BID DOCUMENTS

FOR

BID # 25-034

JOHNSTON ROAD AT FPFWCD CANALS 16 & 17 CULVERT REPLACEMENT

FOR

BOARD OF COUNTY COMMISSIONERS

ST. LUCIE COUNTY, FLORIDA

BOARD OF COUNTY COMMISSIONERS

JAMES CLASBY- DISTRICT 1 LARRY LEET - DISTRICT 2 ERIN LOWRY - DISTRICT 3 JAMIE LEE FOWLER - DISTRICT 4 CATHY TOWNSEND - DISTRICT 5

Dan Zrallack, P.E. County Engineer

St. Lucie County Engineering Division

PROJECT #15-200/16-202

BOARD OF COUNTY COMMISSIONERS ST. LUCIE COUNTY, FLORIDA

INVITATION TO BID

Sealed bids will be received at the Purchasing Division, 2300 Virginia Avenue, Fort Pierce, FL 34982, until 3:00 P.M. local time on Wednesday, June 4, 2025 for the following:

Bid No. 25-034 JOHNSTON ROAD AT FPFWCD CANALS 16 & 17 CULVERT REPLACEMENT

A MANDATORY pre-bid conference will be held on Wednesday, May 21, 2025 at 1:30 P.M. in the Conference Room of the St. Lucie County Engineering Division, 2nd Floor, 2300 Virginia Avenue, Fort Pierce. At this time, the Engineer will be available to answer questions concerning the project requirements.

Bid documents may be obtained via download from www.DemandStar.com, document number No. 25-034 or contact the Office of the Purchasing Manager at 2300 Virginia Avenue, Fort Pierce, Florida, 34982, (772) 462-1700.

Bids may be mailed or hand delivered to the St Lucie County Purchasing Division, 2300 Virginia Avenue, 2nd Floor Rm. 228, Fort Pierce, FL 34982. Any bids received after the above stated time will be returned to the bidder unopened.

All Bidders shall provide proof that they are State Certified or State Registered, and a State Registered License shall be based on the possession of a St. Lucie County Certificate of Competency. Specialty contractors shall be required to provide proof of having obtained a St. Lucie County Certificate of Competency. **Possession of either a State Certification or County Competency card must accompany the bid.** It is the responsibility of the bidder to confirm that they have all the proper licenses to perform the work. If the bidder has any uncertainty, they should submit their licenses to the Engineering Division of St. Lucie County, telephone (772) 462-1707 for review prior to bidding.

The Board of County Commissioners reserves the right to waive any informalities or minor irregularities; reject any and all bids/proposals which are incomplete, conditional, obscure, or which contain additions not allowed for; accept or reject any proposal in whole or in part with or without cause; and accept the proposal which best serves the County.

For Bids, RFPs Bid Results and other information visit the St. Lucie County Purchasing Web Site at http://www.co.st-lucie.fl.us

St. Lucie County is an Equal Opportunity/Affirmative Action Employer.

Board of County Commissioners St. Lucie County, Florida

PUBLISH: Sunday, May 4, 2025

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St. Lucie County Engineering Division

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In order to be considered responsive, all Bids must be made in accordance with these Instructions to Bidders.

1.0 Documents.

Bona fide bidders may obtain bid documents via download from http://www.DemandStar.com **Bid** #25-034 or by contacting the Office of the Purchasing Division at 2300 Virginia Avenue, Fort Pierce, Florida, 34982, (772) 462-1700. No partial sets will be issued. A "no bid" is non-responsive and shall not be deemed a "Bona Fide" bid.

2.0 Examination of Contract Documents and Site.

It is the responsibility of each Bidder before submitting a Bid, to:

- 2.1 Examine the Contract Documents thoroughly,
- 2.2 Visit the site to become familiar with local conditions that may affect cost, progress, or performance, of the Work,
- 2.3 Consider federal, state and local Laws and Regulations that may affect cost, progress, or performance of the Work,
- 2.4 Study and carefully correlate the Bidder's observations with the Contract Documents, and
- 2.5 Notify the Engineer of all conflicts, errors, or discrepancies in the Contract Documents.

Information and data reflected in the Contract Documents with respect to Underground Utilities at or contiguous to the site is based upon information and data furnished to the OWNER and the Engineer by owners of such Underground Utilities or others, and the Owner does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise.

Before submitting a Bid, each Bidder shall, at Bidder's own expense, make or obtain any additional examination, investigations, explorations, tests, and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface, and Underground Utilities) at or contiguous to the site or otherwise which may affect cost, progress, or performance of the Work and which the Bidder deems necessary to determine its Bid for performing the Work in accordance with the time, price, and other terms and conditions of the Contract Documents.

The Contractor shall verify and become familiar with the lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by the Contractor in performing the Work and identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by the Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained by the Owner unless otherwise provided in the Contract Documents.

A submission of a Bid shall constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of Article 2, "Examination of Contract Documents and Site", herein, and that without exception the Bid is premised upon performing the Work required by the Contract Documents with such means, methods, techniques, sequences, or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

3.0 Questions.

Submit all questions about the Drawings and Specifications to the Purchasing Division in writing via facsimile or email (email preferred). Replies will be issued to all bidders of record as Addenda to the Drawings and Specifications and will become part of the Contract. The County will not be responsible for oral clarification. Questions received less than five (5) days before bid opening cannot be answered. All questions shall be faxed to (772)462-1704 or emailed to ciminod@stlucieco.org to the attention of Ms. Desiree Cimino.

4.0 Substitutions.

To obtain approval to use unspecified products, bidders shall submit written requests at least ten (10) days before the bid date and hour. Requests received after this time will not be considered. Requests shall clearly describe the product for which approval is asked, including all data necessary to demonstrate acceptability. If the product is acceptable, the Engineer will approve it in an Addendum issued to all prime bidders to whom Drawings and Specifications have been issued.

5.0 Addenda.

Any Addenda prepared and issued by the owner prior to opening of bids for the purpose of changing the intent of the plans and specifications or clarifying the meaning of same shall be binding in the same way as if written in the specifications. Any Addenda issued prior to the execution of the Contract, shall be binding upon the Contractor after the execution of the agreement.

6.0 Basis of Bid.

No segregated bids or assignment will be considered. The bid shall be submitted on unit price and/or lump sum basis as indicated on the bid form. Where items of work are to be paid for on a unit price basis, estimated quantities are shown for the purpose of estimating total cost. Final payment quantities for unit price shall be those quantities actually constructed within limits of plan quantities and modifications thereof approved in writing in accordance with the General Conditions, Section 00700.

7.0 Preparation of Bids.

Bids shall be made on unaltered Bid forms included herewith under Section 00300. Fill in all blank spaces and submit one (1) copy. Bids shall be signed with name and typed signature below. Where bidder is a corporation, bids must be signed with the legal name of the corporation followed by the name of the state of incorporation and the legal signatures of the officers authorized to bind the corporation to a Contract. Bids submitted after the time and date specified will not be considered and will be returned unopened.

8.0 Bid Security.

Bid security shall be made payable to the Board of County Commissioners, St. Lucie County, Florida, in the amount of 5% of the total contract amount. Security shall be either certified check, cashier's check, or bid bond issued by surety licensed to conduct business in the State of Florida. Surety shall have a rating of A+ or A by "Best's Rating Guide". The accepted bidder's security will be retained until the agreement is executed and the required payment and performance bonds are furnished. The Owner reserves the right to retain the security of any or all of the remaining bidders until the date stated on the bid form. If any accepted bidder refuses to enter into a contract, the Owner will retain the difference between the amount specified in said Bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said Bid, not to exceed the amount of the Bid Security. Such Security shall be retained as liquidated damages but not as a penalty. The Bid Security shall be enclosed with the Sealed Bid.

