 2.5 **Completeness:** All information required by Invitation for Bids/Proposals must be completed and submitted to constitute a proper bid or proposal.
- 2.6 Quality: All materials, or supplies used for the construction necessary to comply with this

proposal shall be of the best quality, and of the highest standard of workmanship. Workmanship employed in any construction, repair, or installation required by this proposal shall be of the highest quality and meet recognized standards within the respective trades, crafts and of the skills employed.

- 2.7 **Guarantee/Warranty:** Unless otherwise specified by the County, the bidder shall unconditionally guarantee the materials and workmanship for one (1) year on all material and/or services. If, within the guarantee period, any defects occur which are due to faulty material and or services, the contractor at his expense, shall repair or adjust the condition, or replace the material and/or services to the complete satisfaction of the County. These repairs, replacements or adjustments shall be made only at such time as will be designated by the County as being least detrimental to the operation of County business.
- 2.8 Liability Provisions: Where bidders are required to enter or go onto Chatham County property to take measurements or gather other information in order to prepare the bid or proposal as requested by the County, the bidder shall be liable for any injury, damage or loss occasioned by negligence of the bidder, his agent, or any person the bidder has designated to prepare the bid and shall indemnify and hold harmless Chatham County from any liability arising therefrom. The contract document specifies the liability provisions required of the successful bidder in order to be awarded a contract with Chatham County.
- 2.9 **Cancellation of Contract:** The contract may be canceled or suspended by Chatham County in whole or in part by written notice of default to the Contractor upon non-performance or violation of contract terms. An award may be made to the next low bidder, for articles and/or services specified or they may be purchased on the open market and the defaulting Contractor (or his surety) shall be liable to Chatham County for costs to the County in excess of the defaulted contract prices. See the contract documents for complete requirements.
- 2.10 **Patent Indemnity:** Except as otherwise provided, the successful bidder agrees to indemnify Chatham County and its officers, agents and employees against liability, including costs and expenses for infringement upon any letters patent of the United States arising out of the performance of this Contract or out of the use or disposal for the account of the County of supplies furnished or construction work performed hereunder.
- 2.11 **Certification of Independent Price Determination:** By submission of this bid, the bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that in connection with this procurement:
 - (1) The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
 - (2) Unless otherwise required by law, the prices which have been quoted in this bid have

not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly to any other bidder or to any competitor; and

- (3) No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not be submit a bid for the purpose or restricting competition.
- 2.12 Award of Contract: The contract, if awarded, will be awarded to that responsible bidder whose bid/proposal will be most advantageous to Chatham County, price and other factors considered. The Board of Commissioners will make the determination as to which bid or proposal that serves as the best value to Chatham County.
- 2.13 **Procurement Protests:** Objections and protests to any portion of the procurement process or actions of the County staff may be filed with the Purchasing Agent for review and resolution. The <u>Chatham County Purchasing Procedures Manual</u>, Article IX Appeals and Remedies shall govern the review and resolution of all protests.
- 2.14 **Qualification of Business (Responsible Bidder or Proposer):** A responsible bidder or proposer is defined as one who meets, or by the date of the bid acceptance can meet, certifications, all requirements for licensing, insurance, and registrations, or other documentation required by the Design Professional engaged to develop Scope of Work, specifications and plans. These documents will be listed in the Special Conditions further on in this solicitation. Chatham County has the right to require any or all bidders to submit documentation of the ability to perform, provide, or carry out the service or provide the product requested.

Chatham County has the right to disqualify the bid or proposal of any bidder or proposer as being unresponsive or unresponsible whenever such bidder/proposer cannot document the ability to deliver the requested product.

2.15 **Chatham County Tax Certificate Requirement:** A current Chatham County Tax Certificate is required unless otherwise specified. Please contact the Building Safety and Regulatory Services at (912) 201-4300 for additional information.

NOTE: No contract shall be awarded unless all real and personal property taxes have been paid by the successful contractor and/or subcontractors as adopted by the Board of Commissioners on 8 April 1994.

2.16 **Insurance Provisions, General:** The selected contractor shall be required to procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Bid.

It is every contractor's responsibility to provide the County Purchasing and Contracting

Division current and up-to-date Certificates of Insurance for multiple year contracts before the end of each term. Failure to do so may be cause for termination of contract.

2.16.1 General Information that shall appear on a Certificate of Insurance:

- I. Name of the Producer (Contractor's insurance Broker/Agent).
- II. Companies affording coverage (there may be several).
- III. Name and Address of the Insured (this should be the Company or Parent of the firm Chatham County is contracting with).
- IV. A Summary of all current insurance for the insured (includes effective dates of coverage).
- V. A brief description of the operations to be performed, the specific job to be performed, or contract number.
- VI. Certificate Holder (This is to always include Chatham County).

Chatham County as an Additional Insured: Chatham County invokes the defense of sovereign immunity. In order not to jeopardize the use of this defense, the County <u>is not</u> to be included as an Additional Insured on insurance contracts.

- 2.16.2 Minimum Limits of Insurance to be maintained for the duration of the contract:
 - a. **Commercial General Liability:** Provides protection against bodily injury and property damage claims arising from operations of a Contractor or Tenant. This policy coverage includes: premises and operations, use of independent contractors, products/completed operations, personal injury, contractual, broad form property damage, and underground, explosion and collapse hazards. Minimum limits: \$1,000,000 bodily injury and property damage per occurrence and annual aggregate.
 - b. Worker's Compensation and Employer's Liability: Provides statutory protection against bodily injury, sickness or disease sustained by employees of the Contractor while performing within the scope of their duties. Employer's Liability coverage is usually included in Worker's Compensation policies, and insures common law claims of injured employees made in lieu of or in addition to a Worker's Compensation claim. Minimum limits: \$500,000 for each accident, disease policy limit, disease each employee and Statutory Worker's Compensation limit.
 - c. **Business Automobile Liability:** Coverage insures against liability claims arising out of the Contractor's use of automobiles. Minimum limit: \$1,000,000 combined single limit per accident for bodily injury and property damage. Coverage should be written on an Any Auto basis.
- 2.16.3 Special Requirements:

- a. **Claims-Made Coverage:** The limits of liability shall remain the same as the occurrence basis, however, the Retroactive date shall be prior to the coincident with the date of any contract, and the Certificate of Insurance shall state the coverage is claims-made. The Retroactive date shall also be specifically stated on the Certificate of Insurance.
- b. **Extended Reporting Periods**: The Contractor shall provide the County with a notice of the election to initiate any Supplemental Extended Reporting Period and the reason(s) for invoking this option.
- c. **Reporting Provisions:** Any failure to comply with reporting provisions of the policies shall not affect coverage provided in relation to this request.
- d. **Cancellation:** Each insurance policy that applies to this request shall be endorsed to state that it shall not be suspended, voided, or canceled, except after thirty (30) days prior to written notice by certified mail, return receipt requested, has been given to the County.
- e. **Proof of Insurance:** Chatham County shall be furnished with certificates of insurance and with original endorsements affecting coverage required by this request. The certificates and endorsements are to be signed by a person authorized by the insurer to bind coverage on its behalf. All certificates of insurance are to be submitted prior to, and approved by, the County before services are rendered. The Contractor must ensure Certificate of Insurance are updated for the entire term of the County.
- f. **Insurer Acceptability:** Insurance is to be placed with an insurer having an A.M. Best's rating of A and a five (5) year average financial rating of not less than V. If an insurer does not qualify for averaging on a five year basis, the current total Best's rating will be used to evaluate insurer acceptability.
- g. Lapse in Coverage: A lapse in coverage shall constitute grounds for contract termination by the Chatham County Board of Commissioners.
- h. **Deductibles and Self-Insured Retention**: Any deductibles or self-insured retention must be declared to, and approved by, the County. At the option of the County, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as related to the County, its officials, officers, employees, and volunteers; or the Contractor shall procure a bond guaranteeing payment of related suits, losses, claims, and related investigation, claim administration and defense expenses.

2.16.4 Additional Coverage for Specific Procurement Projects:

a. **Professional Liability:** Insure errors or omission on behalf of architects,

engineers, attorneys, medical professionals, and consultants.

<u>Minimum Limits:</u> <u>Coverage Requirement:</u>	\$1 million per claim/occurrence If claims-made, retroactive date must precede or coincide with the contract effective date or the date of the Notice to Proceed. The professional <u>must state</u> if tail coverage has been purchased and the duration of the coverage.
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- b. Builder's Risk: (For Construction or Installation Contracts) Covers against insured perils while in the course of construction.
 <u>Minimum Limits:</u> All-Risk coverage equal 100% of contract value <u>Coverage Requirements:</u> Occupancy Clause permits County to use the facility prior to issuance of Notice of Substantial Completion.
- 2.17 **Compliance with Specification Terms and Conditions:** The Invitation to Bid, Legal Advertisement, General Conditions and Instructions to Bidders, Specifications, Special Conditions, Vendor's Bid, Addendum, and/or any other pertinent documents form a part of the bidders proposal or bid and by reference are made a part hereof.
- 2.18 **Signed Bid Considered Offer:** The signed bid shall be considered an offer on the part of the bidder, which offer shall be deemed accepted upon approval by the Chatham County Board of Commissioners, Purchasing Agent or his designee. In case of a default on the part of the bidder after such acceptance, Chatham County may take such action as it deems appropriate, including legal action for damages or lack of required performance.
- 2.19 **Notice to Proceed:** The successful bidder or proposer shall not commence work under this Invitation to Bid until a written contract is awarded and a Notice to Proceed is issued by the Purchasing Agent or his designee. If the successful bidder does commence any work or deliver items prior to receiving official notification, he does so at his own risk.
- 2.20 **Payment to Contractors:** Instructions for invoicing the County for products delivered to the County are specified in the contract document.
 - a. Questions regarding payment may be directed to the Finance Department at (912) 652-7900 or the County's Project Manager as specified in the contract documents.
 - b. Contractors will be paid the agreed upon compensation upon satisfactory delivery of the products or completion of the work as more fully described in the contract document.
 - c. Upon completion of the work or delivery of the products, the Contractor will

provide the County with an affidavit certifying all suppliers, persons or businesses employed by the Contractor for the work performed for the County have been paid in full.

- d. Chatham County is a tax exempt entity. Every contractor, vendor, business or person under contract with Chatham County is required by Georgia law to pay State sales or use taxes for products purchased in Georgia or transported into Georgia and sold to Chatham County by contract. Please consult the State of Georgia, Department of Revenue, Sales and Use Tax Unit in Atlanta (404) 656-4065 for additional information.
- 2.21 **Owner's Rights Concerning Award:** The Owner reserves the right, and sole and complete discretion to waive technicalities and informalities. The Owner further reserves the right, and sole and complete discretion to reject all bids and any bid that is not responsive or that is over the budget, as amended. In judging whether the bidder is responsible, the Owner will consider, but is not limited to consideration of, the following:
 - a. Whether the bidder or principals are currently ineligible, debarred, suspended, or otherwise excluded from bidding or contracting by any state or federal agency, department, or authority;
 - b. Whether the bidder or principals have been terminated for cause or are currently in default on a public works contract;
 - c. Whether the bidder can demonstrate a commitment to safety with regard to Workers' Compensation by having an experience Modification Rate (EMR) over the past three years not having exceeded an average of 1.2; and
 - d. Whether the bidder's past work provides evidence of an ability to successfully complete public works projects within the established time, quality, or cost, or to comply with the bidder's contract obligations; and
 - e. Whether the bidder has made a Good Faith Effort to meet local participation goals for local economic impact for Disadvantaged Business Enterprises and Small Business Enterprises.