9.0 Public Construction Bond.

The accepted Bidder shall furnish the Owner a Public Construction Bond in the amount of 100% of the total contract amount from a surety licensed to conduct business in the State of Florida. The Surety shall have an A+ or A rating under "Best's Rating Guide". The bond shall be submitted on the form furnished herewith under Section 00610. The Public Construction Bond shall guarantee that the Contract will be faithfully performed; that the Contractor will save the Owner harmless on account of all claims for damaged persons, property or premises arising out of his operation prior to the acceptance of the finished work; and that he will promptly make payment to all persons supplying him labor, materials, supplies and services used directly or indirectly by the Contractor in the persecution of the work provided for in the Contract. The Public Construction Bond shall continue in effect for one (1) year after completion and acceptance of the work as guarantee against construction defects.

In the event the Surety Company becomes unsatisfactory to the Owner, the Owner may at its discretion, require the Contractor to issue a new bond in the same or lesser penal sum satisfactory to him, to be conditioned as above required. Upon the Contractor's failure to furnish such additional or new bond within ten (10) days from the date of written notice to do so, all payment under this Contract will be withheld until such additional bond is furnished. The cost of the bond shall be included by the Contractor in its bid.

10.0 Submittal.

Submit bid in an opaque, sealed envelope. Identify the envelope with: (1) Project Name, (2) Name of Bidder, (3) Bid Number. Submit bid in accordance with the Invitation to Bid. All forms required for responsive bid shall be included, i.e. Bid, Bond, Public Entity Crimes Statement, Questionnaire, etc. It is the responsibility of the Bidder to ensure that the Bid is received in proper time.

11.0 Withdrawal of Bid.

The Bid may be withdrawn by the Bidder by means of a written request, signed by the Bidder or its duly authorized representative. Such written request must be delivered to the place stipulated in the Invitation to Bid for receipt of Bids prior to the Scheduled closing time for receipt of Bids.

12.0 Bidder's Qualifications Questionnaire.

All bidders shall fill out the enclosed Bidder's Qualifications Questionnaire and enclose it with the Bid.

13.0 Disqualification.

More than one Bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. If the OWNER believes that any Bidder is interested in more than one Bid for the work contemplated, all Bids in which such Bidder is interested will be rejected. If the OWNER believes that collusion exists among Bidders, all Bids will be rejected.

14.0 Governing Laws and Regulations.

The Bidder shall be familiar with all Federal, State, and Local laws, ordinances, rules and regulations that in any manner affect the work. Ignorance on the part of the Bidder will in no way relieve the Bidder from responsibility from compliance with such laws and regulations.

15.0 Safety Provisions.

The Contractor shall comply with the provisions of Chapter 90-96 of Laws of Florida (Trench Safety Act) and execute the included Trench Safety Act Compliance Statement.

16.0 Patent Fees and Royalties.

If the Contractor requires or desires to use any design, trademark, device, material or process covered by letter of patent or copyright, the Contractor and its surety shall indemnify and save harmless the Owner from any and all claims for infringement by reason of the use of any such patented design, device, trademark, copyright, material or process in connection with the work agreed to be performed under the contract and shall indemnify the Owner from any cost, expense, or damage which the owner may be obligated to pay reason of any infringement at any time during the prosecution of or after completion of the work.

17.0 Licenses and Permits.

The Contractor shall secure and pay for all construction related licenses, permits, and inspection fees required to perform the work. Dump fees will not be waived for County projects except for clean excavated fill as set forth in Paragraph 23.0, Delivery of Clean Excavated Fill. These costs are to be included in the unit prices for other pay items listed.

18.0 Award.

The award of the Contract, if it is awarded, will be to the lowest responsible bidder whose qualifications indicate the award will be in the best interest of the Owner and whose bid complies with all prescribed requirements. The Contract will not be awarded until the Owner has concluded such investigations as the Owner deems necessary to establish the responsibility, qualifications, and financial ability of the Bidder to do the work in accordance with the Contract Documents to the satisfaction of the owner within the time prescribed. The Owner reserves the right to reject the Bid of any Bidder who does not pass such investigation to the Owner's satisfaction. If the Contract is awarded, the Owner will give the accepted Bidder a Notice of Award within the time Bids are to be held open as stated in the Bid form.

19.0 Opening.

Bids will be opened at 3:00pm Wednesday, June 4, 2025.

20.0 Execution of Contract.

The Contract between Contractor and Owner shall utilize the form furnished herewith. The accepted Bidder shall assist and cooperate with the Owner in preparing the Contract, and within 30 days following its presentation shall execute same and return it to the Owner along with the Public Construction Bond, Insurance Certificates and any other documentation that may be required by the Contract Documents to be submitted at that time.

21.0 Definitions.

Whenever in these Specifications, the terms defined in Article I of the General Conditions are used (or pronouns used in place of them), their intent and meaning shall be interpreted as indicated in the General Conditions.

22.0 Certification of Competency.

All Bidders shall provide proof that they are State Certified or State Registered, and a State Registered License shall be based on the possession of a St. Lucie County Certificate of Competency. Specialty contractors shall be required to provide proof of having obtained a St. Lucie County Certificate of Competency. **Possession of either a State Certification or County Competency card must be attained prior to bid submittal.** Failure to comply with this condition shall result in rejection of the Bid.

23.0 Delivery of Clean Excavated Fill.

The successful bidder shall be required to deliver all clean excavated fill removed during the Work and not required by the Work, to the St. Lucie County Landfill. The clean fill shall not contain any construction debris or vegetative growth. There will be no disposal fee for such clean fill. The Contractor shall, however, be responsible for the cost of transportation of the fill and should include this cost in any bid.

24.0 Quantities of Work.

The quantities of work or material stated in the unit price items of the Bid are supplied only to give an indication of the general scope of the Work; the Owner does not expressly or by implication agree that the actual amount of work or material will correspond therewith, and the Owner expressly reserves the right to increase or decrease the amount of any unit price item of the Work by an amount of up to and including twenty five percent (25%) of any Bid item, without a change in the unit price, and shall also reserve the right to delete any Bid item in its entirety, or to add additional Bid items up to and including an aggregate total amount not to exceed twenty five percent (25%) of the Contract Price.

25.0 Pre-Bid Meeting.

There will be a MANDATORY pre-bid meeting held **Wednesday**, **May 21**, **2025**, **at 1:30 P.M.** in the Conference Room of the St. Lucie County Engineering Division, 2nd Floor, Room 229, 2300 Virginia Avenue, Ft. Pierce. At this time, the Engineer will be available to answer questions concerning the project requirements.

SECTION 00110 ST. LUCIE COUNTY BOARD OF COUNTY COMMISSIONERS BIDDER'S CHECKLIST

BIDS MAY NOT BE CONSIDERED if the following documents and/or attachments are not completely filled out and submitted with your bid.

Before sending in your bid, please make sure you have completed all of the following:

- Please complete in their entirety: Sections; 00110 (Bidder's Checklist); 00300 (Bid Form and Bidder's Qualification Questionnaire); 00410 (Bid Bond); and 00480 (Trench Safety Act Compliance Statement).
- Bid Form (Section 300) must be complete and have an original signature (preferably signed in blue ink).
- Every page that has anything handwritten on it must be imprinted with the company's name on the top right-hand corner of the page.
- _ Enclose two (2) copies of either a State Certification or County Competency Card.
- Acknowledge in the bid any and all addendums issued and manually sign each addendum sheet and submit it with your bid.
- _ Erasures, as well as descriptive literature, brochures, and/or data must be initialed by the person signing the bid.
- Enclose Bid Package (Original), and one (1) copy of all handwritten sections of this bid package, as well as two (2) sets of descriptive literature, brochures, and/or supporting data. Please make and retain a separate copy of this bid package for your files.
- Return bid in an opaque, sealed envelope Identify the envelope with: (1) Project Name, (2) Name of Bidder, (3) Bid Number. Submit bid in accordance with the Invitation to Bid. All forms required for responsive bid shall be included, i.e. Bid, Bond, Public Entity Crimes Statement, Questionnaire, etc. If using Fed-Ex or UPS, please keep bid in a separate sealed envelope when placing it in their packaging.
- _ If you desire a copy of the bid tabulation, include a **self-addressed**, **stamped envelope** for bid tabulation to be mailed back to you.

PLEASE INITIAL AND RETURN WITH BID FORM

SECTION 00300 BID FORM and TECHNICAL SPECIFICATIONS

Board of County Commissioners
St. Lucie County, Florida
2300 Virginia Avenue
Fort Pierce, FL 34982

I have received the documents titled **Johnston Road At FPFWCD Canals 16 & 17 Culvert Replacements** I have also received addendum number <u>XX</u> through XX and have included their provisions in my bid. I have examined both the bid documents and the construction site and submit the following bid to which I agree:

- 1. To hold my bid open until an agreement has been executed between St. Lucie County and accepted Bidder, including receipt of the Public Construction and Maintenance Bonds, or until <u>90</u> days after bids are opened, whichever is longer. The winning bidder should expect to begin construction by the end of August 2025.
- 2. Regarding the Disposition of Bid Security: to accept the provisions of the Instructions to the Bidders.
- 3. To enter into and execute a Contract on the basis of this bid and to furnish a 100% Public Construction Bond in accordance with the Instructions to Bidders to guarantee my workmanship and materials to be free from construction defects for a period of not less than one (1) year, if this bid is accepted.
- 4. To accomplish the work included in, and in accordance with, the Contract Documents, if this bid is accepted.
- 5. To start work within ten (10) calendar days from the date of the Notice to Proceed and thereafter to substantial work completion of the titled JOHNSTON ROAD AT FPFWCD CANALS 16 & 17 CULVERT REPLACEMENT within One hundred eighty (150) calendar days. Final work completion within Sixty five (65) calendar days following substantial work completion, unless the time is modified by provisions of the contract, if this bid is accepted.
- 6. Regarding Compensation for the proposed work: if this bid is accepted, I will construct this project on a unit price basis as reflected in the Bid Unit Price Schedule on page 300-2 through 300-5

 JOHNSTON ROAD AT FPFWCD CANALS 16 & 17 CULVERT REPLACEMENT of this bid.
- 7. Regarding the Award of the Contract: if I am awarded a contract for this project, I understand that the award may be for all or any portion thereof of the items listed under the Bid Unit Price Schedule.

BID UNIT PRICE SCHEDULE BID # 25-034 JOHNSTON ROAD AT FPFWCD CANALS 16 & 17 CULVERT REPLACEMENT

ITEM NO.	<u>DESCRIPTION</u>	EST. QUAN	UNIT MEAS URE	UNIT PRICE	AMOUNT
	FPFWCD C-16 Canal Cu	ulvert			
101-1A	Mobilization/Demobilization	1	LS	\$	\$
102-1A	Maintenance Of Traffic	1	LS	\$	\$
104-2A	Prevention, Control, & Abatement of Erosion & Water Pollution	1	LS	\$	\$
110-1-1	Clearing & Grubbing	1	LS	\$	\$
110-7-1	Mailbox, F&I Single	1	EA	\$	\$
120-1A	Regular Excavation/Embankment	1	LS	\$	\$
160-4	Type B Stabilization, LBR 40, 12"	7	SY	\$	\$
199-1A	Construction Layout & Record Drawings	1	LS	\$	\$
285-718A	Optional Base, Cemented Coquina (LBR 100) (18")	180	SY	\$	\$
334-1-13A	Superpave Asphaltic Concrete, (1") (Traffic C, SP-9.5) (PG 76-22)	12	TN	\$	\$
334-1-13B	Superpave Asphaltic Concrete, (1.5") (Traffic C, SP-12.5) (PG 76-22)	9	TN	\$	\$
400-2-1	Concrete Class II (Concrete Collars, 4000 PSI)	13	CY	\$	\$
400-80A	Maintenance of Existing Drainage	1	LS	\$	\$
400-90A	Construction Dewatering	1	LS	\$	\$
407-1-11A	Precast Concrete Box Culvert (10'(Span) X (6'(Rise)	120	LF	\$	\$
430-174-124	Pipe Culvert, RCP, Round, 24", (S/CD) (CLIII)	186	LF	\$	\$
430-984-129	Mitered End Section, Round, 24", (SD)	4	EA	\$	\$
530-3-4	Riprap, Rubble, F&I, Ditch Lining	419	TN	\$	\$
530-74	Bedding Stone	77	TN	\$	\$
536-73	Guardrail Removal	250	LF	\$	\$

St. Lucie County Engineering Division

ITEM NO.	<u>DESCRIPTION</u>	EST. QUAN	UNIT MEAS URE	UNIT PRICE	AMOUNT
570-1-2	Performance Turf, Sod	968	SY	\$	\$
700-1-11	Single Post Sign (Ground Mount)(F&I)(<12SF)	4	AS	\$	\$
706-1-3	Raised Pavement Marker, Type B	2	EA	\$	\$
711-11-121	Thermoplastic, Standard, White, Solid, 6"	176	LF	\$	\$
711-11-231A	Thermoplastic, Standard, Yellow, Skip, 6"	30	LF	\$	\$
1000-1A	Utility Coordination	1	LS	\$	\$
	TOTAL ESTIMATED AMOUNT (Based on Bid U Quantities) C-16 CANAL CULVERT	Jnit Prices &	Estimate	d	

ITEM NO.	DESCRIPTION	EST. QUAN	UNIT MEA SUR	UNIT PRICE	AMOUNT
	FPFWCD C-17 Canal Cu	lvert			
101-1A	Mobilization/Demobilization	1	LS	\$	\$
102-1A	Maintenance Of Traffic	1	LS	\$	\$
104-2A	Prevention, Control, & Abatement of Erosion & Water Pollution	1	LS	\$	\$
110-1-1	Clearing & Grubbing	1	LS	\$	\$
120-1A	Regular Excavation/Embankment	1	LS	\$	\$
199-1A	Construction Layout/Record Drawings	1	LS	\$	\$
285-718A	Optional Base, Cemented Coquina (LBR 100) (18")	89	SY	\$	\$
334-1-13A	Superpave Asphaltic Concrete, (1") (Traffic C, SP-9.5, PG76-22)	22	TN	\$	\$
334-1-13B	Superpave Asphaltic Concrete, (1.5") (Traffic C, SP-12.5, PG76-22)	8	TN	\$	\$
400-2-1	Concrete Class II (Concrete Collars, 4000 PSI)	12.7	CY	\$	\$
400-80A	Maintenance of Existing Drainage	1	LS	\$	\$
400-90A	Construction Dewatering	1	LS	\$	\$
407-1-11A	Precast Concrete Box Culvert (10'(Span) X (6'(Rise)	144	LF	\$	\$
430-174-124	Pipe Culvert, RCP, Round, 24", (S/CD) (CLIII)	256	LF	\$	\$
430-984-129	Mitered End Section , Round, 24", (SD)	4	EA	\$	\$
530-3-4	Riprap, Rubble, F&I, Ditch Lining	500	TN	\$	\$
530-74	Bedding Stone	270	TN	\$	\$
536-73	Guardrail Removal	392	LF	\$	\$
550-10-110	Fencing (Type A, 4 Ft Height)	305	LF	\$	\$
550-60-513	Fence Gate (Remove & Reset)	1	EA	\$	\$
570-1-2	Performance Turf, Sod,	2400	SY	\$	\$

ITEM NO.	DESCRIPTION	EST. QUAN	UNIT MEASURE	UNIT PRICE	AMOUNT
700-1-11	Single Post Sign (Ground Mount)(F&I)(<12SF)	4	AS	\$	\$
706-1-3	Raised Pavement Markers, Type B	8	EA	\$	\$
711-11-121	Thermoplastic, Standard, White, Solid, 6"	260	LF	\$	\$
711-11-231A	Thermoplastic, Standard, Yellow, Skip, 6"	130	LF	\$	\$
1000-1A	Utility Coordination	1	LS	\$	\$
	TOTAL ESTIMATED AMOUNT (Based on Bid Unit Prices & Estimated Quantities) C-17 CANAL CULVERT		\$		
	TOTAL ESTIMATED AMOUNT (Based on Bid Unit Prices & Estimated Quantities) C-16 CANAL CULVERT + C-17 CANAL CULVERT \$			\$	
	CONSTRUCTION CONTINGENCY ALLOWANCE (10 % of Base Bid)		\$		
	TOTAL ESTIMATED AMOUNT (Based on Bid Unit Prices, Estimated Quantities, C-16 Canal + C-17 Canal + 10 % Contingency)		\$		

BID UNIT PRICE SCHEDULE

All bid items shall include all costs for furnishing to the owner all materials, equipment and supplies, permits and for all costs incurred in providing all work shown on the **Johnston Road at FPFWCD Canals 16 & 17 Culvert Replacement** construction project drawings and outlined in the contract specifications for the construction.