2.22 **Owner's Right to Negotiate with the Lowest Bidder:**

In the event all responsive and responsible bids are in excess of the budget, the Owner, in its sole and absolute discretion and in addition to the rights set forth above, reserves the right either to (i) supplement the budget with additional funds to permit award to the lowest responsive and responsible bid, or (ii) to negotiate with the lowest responsive and responsible bidder (after taking all deductive alternates) only for the purpose of making changes to the Project that will result in a cost to the Owner that is within the budget, as it may be amended.

2.23 Debarred or Suspended Subcontractors.

CONTRACTOR shall not subcontract, and shall ensure that no subcontracts are awarded at any tier, to any individual, firm, partnership, joint venture, or any other entity regardless of the form of business organization, that is on the Federal Excluded Parties List System (EPLS) at https://www.epls.gov or the State of Georgia, DOAS, State Purchasing Exclusion listing, or other local government entity. This includes pending litigation or claims with the County or other government entities. Contractor shall immediately notify County in the event any subcontractor is added to a Federal, State or other Government Entity listing after award of the subcontract.

2.24 **Cone of Silence**:

Lobbying of Procurement Evaluation Committee members, County Government employees, and elected officials regarding this product or service solicitation, Invitation to Bid (ITB) or Request for Proposal (RFP) or contract by any member of a proposer's staff, or those people employed by any legal entity affiliated with an organization that is responding to the solicitation is strictly prohibited. Negative campaigning through the mass media about the current service delivery is strictly prohibited. Such actions may cause your proposal to be rejected.

- 2.25 The Chatham County Board of Commissioners has adopted an aggressive program that establishes goals for minority/female, small and disadvantaged business participation in construction, professional services, and general procurement.
 - a. The Chatham County Board of Commissioners under Georgia law may reject any bid as non-responsive if they feel a bidder did not exercise "Good Faith Effort" in obtaining the goal established for M/WBE participation.
 - b. The Chatham County Board of Commissioners adopted a policy establishing goals oriented to increase participation of minority and female owned businesses, through MBE/WBE certification and development. In order to accurately document participation, businesses submitting bids, quotes or proposals are encouraged to report ownership status. A bidder or vendor that is certified by any agency of the Federal Government or State of Georgia may submit a copy of their certification with their bid as proof of qualifications. Bidders that intend to engage in joint ventures or utilize subcontractors must submit to the County Contracts Administrator, a report on Minority/Female Business Enterprise participation.

Goals established for this project is <u>30% Combined</u>.

c. A Minority/Female Business Enterprise (M/WBE) is a business concern that is at

least 51% owned by one or more minority/female individuals and whose daily business operations are managed and directed by one (1) or more of the minority/female owners.

- 2.26 **LIQUIDATED DAMAGES**: Failure to complete all work within 60 calendar days plus any extension authorized in writing by the County shall entitle the County to deduct as "Liquidated Damages" from the monies due the Contractor the amount of \$200 for each calendar day in excess of the authorized construction time.
- 2.26 Bidders or proposers are required to make a **Good Faith Effort**, where subcontracting is to be utilized in performing the contract, to subcontract with or purchase supplies from qualified M/WBEs. Bidders or proposers are required to state if they intend to subcontract any part of the work. Goals will be established for each contract at the onset. Forms requiring the signatures of bidders or proposers are enclosed as Attachments and must be completed and returned with your bid response. If forms are not completed and submitted, the bid may be considered nonresponsive.

Each bidder or proposer is required to maintain records of such efforts in detail adequate to permit a determination of compliance with these requirements. All contracts will reflect **Good Faith Efforts** and reporting requirements for the term of the contract. The County particularly urges general contractors to give emphasis to subcontracting with local area firms. For information on the program or M/WBE contractors/vendors please contact Connell C. Heyward, Chatham County Minority and Women Business Coordinator, 124 Bull Street, Suite 310, Savannah, Georgia 31401, (912) 652-7828 phone, or (912) 652-7951 fax. Email: <u>cheyward@chathamcounty.org</u>

2.27 **GEORGIA OPEN RECORDS ACT** - The responses will become part of the County's official files without any obligation on the County's part. Ownership of all data, materials and documentation prepared for and submitted to Chatham County in response to a solicitation, regardless of type, shall belong exclusively to Chatham County and will be considered a record prepared and maintained or received in the course of operations of a public office or agency and subject to public inspection in accordance with the Georgia Open Records Act, Official Code of Georgia Annotated, Section 50-18-70, et. Seq., unless otherwise provided by law.

Responses to RFPs shall be held confidential from all parties other than the County until after the contract is awarded by the Board of Commissioners.

The vendor and their bid price in response to ITBs will be read allowed at public bid openings. After Bid Tabulations, the ITB shall be available for public viewing.

Chatham County shall not be held accountable if material from responses is obtained without the written consent of the vendor by parties other than the County, at any time during the solicitation evaluation process.

- 2.28 **GEORGIA TRADE SECRET ACT of 1990** In the event a Bidder/Proposer submits trade secret information to the County, the information must be clearly labeled as a Trade Secret. The County will maintain the confidentiality of such trade secrets to the extent provided by law.
- 2.29 **CONTRACTOR RECORDS** The Georgia Open Records Act is applicable to the records of all contractors and subcontractors under contract with the County. This applies to those specific contracts currently in effect and those which have been completed or closed for up three (3) years following completion.
- 2.30 **REFERENCES \$500,000 or more:** For bidders to be responsive each must provide information on the most recent five (5) projects with similar scope of work as well as other information to determine experience and qualifications as follows:
 - a. Project Name:_____

Location:	
Owner:	
Address:	
City and State:	
Contact:	
Phone & Fax:	
*Architect or Engineer:	
Contact:	
Phone & Fax:	

b. The awarded bid amount and project start date.

Final cost of project and completion date.

Number of change orders.

Contracted project completion in days.

Project completed on time. Yes____ No____ Days exceeded___

List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.

Has contractor ever failed to complete a project? If so, provide explanation.

Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

\$499,000 and less: Provide references from owners of at least three (3) projects of various sizes. Include government owners if possible. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government. Provide in the format as in (a) above on the attached form.

Failure to provide the above information may result in your firm's bid being rejected and ruled as non-responsive.

NOTE: FORMS FOR YOU TO FILL OUT FOR YOUR REFERENCES ARE ATTACHED TO THE BACK OF THIS BID PACKAGE.

ADDITIONAL CONDITIONS

3.1 <u>METHOD OF COMPENSATION</u>. The compensation provided for herein shall include all claims by the CONTRACTOR for all costs incurred by the CONTRACTOR in the conduct of the Project as authorized by the approved Project Compensation Schedule and this amount shall be paid to the CONTRACTOR after receipt of the invoice and approval of the amount by the COUNTY. The COUNTY shall make payments to the CONTRACTOR within thirty (30) days from the date of receipt of the CONTRACTOR's acceptable statement on forms prepared by the CONTRACTOR and approved by the COUNTY.

Should the Project begin within any one month, the first invoice shall cover the partial period from the beginning date of the Project through the last day of the month (or on a mutually agreeable time) in which it began. The invoices shall be submitted each month until the Project is completed. Invoices shall be itemized to reflect actual expenses for each individual task; also refer to the requirements concerning changes, delays and termination of work under Sections I-8, 9, and 10 of the contract. Each invoice shall be accompanied by a summary progress report which outlines the work accomplished during the billing period and any problems that may be inhibiting the Project execution. The terms of this contract are intended to supersede all provisions of the Georgia Prompt Pay Act.

As long as the gross value of completed work is less than 50% of the total contract amount, or if the contractor is not maintaining his construction schedule to the satisfaction of the engineer, the County shall retain 10% of the gross value of the completed work as indicated by the current estimate approved by the engineer.

After the gross value of completed work becomes to or exceed 50% of the total contract amount within a time period satisfactory to the County, then the total amount to be retained may be reduced to 5% of the gross value of the completed work as indicated by the current estimate approved by the engineer, until all pay items are substantially completed.

When all work is completed and time charges have ceased, pending final acceptance and final payment the amount retained may be further reduced at the discretion of the County.

The CONTRACTOR may submit a final invoice to the County for the remaining retainage

upon COUNTY'S acceptance of the Certificate of Substantial Completion. Final payment constituting the entire unpaid balance due shall be paid by the COUNTY to the

CONTRACTOR when work has been fully completed and the contract fully performed, except for the responsibilities of the CONTRACTOR which survive final payment. The making of final payment shall constitute a waiver of all claims by Chatham County except those arising from unsettled liens, faulty or defective work appearing after substantial completion, failure of the work to comply with the requirements of the Contract Documents, or terms of any warranties required by the Contractor Documents or those items previously made in writing and identified by the COUNTY as unsettled at the time of final application for payment. Acceptance of final payment shall constitute a waiver of all claims by the CONTRACTOR, except those previously made in writing and identified by the CONTRACTOR as unsettled at the time of final application for payment.

- 3.3 **SURETY REQUIREMENTS and Bonds:** (check where applicable)
 - X A. Such bidder shall post a bid bond, certified check or money order made payable to the Chatham County Finance Department in the amount of 5% of the bid price.
- X B. Contractor(s) shall be required at time of contract to shall post a payment/performance bond, certified check or money order made payable to the Chatham County Finance Department in the amount of 100% of the bid price if awarded the purchase. Such bond(s) are due prior to contract execution as a guarantee that goods meet specifications and will be delivered per contract. Such bonds will also guarantee quality performance of services and timely payment of invoices to any subcontractors.
- X C. Whenever a bond is provided, it shall be executed by a surety authorized to do business in the State of Georgia and approved by Chatham County.
- X D. Bidder acknowledges Chatham County's right to require a Performance and Payment Bond of a specific kind and origin. "Performance Bond" means a bond with good and sufficient surety or surities for the faithful performance of the contract and to indemnify the governmental entity for any damages occasioned by a failure to perform the same within the prescribed time. Such bond shall be payable to, in favor of, and for the protection of the governmental entity for which the work is to be done. "Payment Bond" means a bond with good and sufficient surety or sureties payable to the governmental entity for which the work is to be done and intended for the use and protection of all subcontractors and

all persons supplying labor, materials, machinery, and equipment in the prosecution of the work provided for in the public works construction contract.

X E. Forfeit the amount of the Bid Bond if he/she fails to enter into a contract with Chatham County to do and/or furnish everything necessary to provide service and/or accomplish the work stated and/or specified in this bid proposal for the bid amount.

3.4 WARRANTY REQUIREMENTS:

- a. Provisions of item 2.7 apply.
- b. Warranty required.
- Х

- 1. Standard warranty shall be offered with bid.
- 2. Extended warranty shall be offered with bid. The cost of the extended warranty will be listed separately on the bid sheet.

3.5 **TERMS OF CONTRACT:** (check where applicable):

- a. Annual Contract (With automatic renewal options for four (4) additional one (1) year terms if all parties agree)
- b. One-time Purchase

X c. Other **ONE TIME CONTRACT**

3.6 **AUDITS AND INSPECTIONS:**

At any time during normal business hours and as often as the County may deem necessary, the Contractor and his subcontractors shall make available to the County and/or representatives of the Chatham County Department of Internal Audit for examination of all its records with respect to all matters covered by this Contract. It shall also permit the County and/or representatives of the Department of Internal Audit to audit, inspect, examine and make copies, excerpts or transcripts from such records of personnel, conditions of employment and other data relating to all matters covered by this Contract. All documents to be audited shall be available for inspection at all reasonable times in the main offices of the County or at the offices of the Contractor as requested by the County.

CONVERSATIONS OR CORRESPONDENCE REGARDING THIS SOLICITATION OR REPORT BETWEEN PROSPECTIVE OFFERORS AND PERSONS OUTSIDE THE CHATHAM COUNTY PURCHASING OFFICE WILL NOT BE CONSIDERED OFFICIAL OR BINDING UNLESS OTHERWISE SPECIFICALLY AUTHORIZED WITHIN THIS DOCUMENT.