NOTE: This bid is on a unit price basis. The total estimated amount is for bid comparison purposes only. The contractor should field verify the actual site conditions prior to time of bidding and before submitting the bid proposal. The contractor should read the special conditions and the requirements for insurance before submitting a bid proposal. The contractor should verify the quantities to be included in the construction contract. The contractor shall furnish St. Lucie County with a Public Construction Bond in 100% of the total estimated amount of the contract. The Public Construction Bond shall continue in effect for one (1) year after completion and acceptance of the work as guarantee against construction defects. The contractor in its bid shall include the cost of said bond. Density testing shall be at the expense of St. Lucie County, except for failing or cancelled tests, which shall be charged to the contractor.

I have attached the required 5% Bid Security to this Bid.

Date	
Bidder	
Sy(Signature)	
By	_
Title	
Mailing Address	-
Office Number	_
ax Number	

BID ITEMS:

The governing specifications for this project are the Florida Department of Transportation Standard Specifications for Road and Bridge Construction Dated FY2023/24 and FDOT FY2023-2024 Standard Plans.

QUALITY CONTROL AND INSPECTION: CONTRACTOR is hereby notified that at the COUNTY'S discretion, the COUNTY/COUNTY REPRESENTATIVE may make one or more visits to the manufacturer's drainage structures or pipe plant. The purpose shall be to inspect the pipes and/or drainage structures as they are being produced. If the COUNTY notifies the CONTRACTOR that the COUNTY/COUNTY REPRESENTATIVE will be inspecting, then only items that have been inspected during the manufacturing process and stamped by the COUNTY/COUNTY REPRESENTATIVE shall be delivered to the project site. This inspection by the COUNTY/COUNTY REPRESENTATIVE in no way precludes the COUNTY'S right and ability to reject damaged pipe as a result of manufacturing, transporting, handling, installing/laying, videoing, etc. It shall be the CONTRACTOR'S responsibility to coordinate this inspection with the COUNTY and to determine the manufacturer's schedule and to ensure that the procurement of these materials does not impact the CONTRACTOR'S overall project schedule. No additional time or compensation will be made to the CONTRACTOR for complying with the requirements set forth above.

The following information is in addition to the specifications previously referenced:

FPFWCD CANAL C-16

101-1A Mobilization/Demobilization

The work specified in this section shall include but not be limited to the requirements of Section 101 Mobilization of the Standard Specifications as well as all operations and preparations necessary to begin and end the work on the project. This shall also include those operations necessary for the movement of personnel, equipment, material, and incidentals to the site, establishment of safety equipment, first aid supplies, and sanitary facilities, as required by the Contract Documents. The cost of required bonds and any insurance(s) shall be included in this item.

Aside from the permits included in the bid documents, the contractor shall be responsible for any costs associated with acquiring other permits necessary to complete the project.

All payment requests shall include record drawings confirming that pay items are situated in their final locations. It is anticipated that expenses related to this item shall be spread uniformly throughout the project.

The costs in this section shall include, but not limited to, mowing existing sod and maintenance of existing right-of-way within the project limits inclusive for mowing and litter removal for the project duration.

The work specified in this section shall also include a pre-construction video of the project limits to be submitted to the County before the beginning of construction.

At the pre-construction meeting, the CONTRACTOR shall submit a tentative work schedule, a list of subcontractors and suppliers, and emergency contact people with their respective phone numbers.

The project superintendent shall provide the ENGINEER with a cellular phone number for 24-hour access at the preconstruction meeting. It will be incumbent upon the CONTRACTOR to answer all calls or respond to any missed calls within thirty (30) minutes.

St. Lucie County Engineering Division The basis of payment for **Mobilization/Demobilization** shall be paid as LUMP SUM in accordance with the following schedule:

Percent Contract	Allowable Percentage
Amount Earned	of Lump Sum Price
25%	25%
50%	50%
75%	75%
100%	100%

102-1A Maintenance of Traffic

The bid price for this item shall include, but not be limited to, the requirements of Section 102 Maintenance of Traffic of the Standard Specifications. The maintenance of traffic for this project shall be in accordance with the applicable FDOT index numbers (600 Series) and these documents: The Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways, U.S. Department of Transportation (DOT), and Florida Highway Administration (FHWA). These documents shall be followed in the design, application, installation, maintenance, and removal. It shall include, but not be limited to all traffic control devices, warning devices, barriers, temporary reflective markers, temporary pavement markings, dust control, and all other items necessary to protect the public and workmen from hazards within the project limits.

The contractor shall mobilize portable changeable message signs (PCMS) at the approaches to the project limits 14 days before the beginning of construction. PCMS shall also be installed 7 days before phase changes of the traffic control plan.

CONTRACTOR shall coordinate any type of traffic restrictions with the St. Lucie County Engineering Division. The CONTRACTOR shall notify the St. Lucie County Engineering Division of any road restrictions at least two (2) weeks prior to actual implementation.

At no time is live traffic permitted on the road while project is under construction. CONTRACTOR is responsible for all costs associated with the road closure and Maintenance of Traffic plan as depicted in the Johnston Road Culvert Replacement at FPFWCD Canal 16 Construction Plans Drawing C-09.

Any road closure and lane restriction requests must be APPROVED by the St. Lucie County Engineer a minimum of 2 weeks prior to implementation.

The basis of payment for **Maintenance of Traffic** shall be paid as per LUMP SUM.

104-2A Prevention, Control, and Abatement of Erosion and Water Pollution

The bid price for this item shall include but not be limited to the requirements of Section 104 Prevention, Control, and Abatement of Erosion and Water Pollution of the Standard Specifications. The methods shall include but are not limited to the following options: hay bales, silt fences, soil tracking prevention devices, and/or turbidity barriers. The existing drainage system within the project limits must be always maintained. The Contractor shall maintain all earthwork construction throughout the life of the contract and shall take all reasonable precautions to prevent the loss of material from the construction site due to the action of wind or water. The Contractor shall repair at their expense, except otherwise provided herein, any slides, washouts, settlements, subsidence, or other mishaps, that may occur prior to final acceptance of the work. Maintenance

and protection of earthwork construction shall be in accordance with Section 104 Prevention, Control, and Abatement of Erosion and Water Pollution of the Standard Specifications.

The CONTRACTOR shall be responsible for any and all costs associated with the permitting and implementation of a National Pollution Discharge Elimination System (NPDES) Stormwater Pollution Prevention Plan (SWPPP).

The basis of payment for **Prevention, Control, and Abatement of Erosion and Water Pollution** shall be paid as LUMP SUM.

110-1-1 Clearing and Grubbing

The bid price for this item shall include, but not be limited to, the requirements of Section 110 Clearing and Grubbing of the Standard Specifications.

The unit cost shall include the clearing of all areas within the limits of construction in the roadway right-of-way, including but not limited to all necessary hauling, furnishing equipment, and equipment operation, for the removal and disposal of all buildings, timber, brush, trees, stumps, roots, rubbish, debris, existing flexible pavement and base, drainage structures, culverts, and pipes. Remove all other obstructions resting on or protruding through the surface of the existing ground and the surface of the excavated areas.

The CONTRACTOR shall coordinate any type of restrictions with the County and comply with areas so designated. Any tree that may be salvaged, not impacted, or removed is encouraged and should be coordinated with the County's Environmental Regulations Division at 772-462-2526. Native vegetation that is not in the areas of the proposed construction parameters is to remain undisturbed.