The undersigned bidder or proposer certifies that he/she has carefully read the preceding list of instructions to bidders and all other data applicable hereto and made a part of this invitation; and, further certifies that the prices shown in his/her bid/proposal are in accordance with all documents contained in this Invitation for Bids/ Proposals package, and that any exception taken thereto may disqualify his/her bid/proposal.

This is to certify that I, the undersigned bidder, have read the instructions to bidder and agree to be bound by the provisions of the same.

This	day of	20
BY		
	SIGNATU	RE
<u> </u>	TITLE	
	COMPAN	Y

Phone / Fax No's. / e-mail

CHATHAM COUNTY, GEORGIA SURETY REQUIREMENTS

A Bid Bond for five percent (5%) of the amount of the bid <u>is</u> required to be submitted with each bid.

A Performance Bond for one hundred percent (100%) of the bid **<u>shall</u>** be required of the successful bidder.

The Bidder certifies that he/she has examined all documents contained in this bid package, and is familiar with all aspects of the proposal and understands fully all that is required of the successful bidder. The Bidder further certifies that his/her bid shall not be withdrawn for thirty (30) days from the date on which his bid is publicly opened and read.

The Bidder agrees, if awarded this bid, he/she will:

- A. Furnish, upon receipt of an authorized Chatham County Purchase Order, all items indicated thereon as specified in this bid proposal for the bid amount, or;
- B. Enter a contract with Chatham County to do and/or furnish everything necessary to provide the service and/or accomplish the work as stated and/or specified in this bid proposal for the bid amount, and;
- C. Furnish, if required, a Performance Bond, and acknowledges Chatham County's right to require a Performance Bond of a specific kind and origin, and;
- D. Forfeit the amount of the Bid Bond if he/she fails to enter a contract with Chatham County as stated in (B) above, within fifteen (15) days of the date on which he/she is awarded the bid, and/or;
- E. Forfeit the amount of the Performance Bond if he/she fails to execute and fulfill the terms of the contract entered. The amount of forfeiture shall be:
 - 1. The difference between his/her bid and the next lowest, responsible bid that has not expired or been withdrawn, or;
 - 2. The difference between his/her bid and the amount of the lowest, responsible bid received as a result of rebidding, including all costs related to rebidding.

COMPANY

DATE

SIGNATURE

TITLE

TELEPHONE NUMBER

SPECIFICATIONS FOR:

TIDE GATE MONITORING FOR PIPEMAKERS CANAL

The project is located within the limits of the Georgia Ports Authority facility in Garden City, Georgia. The location of the project work is the existing tide gate structures some 1200' upstream of the junction of Pipemakers Canal within the Savannah River and the GPA road bridge across the canal some 1000' further west.

The work consists of limited dewatering operations, removal of existing controls, installation of new controls, cameras, flow monitoring devices, staff gauges and associated connections, wiring, and conduits as detailed in the Contract Documents. Capacity for stormwater drainage in the canal must be maintained at all times.

This shall be a Lump Sum contract.

COMMENCEMENT AND COMPLETION:

WORK SHALL BEGIN WITHIN 10 DAYS AFTER RECEIPT OF "NOTICE TO PROCEED". TIME OF COMPLETION OF THE WORK SHALL BE <u>60</u> CALENDAR DAYS FRO THE TIME THE CONTRACTOR INFORMS THE COUNTY THAT THE EQUIPMENT IS ON SITE. TOTAL CONTRACT TIME SHALL BE <u>180</u> CALENDAR DAYS.

TIDE GATE MONITORING at PIPEMAKERS CANAL

BID SCHEDULE

ITEM NUMBER

DESCRIPTION

1 Tide gate monitoring system, complete, including mobilization, demolition of items to be removed, acquisition and installation of flow meters, cameras, gauges, and other items shown on the plans, making the system operational, instruction of owner's personnel, and all other work as required to complete the project in accordance with the plans and specifications Job Lump Sum_

2 Field Condition Allowance

3 GPA Allowance

Job

Job

Lump Sum Total

\$_____

Lump Sum

Lump Sum

5,000

15,000

NAME /TITLE

COMPANY

ADDRESS

PHONE / FAX NO'S

E-MAIL

LIST OF SUBCONTRACTORS

I do_____, do not ______, propose to subcontract some of the work on this project. I propose to subcontract work to the following subcontractors: <u>NOTE:</u> M/WBE PARTICIPATION.

NAME AND ADDRESS	TYPE OF WORK	
,		
		-

SIGNED:

CONTRACTOR

7

SPECIAL CONDITIONS 01600

PART 1 – PROJECT DESCRIPTION

The project is located within the limits of the Georgia Ports Authority facility in Garden City, Georgia. The location of the project work is the existing tide gate structures some 1200' upstream of the junction of Pipemakers Canal within the Savannah River and the GPA road bridge across the canal some 1000' further west.

The work consists of limited dewatering operations, removal of existing controls, installation of new controls, cameras, flow monitoring devices, staff gauges and associated connections, wiring, and conduits as detailed in the Contract Documents. Capacity for stormwater drainage in the canal must be maintained at all times.

The work will be completed within the secured perimeter of the Georgia Ports Authority facility. Contractor employees and service providers must adhere to the security measures listed in this section. (See Note 6-4 below).

PART 2 – CONTRACT DOCUMENTS

2.	1	Tec	hnical	S	pecifications:
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	Α.	01600	Special Condition	าร
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- B. 16010 Basic Electrical Requirements
- C. 16100 Basic Materials
- D. 16400 Distribution Equipment
- E. 17000 Instrumentation, Data Logging, and Video System

2.2 Drawings:

- E1 Overall Site Plan, Legend and General Notes
- E2 Site Plan
- E3 One-Line Diagram and Details

PART 3 – DOCUMENTATION

3.1 Documentation to be provided with requests for payment

A.In addition to the documentation described elsewhere in the Contract Documents, the Contractor shall submit with each request for payment the following:

1. Copies of material delivery tickets. The Contractor shall be responsible for collecting these documents at the time of delivery. The delivery tickets shall not relieve the Contractor of his responsibility to ensure the materials are in accordance with the contract with the contract documents. Missing or incomplete documentation of delivered materials may be cause for delay/denial of payment.

2. Copies of invoices from Georgia Ports Authority for project related costs for which reimbursement is sought.

3. Prior to submitting a request for payment, the Contractor shall review the extent of work completed with the County's representative for accuracy and completeness.

PART 4 – FINE

4.1 Fine

A. A **\$1,000 per day** fee shall be assessed against the Contractor and withheld from the Contract Price for each and every day between the end of the contract period (including any approved extensions) and issuance of the Notice of Substantial Completion. The full amount of fines will be deducted from the final payment to the contractor.

PART 5 – ALLOWANCES

5.1 Field Condition Allowance

The Field Condition Allowance shown on the bid sheet shall belong to Chatham County. The purpose of this Allowance is to allow the County to designate actions associated with completion of the project which are not indicated on the plans, but which are dictated by field conditions. Bidders shall not use this Allowance to assume any Contractor costs known or unknown at the bidding. Chatham County must approve use of the Allowance. All bidders shall include this Field Condition Allowance within their base bid. Any unused allowance shall revert to Chatham County.

5.2 GPA Allowance

There may be certain instances during the completion of the work that lead to the contractor being billed for services provided by Georgia Ports Authority personnel. An example of this would be payment for services provided by the Port Police to maintain ready ingress/egress through the normally locked gate at the tide gate structure. The contractor shall pay these invoices upon receipt and request reimbursement by submitting the invoices with the pay application.

The GPA Allowance shown on the bid sheet shall belong to Chatham County for the purposes noted above. Bidders shall not use this allowance to assume any contract costs known or unknown at the time of bidding. All bidders shall include this allowance in the base bid. Any unused allowance shall revert to the County. The allowance shall not be used to pay for fines (either GPA or County) or for costs associated with the work as defined in the documents (i.e., costs for the traffic control for the flow meter installation).

PART 6 – SPECIAL REQUIREMENTS OF CONSTRUCTION

- 1. Pipemakers Canal is a primary drainage outfall for a substantial portion of Chatham County. All flow out of the canal must pass through the tide gate structure. Due to this condition, it is imperative that drainage capacity be maintained throughout the construction period.
- 2. Maintenance of gate functions shall remain with Chatham County Public Works throughout the construction period. The contractor shall not remove or otherwise damage any feature of the gate control and operating system except as indicated. Any costs associated with damage to the features, or otherwise resulting from same, shall be the responsibility of the contractor.
- 3. Canal Water Data: County records on water depth and flow in the canal are available for the gate structure. The normal dry weather water elevation upstream of this structure is minus 3 feet NAVD88 datum (4 feet of water in the canal). During wet weather events, the water level in the canal at the sluice gate structure may reach elevation 5 feet NAVD88 or greater depending upon the severity of the rain event.

Downstream water elevations will vary in accordance with the tide conditions in the Savannah River. The low tide elevation is typically in the range of (-)3 to (-)1 MSL. The high tide elevation may range from 4 to 7 MSL.

The estimated flow is 1600 cfs for a 50 year storm event (9 inches in 24 hours). The contractor shall monitor weather and provide measures to protect and enable work in these conditions.

- 4. Although most of the project site is on Chatham County right-of-way, access to the site is through and across the property of the Georgia Ports Authority. The Port is a secure zone. The following requirements will be understood and adhered to by all Contractor employees, subcontractors and suppliers who will be on the site:
 - a) All employees of the contractor and any subcontractors must have a valid Transportation Worker Identification Credential (TWIC Card) issued under the authority of the United States government. All employees must also have a Georgia Ports Authority identification card issued by the Port Police. See Note G7 on sheet

E1 for special considerations/concerns.

- b) The prime contractor and all subcontractors must be registered with GPA. The process of obtaining company registration and individual credentials can be found at <u>www.gaports.com/departments/customerservice/credentials.aspx</u>. For the time frame expected for the project, application before February 10, 2017, is recommended.
- c) Suppliers and those delivering goods and materials to the project site must have the same credentials. The contractor shall ensure that those who will perform this function have, or can obtain, the required documents. Access to non-credentialed personnel can be arranged with a visitors pass and fully credentialed escort; this should occur only on a very limited basis.
- d) All costs associated with obtaining credentials will be the responsibility of the Contractor.
- e) The GPA will be listed as an additional insured on the Contractor's insurance certificates.
- f) The project site is separated from the Port facility by a fence with gates. The locks on the gate can only be opened and closed by the Port Police. The gate will be locked at times when there is no police presence, even if there are workers inside, unless otherwise determined by the Port Police. The police must be contacted to return to the site to reopen the gate when additional ingress/egress is necessary.

To provide the most effective and secure access for the contractor, full time Port Police presence can be arranged by the contractor for days when the workers will be on site. The Port Police and contractor shall reach agreement on the days and times of the police presence, if any.

The contractor shall be responsible for informing the Port Police of any days when work will not be ongoing, or where the full time police presence will not be needed. This notice shall be provided at least 24 hours in advance of such day or days. Costs associated with these actions shall be reimbursed as noted in Part 5, note 5.2

- g) The access route to the site is across the Port facility and is under jurisdiction of the Port Police. The Contractor should adhere to all restrictions posted or indicated and any directions given by the Port Police.
- h) Conditions may dictate a temporary cessation or limitation of access rights. This would be a basis for a contract extension, if documented. The contractor shall make no claims against GPA for costs arising from such action.
- i) Hot work permits for actions such as welding must be obtained on a daily basis from the Port Police. The Contractor shall be responsible for obtaining the permits before beginning the covered activities.

- j) The Contractor will be responsible for payment of any fines assessed to GPA as a result of the Contractor's activity. Should the contractor not pay these fines, Chatham County will reimburse GPA directly then withhold the amount from funds due to the Contractor.
- Any violation of Port rules/policies will be basis for banning of the Contractor from the facility. If this occurs, Chatham County will be responsible for engaging a qualified contractor to complete the work. The banned contractor shall be responsible for any additional costs to Chatham County resulting from the action.
- j) GPA has provided a list of Security, Health and Environmental requirements applicable to contractors on Port property. These requirements, along with a contractor compliance checklist and a list of emergency numbers, can be found at the end of this section. The Contractor shall complete his work in full accord with these requirements unless a waiver is granted by GPA. Written confirmation of this shall be provided to Chatham County.
- k) Access to the site will be through Gate 5 to the Cross Terminal Road, then south to the Pipemakers Canal, then on facility roads along either side of the canal to the site (schematic representation is included at the end of this section). The contractor and his forces shall not enter into other parts of the Port facility without authorization.
- 5. The County will pay for all materials testing as required by the contract. Testing will be performed by an independent testing lab that is hired by the County. The County will not pay for testing in support of contractor operations/schedule. The contractor will be required to pay for tests which indicate failure to meet requirements and necessitate retests.
- 6. Any damage to the tide gate structure resulting from the Contractor's operations shall be repaired at the expense of the Contractor. Chatham County will be the sole determinant of the extent of required repairs and the acceptability of the Contractor's efforts.
- 7. The Contractor shall comply with all local, state and federal regulations as they pertain to construction activities (erosion control, etc.).
- 8. All efforts have been made to identify every underground and above ground utility, however, the contractor has the ultimate obligation to proceed with caution when a suspected utility line is present in the excavation. Any lines, which are not shown to be abandoned, shall be repaired immediately if broken during construction.
- 9. Work hours shall be limited to 7:00 am to 6:00 pm Monday through Friday and shall exclude weekends and holidays unless otherwise approved by Chatham County, except as discussed below.
- 10. It is anticipated that installation of the flow meter and associated appurtenances on the GPA road bridge will be completed, in full or in part, from the roadway. This will require that one lane of roadway be closed, with all remaining northbound traffic restricted to the inner

lane. To minimize conflicts with traffic, this operation must be done on a Sunday only. The contractor shall be responsible for coordinating the closure and work with GPA and Chatham County. Should all work not be completed on the initial Sunday, the remainder would be finished on subsequent Sundays.

The contractor shall be responsible for providing all measures of traffic control, including, but not limited to, barricades, barriers, channelization devices, warning and direction signs, and flaggers. Costs associated with the closure shall be included in the lump sum price bid for the project.

The contractor shall prepare a traffic control plan showing the measures proposed. The plan must be submitted to, and accepted by, both Chatham County and GPA prior to commencement of the work.

- 11. The Contractor shall obtain an Encroachment permit from the Department of Public Works prior to any work within County rights of way. All work is to be performed within the existing rights of way and easements as shown on the plans unless coordinated with others. Permission to use private property outside of these areas shall be obtained by the Contractor in writing. Copies of such agreements shall be provided to the Chatham County Engineering Department.
- 12. A detailed construction schedule for the project shall be provided to and approved by Chatham County prior to beginning demolition or construction.

PART 7 – PAYMENT

7.1 Payment

A. All items of work required to complete this project in accordance with the contract documents, exclusive of items covered by the field condition and GPA allowances, shall be included in the lump sum price bid for the Tide Gate Monitoring System, complete. This includes work specifically shown as well as actions which would reasonably be expected to be associated with such work.

PART 8 -- PRE-BID CONFERENCE AND SITE VISIT

All perspective bidders are required to attend a mandatory pre-bid meeting and mandatory site visit. No bid will be accepted from a contractor who does not attend the pre-bid meeting and the site visit.

The MANDATORY pre-bid meeting will be held on January 17, 2017 at 10 AM at GPA Annex 2 Auditorium located at 100 main street (S.R. 25) in Garden City, Georgia. Details of the site visit will be provided at this meeting. It is anticipated that the site visit will occur immediately after the meeting with transportation and escort provided by GPA.

CHATHAM ENGINEERING

CHATHAM COUNTY PIPEMAKER CANAL MONITORING

DIVISION 16 - ELECTRICAL

16010 - BASIC ELECTRICAL REQUIREMENTS

1.01 QUALITY ASSURANCE

- A. All electrical work shall be in accordance with the following codes and agencies:
 - 1. The National Electrical Code (NFPA-70), 2014 Edition with Georgia Amendments.
 - 2. The International Building Code, 2012 Edition with 2014 & 2015 Georgia Amendments.
 - 3. Regulations of the local utility company concerning metering and service entrance.
 - 4. State and local ordinances governing electrical work.
- B. All materials shall be new and shall conform to standards where such have been established for the particular material. All UL listed equipment shall bear the UL label.

1.02 WARRANTY

A. The contractor shall warrant to the owner that all work shall be free from defects and will conform to the contract documents. This warranty shall extend not less than one year from the date of acceptance by the owner.

1.03 DRAWINGS

- A. The drawings indicate the general arrangement of electrical equipment, based on one manufacturer's product. Coordinate installation of equipment with all other trades. Do not scale drawings for connection locations. Bring all discrepancies to the immediate attention of the engineer.
- B. Contractor shall install and circuit all electrical work as indicated on drawings unless specific site conditions require a change or rerouting of this work. He shall keep a record of the location of all concealed work, including the underground utility lines.

1.04 EQUIPMENT REQUIRING ELECTRICAL SERVICE

- A. Review all specification sections and drawings for equipment requiring electrical service. Provide service to and make connections to all such equipment.
- B. Drawings are based on design loads of one manufacturer. If equipment actually furnished have loads, numbers of connections, or voltages other than those indicated on the drawings, then control equipment, feeders, and overcurrent

CHATHAM COUNTY PIPEMAKER CANAL MONITORING

devices shall be adjusted as required, at no additional cost to the owner. Such adjustments are subject to review by the engineer.

C. Catalog numbers indicated with equipment, devices and lighting fixtures are for convenience only. Errors or obsolescence shall not relieve the furnishing of items which meet the technical description given in specifications, noted, or required by function designated.

1.05 SCHEDULING OF OUTAGES

A. Electrical work requiring interruption of electrical power which would adversely affect the normal operation of other portions of the owner's, or adjacent, property, shall be done at other than normal working hours. Normal working hours shall be considered 8:00 a.m. to 6:00 p.m., Monday through Friday. Schedule the interruption of electrical power three working days prior to actual shutdown.

1.06 SITE INVESTIGATION AND RENOVATION CONDITIONS

- A. Prior to submitting bids for the project, visit the site to become familiar with existing conditions. The project shall be restored to its existing condition, with the exception of work under this contract, prior to final payment.
- B. Provide additions and alterations to existing work required to produce a complete electrical installation. Provide for the removal, reconnection or relocation of existing circuit wiring, wiring devices, lighting fixtures, etc., necessitated by the new work. If any portion of an existing circuit is in an area where no new work is being done, but is made electrically discontinuous by the new work, it shall be recircuited to maintain electrical continuity. Cutting, channeling, chasing, or drilling of walls, partitions, ceilings, or other surfaces and support, or anchorage of conduit, or other electrical work, shall be done without damage to other piping or building equipment. Existing surfaces shall then be patched and painted to match the surrounding areas.

1.07 PRODUCT DELIVERY, STORAGE, HANDLING, AND PROTECTION

A. Provide a dry, weather tight space for storing materials. Store packaged materials in original undamaged condition with manufacturer's labels and seals intact. Handle and store material in accordance with standards to prevent damage. Equipment and materials shall not be installed until such time as the environmental conditions of the job site are suitable. Replace damaged materials.

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1.08 CLEANING AND PAINTING

A. Remove oil, dirt, grease and foreign materials from all equipment to provide a clean surface. Touch up scratched or marred surfaces of lighting fixtures and cabinet trims, and equipment enclosures with paint manufactured specifically for that purpose.

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2.01 RACEWAYS

- A. The following specifications and standards are incorporated into and become a part of this specification:
 - 1. Underwriter's Laboratory, Inc. Publications 1, 6, 467, 651, 797, 1242.
 - 2. American National Standards Institute C-80.1, C-80.3.
- B. Raceway is required for all wiring, unless specifically indicated or specified otherwise. The minimum size of conduit shall be ³/₄", but shall not be less than size indicated on the drawings or required by the NEC.
- C. Conduits shall be as specified for the following conditions:
 - 1. Conduits exposed above grade shall be galvanized rigid steel (GRS) or intermediate metal conduit (IMC).
 - 2. Conduits installed in direct contact with earth shall be schedule 80, heavy wall PVC. Where transition is made from below earth to any type of raceway out of earth, make transition with a rigid galvanized fully tapped elbow.
 - 3. Use flexible conduit for connections to lighting fixtures, and all vibrating equipment.
 - a. Length shall not exceed 18."
 - b. Maintain ground continuity through flexible conduit with a green equipment grounding conductor.
 - c. Liquid-tight flexible conduit shall be used in exterior installations.
- D. GRS and IMC fittings shall be standard threaded couplings, threaded hubs, bushings, and elbows. All GRS and IMC fittings shall be steel or malleable iron; set screw or non-threaded fittings are not permitted. Non-metallic conduit fittings shall be of the same material as the conduit furnished and shall be the product of the same manufacturer.
- E. All conduit support parts and hardware shall be hot-dipped galvanized. Conduit straps shall be single hole cast metal type or two hole galvanized metal type. Conduit support channels shall be 1 ¹/₂" x 1 ¹/₂" 14 gauge channel. Wire or chain is not acceptable for conduit hangers. Individual conduit hangers shall be galvanized spring steel specifically designed for the purpose.

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- F. Leave all empty conduits with a 200 lb. test nylon cord pull line. Complete raceway runs prior to installation of wires or cables. Deformed conduits shall be replaced. Protect conduits against dirt and foreign debris with conduit plugs.
- G. Fasten conduit support devices to structure with toggle bolts on hollow masonry, expansion anchors on solid masonry or concrete, and machine bolts or clamps on steel. Nails are not acceptable. Seal all conduits with insulating electrical putty to prevent entrance of moisture.
- H. Conduit shall be run parallel or at right angles to structural members. Support branch circuit conduits at intervals not exceeding 10 feet, and within 3 feet of each box or change of direction.

2.02 WIRES AND CABLES

- A. The following specifications and standards are incorporated into and become a part of this specification:
 - 1. Underwriter's Laboratories, Inc. Publications 44, 83, 486, 493.
 - 2. Insulated Cable Engineers Association Standards S-61-402, S-66-524.
 - 3. National Electrical Manufacturer's Standards WC-5, WC-7.
- B. Conductors shall be electrically continuous and free from short circuits or grounds.
- C. All open, shorted, or grounded conductors and any with damaged insulation shall be removed and replaced with new material free from defects.
- D. Conductor size shall be minimum of No. 12 AWG, unless larger size is required by the drawings or the NEC. Insulation voltage level rating shall be 600 volts. All wire and cable shall bear the UL label. Data, and communication conductors are not included in this specification; they shall comply with NEC requirements.
- E. Conductors No. 10 and smaller shall be solid copper, 90 degrees C. type THWN/THHN. Conductors larger than No. 10 shall be stranded copper, 90 degrees C. type THWN/THHN, or XHHW. Fixture wire shall be No. 16 AWG silicone rubber insulated, stranded fixture wire type SFF-2 or No. 16 thermoplastic nylon jacketed stranded fixture wire type TFFN.
- F. Color code all conductors. No. 10 and smaller shall have solid color compound or coating. No. 8 and larger shall have solid color compound or colored phase tape; tape shall be installed on conductors in every box, termination point, cabinet, or enclosure. Coding shall be as follows:
 - 1. 240/120 volt single phase three wire system: Phase A-black, Phase B-red, neutral-white.