The basis of payment for the **Clearing and Grubbing** shall be paid as LUMP SUM.

110-7-1 **Mailbox**, F&I Single

The bid price for this item shall include, but not be limited to, the requirements of Section 110 Mailbox (Remove, Protect and Reset) of the Standard Specifications. The unit cost shall include, but not be limited to the required manpower, equipment, material, and other costs involved in the furnish and install of mailboxes within the limits of construction.

The basis of payment for the **Mailbox**, **F&I Single** shall be paid as per EACH.

120-1A Regular Excavation/Embankment

The bid price for this item shall include, but not be limited to, the requirements of Section 120 Excavation and Embankment of the Standard Specifications. The unit cost shall include, but not be limited to the required manpower, equipment, materials, and any other items necessary as described within the plans. The unit cost shall consist of excavation and utilization or disposal of all materials necessary for the construction of the box culverts, roadway, shoulders, roadside swales, canal grading, and any other areas to achieve the design intent.

The Contractor shall be responsible for all grading included in the cost of excavation and embankment.

The basis of payment for **Regular Excavation/Embankment** shall be paid as LUMP SUM.

160-4 Type "B" Stabilization (12")

The bid price for this item shall include, but not be limited to, the requirements of Section 160 Stabilizing of the Standard Specifications. The unit cost shall include, but not be limited to the required manpower,

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equipment, materials, furnishing, spreading and mixing of all stabilizing material required, any reprocessing of stabilization area necessary to attain the specified bearing value and any other items necessary as described within the plans.

The basis of payment for **Type "B" Stabilization** shall be paid as per SQUARE YARD.

199-1A Construction Layout/Record Drawings

The bid price for this item shall include, but not be limited to the requirements of Section 5 of the Standard Specifications for the laying out of the construction work, and Section 7 of the Standard Specifications for the preparation and submittal of the as-built plans.

The unit cost shall include, but not be limited to the required manpower, equipment, material, and other costs to layout the control points shown in the plans. Establish the horizontal and vertical controls necessary to construct the work in conformity with the contract documents. Perform all calculations required, and set all stakes needed such as grade stakes, offset stakes, reference point stakes, and other reference marks or points necessary to provide lines and grades. The bid price shall also include preparing (1) electronic copy in PDF format and DWG format (Latest Version) of record drawings of the completed project showing all variations from the bid plans. The final document shall be signed and sealed by a professional surveyor registered to practice in the State of Florida and then submitted to the Engineer for approval. The Contractor shall accurately record the locations and elevations of the pipework and existing utilities and structures encountered during construction. All payment requests shall include record drawings confirming that pay items are situated in their final locations. It is anticipated that expenses related to this item shall be spread uniformly throughout the duration of the project.

The basis of payment for **Construction Layout/Record Drawing** shall be paid as per LUMP SUM.

285-718A Optional Base (Cemented Coquina, LBR 100, 18")

The bid price for this item shall include, but not be limited to, the requirements of Section 285 Optional Base Course of the Standard Specifications. The unit cost shall include, but not be limited to the required manpower, equipment, materials, and any other items necessary as described within the plans. This item shall also include the cost for the supply and application of the prime coat.

The basis of payment for Cemented Coquina (LBR 100) (18") shall be paid per SQUARE YARD.

334-1-13A Superpave Asphaltic Concrete, (1") (Traffic C, SP-9.5, PG76-22)

The bid price for this item shall include, but not be limited to, the requirements of Section 334 Superpave Asphalt Concrete of the Standard Specifications. This item shall also include the cost for the supply and application of tack coat.

The Contractor shall submit a mix design to the County for approval prior to ordering or placing any asphalt.

The basis of payment for **Superpave Asphaltic Concrete**, (1") (**Traffic C**, **SP-9.5**, **PG76-22**) shall be paid as per TON.

334-1-13B Superpave Asphaltic Concrete, (1.5") (Traffic C, SP-12.5, PG76-22)

The bid price for this item shall include, but not be limited to, the requirements of Section 334 Superpave Asphalt Concrete of the Standard Specifications. This item shall also include the cost for the supply and

application of tack coat.

The Contractor shall submit a mix design to the County for approval prior to ordering or placing any asphalt.

The basis of payment for Superpave Asphaltic Concrete, (1.5") (Traffic C, SP-12.5, PG76-22) shall be paid as per TON.

400-2-1 Concrete Class II (Concrete Collars, 4000 psi):

The bid price for this item shall include, but not be limited to, the requirements of Section 400 Concrete Structures of the Standard Specifications.

The Contractor shall submit a mix design to the County for approval prior to ordering or placing any concrete.

The basis of payment for **Concrete Class II** (**Concrete Collars, 4000 psi**): shall be paid as per CUBIC YARD.

400-80A Maintenance of Existing Drainage

The contractor shall conduct the construction operation in such a manner that adequate drainage is maintained at all times. Existing ditch/canal bank slopes must be protected from erosion and sloughing. Existing functioning storm sewers, gutters, ditches/canals, and other run-off facilities shall be kept free from obstructions.

This item shall include the furnishing of all materials, labor, equipment, power, maintenance, etc. to implement a temporary pumping system to divert the existing stormwater flow around the work area for the duration of the project. The design, installation, and operation of the temporary pumping system shall be the Contractor's responsibility. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction. The costs associated with the removal of the pump system shall be included in this item.

The Contractor shall submit to the County detailed plans and descriptions outlining all provisions and precautions to be taken by the Contractor regarding the handling of stormwater flows throughout the project. This plan must be specific and complete, including such items as schedules, locations, elevations, capacities of equipment, materials, and all other incidental items necessary and/or required to ensure proper protection of the facilities, protection of the access and bypass pumping locations from damage due to the discharge flows, removal of host pipes and all other incidental items, and compliance with the requirements and permit conditions specified in these Contract Documents. No construction shall begin until all provisions and requirements have been reviewed by the Engineer.

The Contractor shall maintain the water level on Canal 16 to not less than 2 FT from the top of the bank. In the event of a significant storm, the Contractor shall provide a pumping system that will be capable of diverting stormwater around the work area at a capacity of up to 27,000 GPM. The pump system shall be mobilized and set up within 24 hours after approval and written notification from the County in advance of the anticipated arrival of a storm or a significant rain event. The pump system shall be maintained to function throughout the event and may be required to operate for an extended period.

The basis of payment for **Maintenance of Existing Drainage** shall be paid as per LUMP SUM.

400-90A Construction Dewatering

The contractor shall be responsible for the design, installation, and operation of an adequate dewatering system until conditions are suitable to discontinue dewatering. The bid price for this item shall include, but not be limited to, the supply of normal dewatering equipment such as surface pumps, sump pumps, wellpoints and header pipes, and trenching/digging machinery. The unit cost shall include, but not be limited to the manpower, equipment, and materials, for the installation, operation, and removal of all elements of work associated with dewatering operations where dewatering is necessary to construct the proposed improvements.

The unit price shall also include the manpower, equipment, materials, and other items necessary to construct cofferdams upstream and downstream of the culvert crossing or other effective alternatives as indicated in the plans, and to remove the cofferdams once construction is complete. The cost of inspecting, maintaining, and repairing the cofferdams for the duration of construction shall also be included in the bid price of this item.

If required for the project, the Contractor shall include in this item all costs associated with obtaining a Dewatering Permit. A copy of the approved permit must be submitted to the County.

The basis of payment for **Construction Dewatering** shall be paid as LUMP SUM.

407-1-11A Precast Concrete Box Culvert (10'(Span) X 6'(Rise))

The bid price for this item shall include, but not be limited to, the requirements of Section 410 Precast Concrete Box Culvert of the Standard Specifications and Indexes 400-289 Concrete Box Culvert Details, 400-291 Precast Concrete Box Culverts Supplemental Detail and 400-292 Standard Precast Concrete Box Culverts of the Standards Plans.