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- 2. Grounding conductors shall be green or green traced.
- Neutral conductors No. 6 and smaller shall have soild insulation or continuous color tape for the entire length of conductor. Neutral conductors No. 4 and larger shall have colored phase tape. Colored tape shall be installed on conductors in every box, at each termination point, cabinet or other accessible location.
- G. Maintain phase rotation established per N.E.C. at service equipment throughout entire project.
- H. Group and lace with nylon tie straps all conductors within enclosures. Make splices in conductors only within junction boxes, wiring troughs, or other NEC approved enclosures. Do not splice conductors in pull boxes, switchboards, panelboards, safety switches, or motor control enclosures. Identify each conductor as to circuit connection in all boxes and enclosures.
- I. Terminate stranded conductors No. 10 AWG and smaller with crimp-type lug or stud. Crimp terminal shall be the configuration type suitable for terminal point.
- J. Torque each terminal connection to the manufacturer's recommended torque value. A calibrated torquing tool shall be used to insure proper torque application.
- 2.03 BOXES
 - A. The following specifications and standards are incorporated into and become a part of this specification:
 - 1. Underwriter's Laboratories, Inc. Publications 50, 467, 514.
 - B. Boxes shall be rustproof cast metal. Outlet boxes for GFI receptacles shall be 2 3/4" deep.
 - C. Outlet boxes for switches and receptacles in exposed wiring systems shall be cast FS type with matching device plate. For exterior installations, use weatherproof in-use type covers.
 - D. Dimensions of pull and junction boxes shall not be less than those required by the NEC for the number, size, and position of conductors entering the box.
 Wood supports within pull boxes are not acceptable. Provide box covers for all boxes.
 - E. All boxes shall be completely accessible and as required by the NEC. Box sizes shall be increased from those outlined above if required by Article 314 of the NEC.

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- F. Support every box from structure. Secure to metal with sheet metal screws and solid masonry or concrete with expansion anchors.
- G. Remove only knockouts as required and plug all unused openings. After completion, using indelible ink wide tip marker, indicate on the cover of each junction and pull box the designation of each circuit contained therein.

2.04 WIRING DEVICES

- A. The following specifications and standards are incorporated into and become a part of this specification:
 - 1. National Electrical Manufacturer's Association Publications WD-1, WD-5.
- B. Weatherproof, 20 amp, 277 volt switches shall be Hubbell 1281-1750. Equivalent switches manufactured by Arrow Hart, Legrand, or Leviton are acceptable.
- C. Ground fault interrupter (GFI) receptacles shall be Hubbell GFTWRST83. Equivalent receptacles manufactured by Arrow Hart, Legrand, or Leviton are acceptable.
- D. All devices installed in areas exposed to the weather shall be provided with a weatherproof in-use device plate/cover.
- E. All devices shall be provided with white finish.

2.05 SUPPORTING DEVICES

- A. Provide and install supporting devices which comply with manufacturer's standard materials, design, and construction in accordance with published standards and as required for complete installation.
- B. Coordinate with other electrical work, including raceway and wiring work, as necessary to interface installation of supporting devices. Install hangars, supports, clamps, and attachments to support piping properly from building structure only.

2.06 ELECTRICAL IDENTIFICATION

- A. Install engraved plastic laminate sign on each major unit of electrical equipment. Provide a single line of text, 1/2" high lettering on 1 1/2" high sign (or 2" high sign if 2 lines required). Provide signs for each unit of the following:
 - 1. Panelboards.
 - 2. Electrical cabinets and enclosures.

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- 3. Transformers.
- 4. SCADA Cabinets
- 5. Automatic Transfer Switches.

16400 - DISTRIBUTION EQUIPMENT

3.01 GROUNDING SYSTEMS

- A. Equipment grounding system shall be established with equipment ground conductors. The use of metallic raceways for equipment grounding is not acceptable. Unless indicated otherwise, provide equipment ground the same size as phase conductors.
- B. The following specifications and standards are incorporated into and become a part of this specification:
 - 1. Underwriter's Laboratories, Inc. Publications 44, 83, 467, 486, 493.
 - 2. National Electrical Manufacturer's Association Standards WC-5, WC-7.
- C. Grounding electrode conductors shall be bare or green insulated copper sized as indicated on the drawings. Equipment grounding conductors shall be green insulated type THW, THWN, or XHHW sized as indicated on the drawings. Where sizes are not indicated, grounding conductor shall be sized in accordance with NEC Article 250.
- D. Each receptacle and switch device shall be furnished with a grounding screw connected to the metallic device frame. Provide a conductor termination grounding lug bonded to each enclosure.
- E. Ground all non-current carrying parts of the electrical system, i.e., wireways, equipment enclosures and frames, junction and outlet boxes, machine frames, and other conductive items in close proximity with electrical circuits. Grounding connections to structural steel shall be made with a chemical exothermic weld.
- F. Grounding conductors for branch circuits are not shown on the drawings; however, grounding conductors shall be provided in all branch circuit raceways and cables, including flexible conduit. Grounding conductors shall be the same AWG size as branch circuit conductors.
- G. The equipment grounding conductor shall be terminated with a screw or bolt used for no other purpose. Equipment grounding conductors shall terminate on panel board, grounding bus only. Do not terminate on neutral bus.

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3.02 PANELBOARDS

- A. The following specifications and standards are incorporated into and become a part of this specification:
 - 1. Underwriter's Laboratories, Inc. Publications 50, 67,489.
 - 2. National Electrical Manufacturer's Association Publications PB-1, AB-3.
- B. Products of General Electric, Eaton or Square D which comply with these specifications are acceptable.
- C. All panels and circuit breakers shall be UL listed and bear a UL label. Panels shall be of the dead front safety type. Panel enclosures shall be rated NEMA 4X, provide stainless steel enclosure. Provide panels complete with factory assembled circuit breakers connected to the bus bars. Number all panel boards in the following sequence: Circuits 1 and 2 Phase A; circuits 3 and 4 Phase B.
- D. All bus bars shall be copper. Main lugs and main breaker shall be UL approved for copper or aluminum conductors and shall be of a size range for the conductors indicated on the drawings. Each panel shall contain a full size grounding bus and, when required, a full size insulated neutral bus. The neutral and ground busses shall have a sufficient number of lugs to singularly terminate each individual conductor requiring a connection. The ground bus shall be brazed or riveted to the panel enclosure, but not attached to the panel interior. Where designated, each "space' shall include all bussing, device supports and connections for future breaker installation. Where indicated, provide sub-feed or through-feed lugs and increase box height to provide additional cable bending space; lug size shall match ampacity of mains.
- E. Branch circuit panel board width shall be between 20 and 22 inches; depth shall be 5 3/4" maximum. Provide gutters and bending space to conform with the NEC. Key all panels throughout the project alike.
- F. Circuit breakers shall be quick-make, quick-break, thermal magnetic type bolted to the bus. Multi-pole breakers shall be common trip and common reset type; tie handle connections are not acceptable. Interrupting ratings on 240 volt systems shall be 10,000 RMS symmetrical amps minimum; provide higher ratings when indicated on the drawings. Provide the following when specified, indicated on the drawings, or required by the NEC:
 - 1. Ground fault interrupting circuit breaker (GFI).
- G. Mount panel boards with top circuit not more than 6'-6" above finished floor. Enclosures shall be secured by a minimum of four fastening devices. Mount enclosure to metal channel for installations on steel structure.

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H. Provide in each panel board a plastic laminated, typewritten circuit directory mounted under clear plastic in metal holder in the door of the panel reflecting all field changes additions. Install push-in knock-out closure plugs in any unused knock-out openings.

3.03 AUTOMATIC TRANSFER SWITCH

- A. Acceptable Manufacturers: Products of the following manufacturers, which comply with these specifications, are acceptable:
 - 1. Transfer Switches:
 - a. ASCO
 - b. Caterpillar
- B. SUBMITTALS
 - 1. Manufacturer's Product Data:
 - a. Submit material specifications and installations data for products specified under Part 2 Products to include:
 - 1) Transfer switches
 - 2. Shop Drawings: Submit shop drawings to indicate information not fully described by the product data to indicate compliance with the contract drawings. Submittals containing less than the information listed below will be rejected.
 - a. Shop drawings for the transfer switch shall contain not less than the information listed as follows:
 - 1) List of accessories contained in the control panel.
 - 2) Withstand rating in RMS symmetrical amperes.
 - 3. Quality and Service:
 - a. All materials and parts of the transfer switch shall be new and unused. Each component shall be of current manufacture from a firm regularly engaged in the production of such equipment. Units and components offered under these specifications shall be covered by the manufacturer's parts and labor warranty for a minimum of five (5) years from date of Owner acceptance of the project on a new machine, a copy of which shall be included in the shop drawings submittal.
 - b. Submittals will be accepted only on transfer switches which can be properly maintained and serviced without requiring the Owner to stock spare parts or wait longer than twenty-four hours for service. Submittals shall include the nearest location of permanent parts outlet from which parts may be obtained and written assurance that trained service personnel will be available on twenty-four hour's notice. Units with service centers more than 100 miles from project site will not be accepted.
 - 4. Record Drawings

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a. Include in each set three sets of operating, maintenance, and parts manuals covering all components for the transfer switch. Each supplier shall provide instructions to the Owner in operation and maintenance of his equipment, both in written form and with on-site personnel for a minimum of four hours.

3.04 TRANSFER SWITCH(ES)

- A. Transfer switch (es) shall be rated at not less than as indicated on the drawings at rated voltage]. Transfer switch (es) shall be rated and marked for total system load.
- B. Transfer switches serving 120/240 volt single phase three wire loads, shall be three pole.
- C. Transfer switch (es) shall be the automatic type.
- D. Transfer switch (es) shall be rack mounted in a NEMA 4X stainless steel enclosure. Enclosure shall have hinged door with three point latching and factory installed key locking enclosure door.
- E. Operation shall be inherently double-throw whereby all contacts move simultaneously. Electrical spacing shall be equal to or exceed those listed in Table 15.1 of UL-1008. Only those main contact structures specifically designed for transfer switch service shall be acceptable. An overload or short circuit shall not cause the switch to go to a neutral position. A manual operating handle shall be provided. All main contacts shall be silver alloy type protected by arc quenchers and, for switches rated 600 amps and larger, by arching contacts. Operating transfer time shall be 1/15 second or less on switches rated below 600 amps.
- F. All switch and contacts, coils, springs and control elements shall be removable from the front of the transfer switch without removal of the switch panel from the enclosure and without disconnecting power conductors or drive linkages. Control and sensing relays shall be continuous duty industrial type with minimum contact rating of ten amps.
- G. Transfer switch shall be rated to withstand in RMS symmetrical amperes not less than the available symmetrical RMS amperes when protected by the circuit protective device on the line side of the transfer switch. Withstand rating of switch shall be based on switch contacts not welding under fault conditions. Provide switch with current limiting fuses to increase current withstand rating when switch is not rated for fault duty.

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- H. The control panel for each automatic transfer switch shall contain the following accessories:
 - 1. Adjustable 0.5 to 6 second time delay on starting of EPS to override momentary power dips and interruptions of the normal services. Time delay shall be factory set at 1 second.
 - 2. Time delay on transfer to emergency adjustable from 0 to 60 seconds, factory set at 0 seconds.
 - 3. Test switch on enclosure door to simulate failure of the normal power source. ATS shall transfer load to the EPS.
 - 4. Push button to bypass time delay on re-transfer to normal.
 - 5. Close differential voltage sensing shall be provided on all phases of the normal power supply. The pickup voltage shall be adjustable from 85% to 100% of nominal and the dropout voltage shall be adjustable from 75% to 98% of the pickup value. The transfer to emergency will be initiated upon reduction of normal source to 85% of nominal voltage and re-transfer to normal shall occur when normal source restores to 95% of nominals.
 - 6. Independent single phase voltage and frequency sensing of the emergency source. The pickup voltage shall be adjustable from 85% to 100% of nominal. Pickup frequency shall be adjustable from 90% to 100% of nominal. Transfer to emergency upon normal source failure when emergency source voltage is 90% or more of nominal and frequency is 95% or more of nominal.
 - 7. A time delay on re-transfer to normal source. The time delay shall be automatically bypassed if the emergency source fails and normal source is available. The time delay shall be field adjustable from 0 to 25 minutes and factory set at 15 minutes.
 - 8. An unloaded running time delay for emergency generator cool-down, factory set at 5 minutes.
 - 9. A switch with controlled contact adjustable transition time is acceptable.
 - 10. Pilot light for indicating switch in normal position (include fuses and auxiliary contact).
 - 11. Pilot light for indicating switch in emergency position (include fuses and auxiliary contact).
 - 12. An exerciser for exercising standby power plant on a weekly basis shall be provided in the transfer switch. Exerciser shall be set to exercise standby plant for one half hour per week under load. Time of plant exercise shall be set in field. Exerciser timer shall have reserve power back-up, either by battery or spring-wound clock, to ride through power outages to the switch.
 - 13. Auxiliary contact (gold plated) which closes when normal source fails. (Closed after override delay of 0.5 to 6 seconds).