The unit cost shall include, but not be limited to the required manpower, equipment, materials, and any other items necessary for the fabrication, delivery, and installation of the box culvert units as described in the plans.

The Contractor shall select a precast manufacturer that is listed as an FDOT-approved supplier of precast concrete box culvert products. The Contractor shall be responsible for coordinating with the precast manufacturer to ensure that fabrication and delivery time will not adversely affect the project schedule. The Contractor shall be responsible for providing the geotechnical report (included with the bid documents) and other required information for the design of the culvert sections to the precast manufacturer as requested.

The Contractor shall submit details of all precast box culvert elements for approval to the Engineer prior to manufacturing. These shop drawings must include the proposed layout, lifting devices, and a note describing the casting method for the precast box culverts. The area of excavation shall be maintained in a dry condition, with the use of an adequate dewatering system as applicable. The coarse aggregate bedding material at the bottom of the box culverts shall be wrapped with filter fabric as specified in the plans. The joints of the box culvert sections shall be sealed with either profile rubber gaskets or preformed joint sealants. The Contractor shall submit the field joint material proposed to the Engineer for approval. All box culvert joints and pipes to box culvert connections shall be wrapped with filter fabric. All associated costs are to be included in this bid item.

The basis of payment for **Precast Concrete Box Culvert (10'(Span) X 6'(Rise))** shall be paid per LINEAR FOOT.

430-174-124 Pipe Culvert, RCP, Round 24" (S/CD) (CLIII)

The bid price for this item shall include, but not be limited to, the requirements of Sections 430 Pipe Culverts of the Standard Specifications. The unit cost shall include, but not be limited to all excavation except for quantities included in other items of work as described in this document, all backfilling material and compaction; disposal of surplus material; and all clearing and grubbing outside of the required limits of clearing and grubbing as described in the plans.

All pipes to drainage structure connections shall be wrapped with filter fabric per FDOT Standard Plans Index No. 425-001. All pipe joints shall be wrapped with filter fabric per FDOT Standard Plans Index No. 430-001 in addition to the Manufacturer's gasket recommendations. Costs are to be included in this bid item.

The area of excavation shall be maintained in a dry condition to the extent reasonably practicable utilizing an adequate dewatering system to meet the compaction requirements. Bedding stones (#57) wrapped in filter fabric with a depth of one foot may be utilized in lieu of compaction under wet conditions when dewatering methods will not be effective upon inspection and written approval by the County's Project Manager at no additional cost to the COUNTY.

The contractor shall be responsible for selecting a plant currently on the FDOT's Production Facility Listing. Shop drawings, cut sheets, technical data sheets, and installation instructions must be submitted to the Engineer for approval prior to purchase or installation. Any products or materials manufactured, purchased, or installed shall be replaced at the contractor's expense if the above-noted approvals have not been obtained.

The basis of payment for **Pipe Culvert, RCP, Round, 24"** (S/CD) (CLIII) shall be paid per LINEAR FOOT.

430-984-129 Mitered End Section, Round, 24", (SD)

The bid price for this item shall include, but not be limited to, the requirements of Sections 430 Pipe Culverts and Storm Sewers and 449 Concrete Pipe of the Standard Specifications. The unit cost shall include, but not be limited to full compensation for all pipes, grates when required, fasteners, reinforcing, connectors, anchors, concrete, sealants, jackets, and coupling bands, and all work required as described in the plans.

The Contractor shall submit a mix design to the County for approval prior to ordering or placing any asphalt.

The basis of payment for Mitered End Section, Round, 24" (SD) shall be paid as EACH.

530-3-4 Riprap, Rubble, F&I, Ditch Lining

The bid price for this item shall include, but not be limited to, the requirements of Sections 514 Plastic Filter Fabric (Geotextile) and 530 Revetment Systems of the Standard Specifications. The unit cost shall include all materials, filter fabric, manpower, and equipment for installation as shown on the plans.

The CONTRACTOR shall submit to the County the material aggregate source and the technical data sheets for approval prior to ordering or installation. The County reserves the right to inspect and test any batch of riprap materials at the source or at the site to verify if they meet project specifications.

The basis of payment for **Riprap**, **Rubble**, **F&I**, **Ditch Lining** shall be paid per TON.

530-74 Bedding Stone

The bid price for this item shall include, but not be limited to, the requirements of Section 530 Revetment Systems of the Standard Specifications. The unit cost shall include, but not be limited to all materials, St. Lucie County

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manpower, and equipment for installation as described in the plans. The unit cost shall also include the cost to furnish and install the filter fabric.

The CONTRACTOR shall submit to the County the material aggregate source and the technical data sheets for the bedding stone and filter fabric for approval prior to ordering or installation. The County reserves the right to test any batch of stone at the source or on-site to determine if they meet project specifications.

The basis of payment for **Bedding Stone** shall be paid per TON.

536-73 Guardrail Removal

The bid price for this item shall include, but not be limited to, the requirements of Section 536 Guardrail of the Standard Specifications. The unit cost shall include all materials, manpower and equipment for removal as shown on the plans.

The basis of payment for **Guardrail Removal** shall be paid per LINEAR FOOT.

570-1-2 Performance Turf, Sod

The bid price for this item shall include, but not be limited to, the requirements of Section 570 Performance Turf of the Standard Specifications. The unit cost shall include, but not be limited to all materials, manpower, hardware, and equipment necessary to perform the task.

Also included in this item are fertilizing and watering needed to produce a healthy and vigorous stand of grass upon acceptance of the project by the County. All disturbed areas shall be covered to match like kind. The Contractor shall be responsible for repairing all washouts and eroded areas and watering the sod until such time as the project is accepted by the County.

The basis of payment for **Performance Turf, Sod** shall be paid per SQUARE YARDS.

700-1-11 Single Post Sign (Ground Mount)(F&I)(<12SF)

The bid price for this item shall meet the requirements of Section 700 Highway Signing of the Standard Specifications. The unit cost shall include all labor, equipment, and material to remove existing signs designated within plans.

The basis of payment for **Single Post Sign (Ground Mount)(F&I)(<12SF)** shall be paid as per ASSEMBLY.

706-1-3 Raised Pavement Marker, Type B

The bid price for this item shall meet the requirements of Section 706 Raised Retro-Reflective Pavement Markers and Marker Adhesive of the Standard Specifications. The unit cost shall include all cleaning and preparing of surfaces, furnishing of all materials, application, curing and protection of traffic, furnishing of all tools, machines and equipment for installation as shown on the plans.

The basis of payment for **Raised Payement Marker**, **Type B** shall be paid as per EACH.

711-11-121 Thermoplastic, Standard, White, Solid, 6"

The bid price for this item shall include, but not be limited to the requirements of Section 711 Thermoplastic Pavement Markings of the Standard Specifications. The unit cost shall include all cleaning

and preparing of surfaces, furnishing of all materials, application, curing and protection of traffic, furnishing of all tools, machines and equipment for installation as shown on the plans.

The basis of payment for **Thermoplastic**, **Standard**, **White**, **Solid**, **6**" shall be paid as per LINEAR FOOT.

711-11-231A Thermoplastic, Standard, Yellow, Skip, 6"

The bid price for this item shall include, but not be limited to the requirements of Section 711 Thermoplastic Pavement Markings of the Standard Specifications. The unit cost shall include all cleaning and preparing of surfaces, furnishing of all materials, application, curing and protection of traffic, furnishing of all tools, machines and equipment for installation as shown on the plans.

The basis of payment Thermoplastic, Standard, Yellow, Skip, 6" shall be paid as per LINEAR FOOT...

1000-1A Utility Coordination:

The Contractor shall coordinate with the utility companies to facilitate the adjustment, relocation, removal, and any other work necessary to accomplish the project's construction as specified in the plans. The contractor shall call 811 or Sunshine Notification Center at 1-800-432-4770 three business days before digging. The contractor shall notify utility companies two business days before digging to allow them to observe work. This item shall also include but not be limited to all labor, equipment, and materials necessary to adjust, relocate, and hold any utilities required to accommodate the proposed improvements not paid for or itemized elsewhere.