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14.Auxiliary contact (gold plated) which opens when normal source fails. (Opens after override delay of 0.5 to 6 seconds).

- 15. Auxiliary contacts on same shaft as main contacts (closed on normal.)
- 16. Auxiliary contacts on same shaft as main contacts (closed on emergency).

3.05 TRANSFER SWITCH INSTALLATION

- A. Wall mounted transfer switch (es) shall be installed with top of switch no more than seven feet above finished floor. Locate transfer switch (es) to provide working clearance and full accessibility as required by the National Electrical Code.
- B. Lace and group conductors installed in transfer switch with nylon tie straps. Only one conductor shall be installed under terminals. Form and train conductors in enclosure neatly parallel and at right angles to sides of box. Uninsulated conductor shall not extend beyond one-eights inch from terminal lug. Conductors shall be installed such that no stresses are transferred to terminal lugs.
- C. Mounting and Support
 - 1. Mounting
 - a. Enclosure shall be secured to structure by a minimum of four (4) fastening devices. A 1.5 inch minimum diameter round washer shall be used between head of screw or bolt and enclosure.
 - b. Enclosures shall be mounted where indicated on the drawings or specified herein. Support from the structure with fastening device specified.
 - c. Mount enclosure on metal channel (strut), which is connected to structure with fastening device specified, for installations on steel structure.
 - d. Do not splice conductors in enclosure. Where required, install junction box or wireway adjacent to transfer switch and splice or tap conductors in box. Refer to number of conductors in a conduit limitation defined in the WIRES AND CABLES section of the specifications and do not exceed.
 - e. Conductors not terminating in transfer switch shall not extend through or enter transfer switch enclosure.
 - f. Install NEMA 4X stainless steel hole-seals in any unused knock-out openings.
 - g. Cleaning and Adjustment
 - 1) After completion, clean the interior and exterior of dirt, paint and construction debris.

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2) Touch up paint all scratched or marred surfaces with factory furnished touch up paint of the same color as the factory applied paint.

3.06 TESTING

- A. Submit verification letter to Engineer indicating successful completion of sequence of operations testing and certification that all functions are operational. Letter to request load testing approval and schedule of proposed test. Prior to load test, written approval must be provided by Engineer. Representatives of the generator and transfer switch shall be present. The local authority having jurisdiction shall be given advance notification of the time of the final test in order that he may witness the tests.
- B. A failure of any test or any component during a test will require a complete retest program at no additional cost to the Owner.
- C. Provide all fuel, lubricants, and other consumables for testing.
- D. An on-site acceptance test shall be conducted as a final approval test for all Emergency Power Supply Systems.
 - 1. The test shall be conducted after completion of the installation with all EPSS accessory and support equipment in place and operating.
 - 2. Test Results. The EPSS shall perform within the limits specified in the standard NFPA-110, level I.

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3.07 O&M MANUALS

- A. At least three sets of an instruction manual(s) for all major components of the transfer switch shall be supplied by the Manufacturer(s) of the transfer switch and shall contain:
 - 1. A detailed explanation of the operation of the system.
 - 2. Instruction for routine maintenance.
 - 3. Detailed instructions for repair of the transfer switch and other major components of the transfer swtich.
 - 4. Pictorial parts list and part numbers.
 - 5. Pictorial and schematic electrical drawings of wiring systems, including operation and safety devices, control panels, instrumentation and annunciators.

END OF SECTION

SECTION 17000

INSTRUMENTATION, DATA LOGGING AND VIDEO SYSTEM

PART 1 - GENERAL

1.1 INSTRUMENTATION, DATA LOGGING AND VIDEO SYSTEM DESCRIPTIONS

- A. Work included: Provide field instruments, data logging and video equipment as required to allow County personnel to collect level and flow data and to remotely view (via the Internet) the gates and staff gauges.
 - 1. Work includes, but is not necessarily limited to, supplying and commissioning the following:
 - a. Field instruments, as identified below.
 - b. Data loggers, as identified below.
 - c. Video cameras, as identified below.
 - d. All engineering, hardware and software installation and supervision required for a complete and fully operable monitoring system.
 - c. Testing and operational demonstrations as specified.
 - d. Training programs as specified.
 - e. Preparation of operation and maintenance manuals and Record Prints.
 - 2. It shall be the Instrumentation and Control System Integrator's responsibility to identify, terminate, commission and test the field instruments and other hardware supplied under this section of the specifications.
- B. Major components of the instrumentation, data logging and video system include but are not limited to:

Panel/Device	Description & Service	Location
LCP-A	Local Control Panel for Tide Gate Structure Level Data Loggers and Video Camera Equipment	Atop Tide Gate Structure
LE-101A	Upstream Staff Gauge to indicate Upstream Canal Level	Mounts on Upstream Canal Wall.
LE-101B	Ultrasonic Flow Transducer – Measures Mounts in Upstrea Upstream Canal Level Stilling Well.	
LIT-101	Ultrasonic Flow Transmitter – Displays Upstream Canal Level	Mounts in LCP-A.
LE-102A	E-102A Downstream Staff Gauge to indicate Downstream Canal Level Downstream Canal	
LE-102B	Ultrasonic Flow Transducer – Measures Downstream Canal Level	Mounts in Downstream (Existing) Stilling Well.
LIT-102	Ultrasonic Flow Transmitter – Displays Downstream Canal Level	Mounts in LCP-A.
CAM-1 Video Camera to view Upstream Staff Gauge		New Camera Pole #1

Panel/Device	Description & Service	Location	
LED-1	LED Flood Luminaire to illuminate Upstream Staff Gauge	New Camera Pole #1	
CAM-2	Video Camera to view Upstream Gates 1, 2 & 3		
LED-2	LED Flood Luminaire to illuminate Upstream Gates 1, 2 & 3 New Camera Pole		
CAM-3	Video Camera to view Upstream Gates 4, 5 & 6	New Camera Pole #3	
LED-3	LED Flood Luminaire to illuminate Upstream Gates 4, 5 & 6	New Camera Pole #3	
CAM-4	Video Camera to view Downstream Staff Gauge	Existing Camera Pole	
LED-4	LED Flood Luminaire to illuminate Downstream Staff Gauge	Existing Camera Pole	
CAM-5	Video Camera to view Upstream Gates 4, 5 & 6	Existing Camera Pole	
LED-5	LED Flood Luminaire to illuminate Upstream Gates 4, 5 & 6	Existing Camera Pole	
LCP-B	Local Control Panel for Canal Flowmeter Data Logger	Adjacent to GPA Bridge	
FE-1	ISCO LaserFlow Velocity Sensor Mounts in center of t		
FIT-1	ISCO 2160 LaserFlow Module (Transmitter)	Mounts in LCP-B	

C. Related work:

- 1. Documents affecting work of this Section include, but are not necessarily limited to, Special Conditions.
- 2. Division 16; Electrical.

1.2 QUALITY ASSURANCE

- A. The Contractor's attention is directed to the fact that the SCADA system shall be an integrated system and, as such, shall be furnished by a single approved Instrumentation and Control System Integrator who shall provide all of the instruments, equipment, and appurtenances regardless of manufacturer, and who shall be responsible to the Contractor for the complete and satisfactory operation of the entire SCADA system. The Instrumentation and Control System Integrator may bid the project provided all bonding and insurance requirements can be met as required by the commercial terms contained herein.
 - 1. These specifications cover the intended functionality of the equipment, but do not necessarily cover all details necessary for a complete, operable and functional system. The Instrumentation and Control System Integrator shall

supply all devices and appurtenances necessary to provide a complete, operable and satisfactory system as indicated or specified.

- 2. The Contractor shall be fully and solely responsible for the work of the Instrumentation and Control System Integrator and solely responsible to the Owner for having supplied the hardware, instrumentation, programming and integration for the supervisory control and data acquisition system for the water plant.
- 3. The Contractor shall provide personal superintendence and direction to the work, maintaining and supplying complete supervision over and coordination between all subcontractors employed by him.
- 4. The Contractor shall be responsible for defining the limits of the Instrumentation and Control System Integrator's work but will remain solely responsible for the proper operation of the completed system.
- B. Instrumentation and Control System Integrator:
 - 1. It is the intent of these specifications and drawings that the Contractor shall engage an approved and qualified Instrumentation and Instrumentation and Control System Integrator to provide the system as specified and indicated.
 - 2. The Instrumentation and Control System Integrator shall be MR Systems, Inc. of Norcross, Georgia.
- C. Contractor:
 - 1. Shall be fully and solely responsible for the work of the systems supplier and solely responsible to the Owner for having supplied to the Owner the complete supervisory control and data acquisition system.
 - 2. To provide personal superintendence and direction to the work, maintaining and supplying complete supervision over and coordination between all subcontractors employed by him.
 - 3. Shall be responsible for defining the limits of his subcontractors' work.
- D. Technical services:
 - 1. Provide supervisory service of a factory trained service engineer, specifically trained on the type of equipment herein specified, for a period of not less than two (2) 8-hour days during construction to assist the Contractor as requested.
 - 2. Upon completion of equipment installation, provide services of the above service engineer for a period of not less than two (2) 8-hour days for calibration and start-up of the equipment and instructing the operating personnel.
 - 3. The minimum days specified above do not relieve the system manufacturer of providing sufficient service to place the system in satisfactory operation.

1.3 SUBMITTALS

- A. Product data: Within 30 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:
 - 1. Component manufacturing data sheet indicating pertinent data and identifying each component by item number and nomenclature as indicated on the drawings and in the specifications.
 - 2. Component drawing showing dimensions, mounting and external connection details.
 - 3. System wiring schematics, each on a single drawing with full description of operation. Component identification on the schematic shall be as indicated above.
 - 4. A system schematic of the hardware with the component manufacturing data sheets for each item, including all system peripherals.
 - 5. Sample of field service report.
 - 1. Additional requirements for manuals will be found in Part 2 of this Section of the Specifications.

1.4 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Schedule the delivery of the equipment to coordinate with the project completion schedule.
 - 1. Each item of equipment to be tagged with identifying number shown on the Shop Drawings.
- B. Contractor's attention is directed to the fact that equipment has delicate components and extreme care shall be taken in handling to avoid internal and/or external damages.
- C. Damaged equipment will not be accepted.
- D. Equipment not for immediate use shall be stored inside a building, with enclosures under protective coverings and shall be fully protected from moisture, extreme heat and vibration.

1.5 WARRANTY

- A. Upon final acceptance of the project by the Owner, the instrumentation and control system integrator shall furnish a hardware maintenance contract for the instrumentation, data logging and video system providing for an 8-hour response time during normal working hours, five days per week. The duration of this maintenance contract shall be one (1) year.
 - 1. For any service visit during this period, the instrumentation and control system integrator shall provide the Owner and Engineer with a written report

stating the reason for equipment failure and recommendations to prevent recurrence.