The basis of payment for **Utility Coordination** shall be paid as LUMP SUM.

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101-1A Mobilization/Demobilization

The work specified in this section shall include but not be limited to the requirements of Section 101 Mobilization of the Standard Specifications as well as all operations and preparations necessary to begin and end the work on the project. This shall also include those operations necessary for the movement of personnel, equipment, material, and incidentals to the site, establishment of safety equipment, first aid supplies, and sanitary facilities, as required by the Contract Documents. The cost of required bonds and any insurance(s) shall be included in this item.

Aside from the permits included in the bid documents, the contractor shall be responsible for any costs associated with acquiring other permits necessary to complete the project.

All payment requests shall include record drawings confirming that pay items are situated in their final locations. It is anticipated that expenses related to this item shall be spread uniformly throughout the project.

The costs in this section shall include, but not limited to, mowing existing sod and maintenance of existing right-of-way within the project limits inclusive for mowing and litter removal for the project duration.

The work specified in this section shall also include a pre-construction video of the project limits to be submitted to the County before the beginning of construction.

St. Lucie County Engineering Division At the pre-construction meeting, the CONTRACTOR shall submit a tentative work schedule, a list of subcontractors and suppliers, and emergency contact people with their respective phone numbers.

The project superintendent shall provide the ENGINEER with a cellular phone number for 24-hour access at the preconstruction meeting. It will be incumbent upon the CONTRACTOR to answer all calls or respond to any missed calls within thirty (30) minutes.

The basis of payment for Mobilization/Demobilization shall be paid as LUMP SUM in accordance with the following schedule:

Percent Contract	Allowable Percentage
Amount Earned	of Lump Sum Price
25%	25%
50%	50%
75%	75%
100%	100%

102-1A Maintenance of Traffic

The bid price for this item shall include, but not be limited to, the requirements of Section 102 Maintenance of Traffic of the Standard Specifications. The maintenance of traffic for this project shall be in accordance with the applicable FDOT index numbers (600 Series) and these documents: The Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways, U.S. Department of Transportation (DOT), and Florida Highway Administration (FHWA). These documents shall be followed in the design, application, installation, maintenance, and removal. It shall include, but not be limited to all traffic control devices, warning devices, barriers, temporary reflective markers, temporary pavement markings, dust control, and all other items necessary to protect the public and workmen from hazards within the project limits.

The contractor shall mobilize portable changeable message signs (PCMS) at the approaches to the project limits 14 days before the beginning of construction. PCMS shall also be installed 7 days before phase changes of the traffic control plan.

CONTRACTOR shall coordinate any type of traffic restrictions with the St. Lucie County Engineering Division. The CONTRACTOR shall notify the St. Lucie County Engineering Division of any road restrictions at least two (2) weeks prior to actual implementation.

At no time is live traffic permitted on the road while project is under construction. CONTRACTOR is responsible for all costs associated with the road closure and Maintenance of Traffic plan as depicted in the Johnston Road Culvert Replacement at FPFWCD Canal 16 Construction Plans Drawing C-09.

Any road closure and lane restriction requests must be APPROVED by the St. Lucie County Engineer a minimum of 2 weeks prior to implementation.

The basis of payment for **Maintenance of Traffic** shall be paid as per LUMP SUM.

104-2A Prevention, Control, and Abatement of Erosion and Water Pollution

The bid price for this item shall include but not be limited to the requirements of Section 104 Prevention, Control, and Abatement of Erosion and Water Pollution of the Standard Specifications. The methods shall include but are not limited to the following options: hay bales, silt fences, soil tracking prevention devices, St. Lucie County

and/or turbidity barriers. The existing drainage system within the project limits must be always maintained. The Contractor shall maintain all earthwork construction throughout the life of the contract and shall take all reasonable precautions to prevent the loss of material from the construction site due to the action of wind or water. The Contractor shall repair at their expense, except otherwise provided herein, any slides, washouts, settlements, subsidence, or other mishaps, that may occur prior to final acceptance of the work. Maintenance and protection of earthwork construction shall be in accordance with Section 104 Prevention, Control, and Abatement of Erosion and Water Pollution of the Standard Specifications.

The CONTRACTOR shall be responsible for any and all costs associated with the permitting and implementation of a National Pollution Discharge Elimination System (NPDES) Stormwater Pollution Prevention Plan (SWPPP).

The basis of payment for **Prevention, Control, and Abatement of Erosion and Water Pollution** shall be paid as LUMP SUM.

110-1-1 Clearing and Grubbing

The bid price for this item shall include, but not be limited to, the requirements of Section 110 Clearing and Grubbing of the Standard Specifications.

The unit cost shall include the clearing of all areas within the limits of construction in the roadway right-of-way, including but not limited to all necessary hauling, furnishing equipment, and equipment operation, for the removal and disposal of all buildings, timber, brush, trees, stumps, roots, rubbish, debris, existing flexible pavement and base, drainage structures, culverts, and pipes. Remove all other obstructions resting on or protruding through the surface of the existing ground and the surface of the excavated areas.

The CONTRACTOR shall coordinate any type of restrictions with the County and comply with areas so designated. Any tree that may be salvaged, not impacted, or removed is encouraged and should be coordinated with the County's Environmental Regulations Division at 772-462-2526. Native vegetation that is not in the areas of the proposed construction parameters is to remain undisturbed.

The basis of payment for the **Clearing and Grubbing** shall be paid as LUMP SUM.

120-1A Regular Excavation/Embankment

The bid price for this item shall include, but not be limited to, the requirements of Section 120 Excavation and Embankment of the Standard Specifications. The unit cost shall include, but not be limited to the required manpower, equipment, materials, and any other items necessary as described within the plans. The unit cost shall consist of excavation and utilization or disposal of all materials necessary for the construction of the box culverts, roadway, shoulders, roadside swales, canal grading, and any other areas to achieve the design intent.

The Contractor shall be responsible for all grading including in the cost of excavation and embankment.

The basis of payment for **Regular Excavation/Embankment** shall be paid as LUMP SUM.

199-1A Construction Layout/Record Drawings

The bid price for this item shall include, but not be limited to the requirements of Section 5 of the Standard Specifications for the laying out of the construction work, and Section 7 of the Standard Specifications for the preparation and submittal of the as-built plans.

The unit cost shall include, but not be limited to the required manpower, equipment, material, and other

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costs to layout the control points shown in the plans. Establish the horizontal and vertical controls necessary to construct the work in conformity with the contract documents. Perform all calculations required, and set all stakes needed such as grade stakes, offset stakes, reference point stakes, and other reference marks or points necessary to provide lines and grades. The bid price shall also include preparing (1) electronic copy in PDF format and DWG format (AutoCAD 2017) of record drawings of the completed project showing all variations from the bid plans. The final document shall be signed and sealed by a professional surveyor registered to practice in the State of Florida and then submitted to the Engineer for approval. The Contractor shall accurately record the locations and elevations of the pipework and existing utilities and structures encountered during construction. All payment requests shall include record drawings confirming that pay items are situated in their final locations. It is anticipated that expenses related to this item shall be spread uniformly throughout the duration of the project.

The basis of payment for Construction Layout & Record Drawing shall be paid as per LUMP SUM.

285-718A Cemented Coquina (LBR 100) (18")

The bid price for this item shall include, but not be limited to, the requirements of Section 285 Optional Base Course of the Standard Specifications. The unit cost shall include, but not be limited to the required manpower, equipment, materials, and any other items necessary as described within the plans. This item shall also include the cost for the supply and application of the prime coat.

The basis of payment for Cemented Coquina (LBR 100) (18") shall be paid per SQUARE YARD.

334-1-13A Superpave Asphaltic Concrete, (1") (Traffic C, SP-9.5, PG76-22)

The bid price for this item shall include, but not be limited to, the requirements of Section 334 Superpave Asphalt Concrete of the Standard Specifications. This item shall also include the cost for the supply and application of tack coat.

The Contractor shall submit a mix design to the County for approval prior to ordering or placing any asphalt.