2. Prior to expiration of the warranty period, the instrumentation and control system integrator shall provide the Owner with a priced proposal for a one-year extension of the maintenance contract.

1.6 SPARE PARTS

A. Five (5) spares of each type and size of fuse furnished with devices supplied under this section of the Specifications.

PART 2 – PRODUCTS

2.1 GENERAL

- A. The total instrumentation, data logging and video monitoring system could, by this specification, consist of a series of individual control and monitoring loops, each configured to perform a specific function associated with the total plant flow scheme.
- B. Each loop consists of field and panel mounted analog hardware components along with computer software functions as required to perform the control and monitoring operations described in the individual loop descriptions.

2.2 SCADA FUNCTIONAL DESCRIPTIONS

- A. General:
 - 1. See Drawings for Control System Overview.
 - 2. The instrumentation, data logging and video equipment shall include all the hardware described herein with programming and application software as required to allow it to monitor and record the system functions described herein.
- B. Field Instruments shall be supplied to monitor and record the following parameters:
 - 1. Canal Upstream Level.
 - 2. Canal Downstream Level.
 - 3. Canal Flow Velocity.
- C. Video cameras shall be supplied to permit remote monitoring of:
 - 1. Canal Upstream Level Staff Gauge.
 - 2. Upstream View of Bar Racks.
 - 3. Downstream Tide Gates 1, 2 & 3.
 - 4. Downstream Tide Gates 4, 5 & 6.
 - 5. Canal Downstream Level Staff Gauge

- D. Data Logging shall be provided for the following signals. The Owner will visit the site periodically (approximately once per month) to retrieve the data stored in each of the three (3) data loggers.
 - 1. Canal Upstream Level.
 - 2. Canal Downstream Level.
 - 3. Canal Flow Rate.

2.3 ULTRASONIC LEVEL SENSORS, TRANSMITTERS AND ENCLOSURE

- A. Ultrasonic level transmitter modules shall be Teledyne ISCO Model 2160 LASERFLOW with data logging capability and 2100 Series AC Power Adapter.
- B. Ultrasonic level sensors shall be Teledyne ISCO TIENet 310. Each level sensor shall be provided with an adequate length of factory supplied cable, including a TIENet plug, to be cut to length in the field.
- C. For each ultrasonic level sensor provide one (1) wall mounting bracket.
- D. For each ultrasonic level transmitter module provide one (1) sunshade to protect the sensor from direct sunlight.
- E. The Owner currently owns two (2) user licenses of Version 5.1 of ISCO's Flowlink Data Analysis software. This is the current version of this software. Free updates for version 5 are periodically available online.
- F. Provide two (2) engraved stainless steel nametags; one for the level sensor and one for the level transmitter. Each nametag will contain the instrument tag and range of the instrument.
- G. Provide Ultrasonic level sensors and transmitter modules for the following applications:
 - 1. Canal Upstream Level.
 - 2. Canal Downstream Level.
- H. The two ultrasonic level transmitter modules will be mounted by the instrumentation and control system integrator in a wall-mounting, NEMA 4X enclosure constructed of #304 stainless steel with white powder coating. The enclosure shall utilize a 3point latch with handle. An AC power surge protector shall be located inside the enclosure to protect the ultrasonic level transmitter power modules from power transients.

2.4 LASER DOPPLER VELOCITY LASER FLOW SENSOR AND TRANSMITTER

A. The Laser Doppler Velocity Ultrasonic flow transmitter module shall be Teledyne ISCO Model 2160 LaserFlow with data logging capability and 2100 Series AC Power Adapter.

- B. The LaserFlow sensor shall be Teledyne ISCO TIENet 360. The flow sensor shall be provided with an adequate length of factory supplied cable, including a TIENet plug, to be cut to length in the field.
- C. Provide one (1) permanent wall mounting bracket for the TIENet 360 LaserFlow sensor.
- D. Provide one (1) sunshade to protect the flow sensor from direct sunlight.
- E. Provide latest version of Flowlink Pro Data Analysis software.
- F. Provide two (2) engraved stainless steel nametags; one for the level sensor and one for the level transmitter. Each nametag will contain the instrument tag and range of the instrument.

2.5 INTERCONNECTING CABLES

- A. The Instrumentation and Control System Integrator shall furnish all specialty cables required for interconnections between the level and flow sensors and their respective transmitters.
- B. Wiring for 120 VAC power shall be furnished and installed by the General Contractor or his designated electrical subcontractor.

2.6 FACTORY TESTING

- A. If requested, the Instrumentation and Control System Integrator shall provide a factory software demonstration to verify operation of the video portion of this system. Factory testing will be witnessed by representatives of the Owner and the Consulting Engineer upon their notification.
- B. Whether witnessed or not all software shall be fully factory tested by the Instrumentation and Control System Integrator prior to delivery to the jobsite.

2.7 IP CAMERAS & MONITORING SYSTEM SOFTWARE

- A. IP cameras shall be Pelco Sarix Pro2 Series 3MP IR Environmental Bullet Camera with 10.5 mm lens and IR LED. Power supply to be PoE (IEEE 802.3af, Class 3); 24 VAC nominal, 18 to 32 VAC range, or 12 VDC.
- B. For each camera supply one (1) Pelco IBP2BBAP-ES Sarix Pro2 Series surface mounting box with environmental rating.
- C. For each camera supply one (1) Pelco IBP2-PLMT Sarix Pro2 Series adapter plate for pole mounting.

- D. Video may be viewed from a web browser for PC and/or via a free Pelco App for iPhone or Android devices.
- E. Each video camera will be wired back to LCP-A for connection to a Verizon Wireless Cellular Modem.
- 2.10 LCP-A: Local Control Panel for Tide Gate Structure
 - A. LCP-1 shall be constructed of #304 stainless steel to meet NEMA 4X requirements. This panel shall be sized approximately 48" high x 36" wide by 12" deep and shall be painted with white powder-coated paint.
 - B, All field wiring terminations shall be made to terminal strips capable of accommodating up to #12 AWG wire. Terminal strips shall be mounted using DIN rails. Terminal strips shall be as manufactured by Phoenix, Square D, Allen-Bradley, or approved equal.
 - C. The following components shall be mounted inside LCP-A:
 - 1. AC Power Surge Protector.
 - 2. 15 Amp Circuit Breaker.
 - 3. LIT-101 Ultrasonic Flow Transmitter module.
 - 4. AC Power Supply for LIT-101.
 - 5. LIT-102 Ultrasonic Flow Transmitter module.
 - 6. AC Power Supply for LIT-102.
 - 7. Power Supplies for POE cameras.
 - 8. One (1) Sierra Wireless RV50 Cellular Modem, Verizon (CDMA) Sierra Wireless Cellular Gateway for each camera.
 - 9. Ancillary components as required.
- 2.11 LCP-B LOCAL CONTROL PANEL FOR CANAL FLOWMETER DATA LOGGER
 - A. The following components shall be mounted inside LCP-B:
 - 1. AC Power Surge Protector.
 - 2. 15 Amp Circuit Breaker.
 - 3. ISCO 2160 LaserFlow Module/Transmitter (FIT-1).
 - 4. AC Power Supply for FIT-101, if required.
 - 5. Ancillary components as required.

2.12 INSTRUCTION MANUALS

- A. Provide six (6) sets of instruction manuals, sturdily bound.
- B. Operating instructions to incorporate a functional description of the entire system including the "as-built" system schematics.

C. Include and clearly define special maintenance requirements particular to the system along with special calibration and test procedures.

2.13 DRAWINGS

- A. Provide "as-builts" drawings containing all necessary information for proper maintenance and system operation. Drawings to be comprehensive and shall include all new and existing system components and interconnecting wiring.
- B. Interconnection information between system components; and system components and packaged equipment found in other sections of these specifications, shall be complete with all necessary interconnection information.
 - 1. Notes referring to equipment manufacturer's drawings for proper interconnection will not be acceptable.
- C. Systems manufacturers to be responsible for furnishing the drawings.
- D. Furnish a comprehensive fiber optic network overview drawing, including strand by strand identification and termination. Ensure each new and existing fiber termination panel has fiber identification stickers.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
- 3.2 INSTALLATION
 - A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.
 - B. Install the work of this Section in strict accordance with the original design and the manufacturer's recommended installation procedures as approved by the Engineer, anchoring all components firmly into position for long life under hard use.
 - C. Perform all wiring in compliance with NEC.

3.3 TRAINING

A. System supplier to provide operation and maintenance training for Owner's personnel to ensure their adequate knowledge of use of the system.

B. Provide two (2) 2-hour training classes for up to six (6) County employees. The morning class will be held onsite to review the new instrumentation, data logger and video equipment supplied. The afternoon class will be held at the County's Conference Room to train personnel on how to use the video software remotely.

3.4 START-UP SERVICES

- A. Upon final completion of all components determine date of start-up jointly with Engineer, Owner and Contractor.
- B. The Instrumentation and Control System Integrator shall be responsible for placing SCADA equipment and systems in operation.
- C. The Instrumentation and Control System Integrator shall provide qualified personnel on the job site until successful operation of SCADA system is attained.

3.5 FIELD SERVICE REPORTS

A. Provide service reports for each day that a representative of the System Integrator is on site. The service reports shall include all tasks performed, time on site and shall be signed by a representative of the Owner. One copy shall be left with the Owner and one copy shall be submitted to the Engineer.

3.6 MEASUREMENT AND PAYMENT

A. No separate measurement or direct payment will be made for the items under this Section and all costs for same shall be included in the lump sum price bid for the project.

END OF SECTION

ATTACHMENT A

DRUG - FREE WORKPLACE CERTIFICATION

THE UNDERSIGNED CERTIFIES THAT THE PROVISIONS OF CODE SECTIONS 50-24-1 THROUGH 50-24-6 OF THE OFFICIAL CODE TO GEORGIA ANNOTATED, RELATED TO THE **DRUG-FREE WORKPLACE**, HAVE BEEN COMPLIED WITH IN FULL. THE UNDERSIGNED FURTHER CERTIFIES THAT:

- 1. A Drug-Free Workplace will be provided for the employees during the performance of the contract; and
- 2. Each sub-contractor under the direction of the Contractor shall secure the following written certification:

(CONTRACTOR) certifies to Chatham County that a Drug-Free Workplace will be provided for the employees during the performance of this contract known as_procurement_<u>Tide Gate Monitoring at</u> <u>Pipemakers Canal</u> (PROJECT) pursuant to paragraph (7) of subsection (B) of Code Section 50-24-3. Also, the undersigned further certifies that he/she will not engage in the unlawful manufacture, sale, distribution, possession, or use of a controlled substance or marijuana during the performance of the contract.

CONTRACTOR

DATE

NOTARY

ï

DATE

ATTACHMENT B

PROMISE OF NON-DISCRIMINATION STATEMENT

Know All Men By These Presence, that I (We),

Name

Title

Name of Bidder

(herein after Company) in consideration of the privilege to bid/or propose on the following Chatham County project procurement_<u>Tide Gate Monitoring at Pipemakers Canal</u>_hereby consent, covenant and agree as follows:

(1) No person shall be excluded from participation in, denied the benefit of or otherwise discriminated against on the basis of race, color, national origin or gender in connection with the bid submitted to Chatham County or the performance of the contract resulting therefrom;

(2) That it is and shall be the policy of this Company to provide equal opportunity to all business persons seeking to contract or otherwise interested with the Company, including those companies owned and controlled by racial minorities, and women;

(3) In connection herewith, I (We) acknowledge and warrant that this Company has been made aware of, understands and agrees to take affirmative action to provide minority and women owned companies with the maximum practicable opportunities to do business with this Company on this contract;

(4) That the promises of non-discrimination as made and set forth herein shall be continuing throughout the duration of this contract with Chatham County;

(5) That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made a part of and incorporated by reference in the contract which this Company may be awarded;

(6) That the failure of this Company to satisfactorily discharge any of the promises of nondiscrimination as made and set forth above may constitute a material breach of contract entitling the County to declare the contract in default and to exercise appropriate remedies including but not limited to termination of the contract.

Signature

Date

2200-33

ATTACHMENT C

DISCLOSURE OF RESPONSIBILITY STATEMENT

Failure to complete and return this information will result in your bid/offer/proposal being disqualified from further competition as non-responsive.

- 1. List any convictions of any person, subsidiary, or affiliate of the company, arising out of obtaining, or attempting to obtain a public or private contract or subcontract, or in the performance of such contract or subcontract.
- 2. List any indictments or convictions of any person, subsidiary, or affiliate of this company for offenses such as embezzlement, theft, fraudulent schemes, etc. or any other offenses indicating a lack of business integrity or business honesty which affects the responsibility of the contractor.
- 3. List any convictions or civil judgments under states or federal antitrust statutes.
- 4. List any violations of contract provisions such as knowingly (without good cause) to perform, or unsatisfactory performance, in accordance with the specifications of a contract.
- 5. List any prior suspensions or debarments by any governmental agency.
- 6. List any contracts not completed on time.
- 7. List any penalties imposed for time delays and/or quality of materials and workmanship.
- 8. List any documented violations of federal or any state labor laws, regulations, or standards, occupational safety and health rules.

2200-34

I, Name of individual	, as	 Title & Authority
of	, declare under oath that	
Company Name		
the above statements, includ	ing any supplemental responses attache	ed hereto, are true.
Signature		
a e		
State of		
County of		
Subscribed and sworn to bef	fore me on this day of	
20 by	representing him/herself to be	
of	the company named herein.	
Notary Public	с	
My Commission expires:		
Resident State:		
DPC Form #45		

ATTACHMENT D

CONTRACTOR AFFIDAVIT under O.C.G.A. § 13-10-91(b)(1)

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of <u>CHATHAM COUNTY</u> has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Contractor

Name of Project

Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, ___, 201__ in _____(city), _____(state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE _____ DAY OF _____,201__.

NOTARY PUBLIC

My Commission Expires:

SUBCONTRACTOR AFFIDAVIT under O.C.G.A. § 13-10-91(b)(3)

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the (name of physical performance of services under a contract with contractor) on behalf of CHATHAM COUNTY has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the subcontractor with the information required by O.C.G.A. § 13-10-91 (b). Additionally, the undersigned subcontractor will forward notice of the receipt of an affidavit from a sub-subcontractor to the contractor within five (5) business days of receipt. If the undersigned subcontractor receives notice of receipt of an affidavit from any sub-subcontractor that has contracted with a sub-subcontractor to forward, within five (5) business days of receipt, a copy of such notice to the contractor. Subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Subcontractor

Name of Project

Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, ___, 201__ in _____(city), _____(state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE _____ DAY OF _____,201__.

NOTARY PUBLIC My Commission Expires:

D-2

1

ATTACHMENT E

CHATHAM COUNTY, GEORGIA

BIDDER'S CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

The undersigned certifies, by submission of this proposal or acceptance of this contract, that neither Contractor nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntary excluded from participation in this transaction by any Federal department or agency, State of Georgia, City of Savannah, Board of Education or local municipality. Bidder agrees that by submitting this proposal that Bidder will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts and subcontracts. Where the Bidder or any lower tier participant is unable to certify to this statement, that participant shall attach an explanation to this document.

Bidder must verify Sub-Tier Contractors and Suppliers are not debarred, suspended, ineligible, pending County litigation or pending actions from any of the above government entities.

Certification - the above information is true and complete to the best of my knowledge and belief.

(Printed or typed Name of Signatory)

(Signature)

(Date)

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001

END OF DOCUMENT Mod. CC P & C 6/2005

E-1

ATTACHMENT F

Chatham County Minority and Women Business Enterprise Program M/WBE Participation Report

Name of Bidder:

Name of Project:

Bid No:

M/WBE Firm	Type of Work	Contact Person/ Phone #	City, State	%	MBE or WBE
-					

WBE Total____% M/WBE Combined % MBE Total

The undersigned should enter into a formal agreement with M/WBE Contractor identified herein for work listed in this schedule conditioned upon execution of contract with the Chatham County Board of Commissioners.

Signature Print_____

Phone ()	
Fax ()	

ATTACHMENT G

Systematic Alien Verification for Entitlements (SAVE) Affidavit Verifying Status for Chatham County Benefit Application

By executing this affidavit under oath, as an applicant for a Chatham County, Georgia Business License or Occupation Tax Certificate, Alcohol License, Taxi Permit, Contract or other public benefit as reference in O.C.G.A. Section 50-36-1, I am stating the following with respect to my bid for a Chatham County contract for ______. [Name of natural person applying on behalf of individual, business, corporation, partnership, or other private entity]

1.) I am a citizen of the United States.

OR

2.) I am a legal permanent resident 18 years of age or older.

OR

3.) I am an otherwise qualified alien (8 § USC 1641) or nonimmigrant under the Federal Immigration and Nationality Act (8 USC 1101 et seq.) 18 years of age or older and lawfully present in the United States.*

In making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of Code Section 16-10-20 of the Official Code of Georgia.

Signature of Applicant:

Date

Printed Name:

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE DAY OF _____, 20____

Alien Registration number for non-citizens.

Notary Public My Commission Expires:

REFERENCES - \$499,999 or more: On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of <u>\$499,999 or less</u>, for bidders to be responsive each must provide information on the most recent three (3) projects with similar scope of work as well as other information to determine experience and qualifications as follows. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government

Project Name:	
Location:	
Owner:	
Address:	
City and State:	
Contact:	
Phone & Fax:	
*Architect or Engineer:	
Contact:	
Phone & Fax:	
Email:	

- b. The awarded bid amount and project start date.
- c. Final cost of project and completion date.
- d. Number of change orders. ____

a.

<u>.</u>

- e. Contracted project completion in days.
- f. Project completed on time. Yes____ No____ Days exceeded__

g. List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.

h. Has contractor ever failed to complete a project?_____ If so, provide explanation.

i. Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? ______ If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

REFERENCES - \$499,999 or more: On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of <u>\$499,999 or less</u>, for bidders to be responsive each must provide information on the most recent three (3) projects with similar scope of work as well as other information to determine experience and qualifications as follows. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government

a. Project Name:

Location:
Owner:
Address:
City and State:
Contact:
Phone & Fax:
*Architect or Engineer:
Contact:
Phone & Fax:
Email:

b. The awarded bid amount and project start date.

c. Final cost of project and completion date.

d. Number of change orders.

4

e. Contracted project completion in days.

f. Project completed on time. Yes_____ No_____ Days exceeded____

g. List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.

h. Has contractor ever failed to complete a project? _____ If so, provide explanation.
i. Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? _____ If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

REFERENCES - \$499,999 or more: On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of <u>\$499,999 or less</u>, for bidders to be responsive each must provide information on the most recent three (3) projects with similar scope of work as well as other information to determine experience and qualifications as follows. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government

a. Project Name:

	Vanie
L	location:
	Owner:
A	Address:
C	City and State:
	Contact:
Р	hone & Fax:
	Architect or Engineer:
C	Contact:
Р	hone & Fax:
E	Email:

b. The awarded bid amount and project start date.

c. Final cost of project and completion date.

d. Number of change orders. _

e. Contracted project completion in days.

f. Project completed on time. Yes No Days exceeded

g. List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.

h. Has contractor ever failed to complete a project?_____ If so, provide explanation.

i. Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? ______ If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

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REFERENCES - \$499,999 or more: On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of <u>\$499,999 or less</u>, for bidders to be responsive each must provide information on the most recent three (3) projects with similar scope of work as well as other information to determine experience and qualifications as follows. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government

> Project Name: Location: Owner: Address:_____ City and State:_____ Contact: Phone & Fax:_____ *Architect or Engineer: Contact: Phone & Fax: Email:

b. The awarded bid amount and project start date.

c. Final cost of project and completion date.

d. Number of change orders.

a.

g. List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.

h. Has contractor ever failed to complete a project? If so, provide explanation.

i. Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? _____ If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

CHECKLIST FOR SUBMITTING BID

Sign below and submit this sheet with Bid

NOTE: All of the following items must be submitted with your Bid to be considered "responsive".

1. ACKNOWLEDGMENT OF ANY/ALL ADDENDUMS (Page 3 of ITB).

2. ORGINAL SURETY BOND (5% OF BID) ALONG WITH SURETY REQUIREMENTS SHEETS FILLED OUT.

3. BID SHEET COMPLETELY FILLED OUT AND SIGNED.

4. **"LIST OF SUBCONTRACTORS" SHEET** FILLED OUT WITH ALL SUBCONTRACTORS AND SUPPLIERS.

5. **"% TO MBE SUBCONTRACTORS/SUPPLIERS' SHEET** COMPLETELY FILLED OUT SHOWING \$ AMOUNT AS WELL AS % OF PROJECT THAT IS PROJECTED TO GO TO MBE/WBE SUBCONTRACTORS/SUPPLIERS.

6. SECTION 2.31 OF ITB - **REFERENCES**: Read this section and submit the correct number of "References" (based on total dollar amount of project) Note: Supply <u>ALL</u> the information that is requested for each Reference. NOTE: *Forms for Reference Information are attached to this Bid Package*.

7. ALL FIRMS REQUESTING TO DO BUSINESS WITH CHATHAM COUNTY MUST REGISTER ON-LINE AT HTTP://PURCHASING.CHATHAMCOUNTY.ORG.

8. COMPLETE AND SUBMIT ALL ATTACHMENTS TO THE ITB (Attachments A thruH). D-2 IS TO BE FILLED OUT FOR EACH SUBCONTRACTOR.

NAME/TILE

COMPANY NAME

ADDRESS

CITY/STATE/ZIP

PHONE NUMBER

FAX NUMBER

LEGAL NOTICE CCNO. <u>166652</u> Invitation to Bid

Sealed Bids will be received until 2:00 P.M. on FEBRUARY 2, 2017 and publicly opened in Chatham County Purchasing & Contracting Department, at The Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia 31406, for: BID NO : 16-0119-4 TIDE GATE MONITORING AT PIPEMAKERS CANAL

PRE-BID CONFERENCE: A MANDATORY Conference will be held ON-SITE <u>at the</u> <u>Georgia Ports Authority, Annex 2 Auditorium, located at 100 Main Street (S.R. 25), Garden</u> <u>City, Georgia</u> on <u>JANUARY 17, 2017, at 10:00 A.M.</u> Your firm <u>must be</u> represented at the conference to be allowed to submit a bid for this project.

The Bid Package can be downloaded and printed from the County website <u>http://purchasing.chathamcounty.org</u> Also, all firms requesting to do business with Chatham County must also register on-line at website: <u>http://purchasing.chathamcounty.org</u>

For any additional questions regarding this bid, please contact Robert Marshall, Senior Procurement Specialist, at 912-790-1622.or rmarshall@chathamcounty.org

Bid Bond <u>is required</u> at the time of bid. (5% of total bid) Payment and Performance Bonds (100% of bid) will be required for this project at the time of contract award.

<u>CHATHAM COUNTY HAS THE AUTHORITY TO REJECT ALL BIDS AND WAIVE</u> MINOR FORMALITIES.

"CHATHAM COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER, M/F/H, ALL BIDDERS ARE TO BE EQUAL OPPORTUNITY EMPLOYERS"

Margaret H. JOYNER, PURCHASING DIRECTOR

SAVANNAH NEWS/PRESS INSERT: Jan. 4, 2017 Please send affidavit to: Chatham County Purchasing & Contracting Department 1117 Eisenhower Drive, Suite C Savannah, Georgia 31406 (912) 790-1622