The basis of payment for **Superpave Asphaltic Concrete**, (1") (**Traffic C, SP-9.5**, **PG76-22**) shall be paid as per TON.

334-1-13B Superpave Asphaltic Concrete, (1.5") (Traffic C, SP-12.5, PG76-22)

The bid price for this item shall include, but not be limited to, the requirements of Section 334 Superpave Asphalt Concrete of the Standard Specifications. This item shall also include the cost for the supply and application of tack coat.

The Contractor shall submit a mix design to the County for approval prior to ordering or placing any asphalt.

The basis of payment for **Superpave Asphaltic Concrete**, (1.5") (**Traffic C**, **SP-12.5**, **PG76-22**) shall be paid as per TON.

400-2-1 Concrete Class II (Concrete Collars, 4000 psi):

The bid price for this item shall include, but not be limited to, the requirements of Section 400 Concrete Structures of the Standard Specifications.

The Contractor shall submit a mix design to the County for approval prior to ordering or placing any asphalt.

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The basis of payment for **Concrete Class II** (**Concrete Collars, 4000 psi**): shall be paid as per CUBIC YARD.

400-80A Maintenance of Existing Drainage

The contractor shall conduct the construction operation in such a manner that adequate drainage is maintained at all times. Existing ditch/canal bank slopes must be protected from erosion and sloughing. Existing functioning storm sewers, gutters, ditches/canals, and other run-off facilities shall be kept free from obstructions.

This item shall include the furnishing of all materials, labor, equipment, power, maintenance, etc. to implement a temporary pumping system to divert the existing stormwater flow around the work area for the duration of the project. The design, installation, and operation of the temporary pumping system shall be the Contractor's responsibility. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction. The costs associated with the removal of the pump system shall be included in this item.

The Contractor shall submit to the County detailed plans and descriptions outlining all provisions and precautions to be taken by the Contractor regarding the handling of stormwater flows throughout the project. This plan must be specific and complete, including such items as schedules, locations, elevations, capacities of equipment, materials, and all other incidental items necessary and/or required to ensure proper protection of the facilities, protection of the access and bypass pumping locations from damage due to the discharge flows, removal of host pipes and all other incidental items, and compliance with the requirements and permit conditions specified in these Contract Documents. No construction shall begin until all provisions and requirements have been reviewed by the Engineer.

The Contractor shall maintain the water level on Canal 17 to not less than 2 FT from the top of the bank. In the event of a significant storm, the Contractor shall provide a pumping system that will be capable of diverting stormwater around the work area at a capacity of up to 27,000 GPM. The pump system shall be mobilized and set up within 24 hours after approval and written notification from the County in advance of the anticipated arrival of a storm or a significant rain event. The pump system shall be maintained to function throughout the event and may be required to operate for an extended period.

The basis of payment for **Maintenance of Existing Drainage** shall be paid as per LUMP SUM.

400-90A Construction Dewatering

The contractor shall be responsible for the design, installation, and operation of an adequate dewatering system until conditions are suitable to discontinue dewatering. The bid price for this item shall include, but not be limited to, the supply of normal dewatering equipment such as surface pumps, sump pumps, wellpoints and header pipes, and trenching/digging machinery. The unit cost shall include, but not be limited to the manpower, equipment, and materials, for the installation, operation, and removal of all elements of work associated with dewatering operations where dewatering is necessary to construct the proposed improvements.

The unit price shall also include the manpower, equipment, materials, and other items necessary to construct cofferdams upstream and downstream of the culvert crossing or other effective alternatives as indicated in the plans, and to remove the cofferdams once construction is complete. The cost of inspecting, maintaining, and repairing the cofferdams for the duration of construction shall also be included in the bid price of this item.

The basis of payment for **Construction Dewatering** shall be paid as LUMP SUM.

407-1-11A Precast Concrete Box Culvert (10'(Span) X 6'(Rise))

The bid price for this item shall include, but not be limited to, the requirements of Section 410 Precast Concrete Box Culvert of the Standard Specifications and Indexes 400-289 Concrete Box Culvert Details, 400-291 Precast Concrete Box Culverts Supplemental Detail and 400-292 Standard Precast Concrete Box Culverts of the Standards Plans.

The unit cost shall include, but not be limited to the required manpower, equipment, materials, and any other items necessary for the fabrication, delivery, and installation of the box culvert units as described in the plans.

The Contractor shall select a precast manufacturer that is listed as an FDOT-approved supplier of precast concrete box culvert products. The Contractor shall be responsible for coordinating with the precast manufacturer to ensure that fabrication and delivery time will not adversely affect the project schedule. The Contractor shall be responsible for providing the geotechnical report (included with the bid documents) and other required information for the design of the culvert sections to the precast manufacturer as requested.

The Contractor shall submit details of all precast box culvert elements for approval to the Engineer prior to manufacturing. These shop drawings must include the proposed layout, lifting devices, and a note describing the casting method for the precast box culverts. The area of excavation shall be maintained in a dry condition, with the use of an adequate dewatering system as applicable. The coarse aggregate bedding material at the bottom of the box culverts shall be wrapped with filter fabric as specified in the plans. The joints of the box culvert sections shall be sealed with either profile rubber gaskets or preformed joint sealants. The Contractor shall submit the field joint material proposed to the Engineer for approval. All box culvert joints and pipes to box culvert connections shall be wrapped with filter fabric. All associated costs are to be included in this bid item.

The basis of payment for **Precast Concrete Box Culvert (10'(Span) X 6'(Rise))** shall be paid per LINEAR FOOT.

430-174-124 Pipe Culvert, RCP, Round 24" (SD)

The bid price for this item shall include, but not be limited to, the requirements of Sections 430 Pipe Culverts of the Standard Specifications. The unit cost shall include, but not be limited to all excavation except for quantities included in other items of work as described in this document, all backfilling material and compaction; disposal of surplus material; and all clearing and grubbing outside of the required limits of clearing and grubbing as described in the plans.

All pipes to drainage structure connections shall be wrapped with filter fabric per FDOT Standard Plans Index No. 425-001. All pipe joints shall be wrapped with filter fabric per FDOT Standard Plans Index No. 430-001 in addition to the Manufacturer's gasket recommendations. Costs are to be included in this bid item.

The area of excavation shall be maintained in a dry condition to the extent reasonably practicable utilizing an adequate dewatering system to meet the compaction requirements. Bedding stones (#57) wrapped in filter fabric with a depth of one foot may be utilized in lieu of compaction under wet conditions when dewatering methods will not be effective upon inspection and written approval by the County's Project Manager at no additional cost to the COUNTY.

The contractor shall be responsible for selecting a plant currently on the FDOT's Production Facility Listing. Shop drawings, cut sheets, technical data sheets, and installation instructions must be

St. Lucie County Engineering Division submitted to the Engineer for approval prior to purchase or installation. Any products or materials manufactured, purchased, or installed shall be replaced at the contractor's expense if the above-noted approvals have not been obtained.

The basis of payment for **Pipe Culvert**, **RCP**, **Round 24**", (**SD**) shall be paid per LINEAR FOOT.

430-984-129 Mitered End Section, Round, 24", (SD)

The bid price for this item shall include, but not be limited to, the requirements of Sections 430 Pipe Culverts and Storm Sewers and 449 Concrete Pipe of the Standard Specifications. The unit cost shall include, but not be limited to full compensation for all pipes, grates when required, fasteners, reinforcing, connectors, anchors, concrete, sealants, jackets, and coupling bands, and all work required as described in the plans.

The Contractor shall submit a mix design to the County for approval prior to ordering or placing any asphalt.

The basis of payment for Mitered End Section, Round, 24" (SD) shall be paid as EACH.

530-3-4 Riprap, Rubble, F&I, Ditch Lining

The bid price for this item shall include, but not be limited to, the requirements of Sections 514 Plastic Filter Fabric (Geotextile) and 530 Revetment Systems of the Standard Specifications. The unit cost shall include all materials, filter fabric, manpower, and equipment for installation as shown on the plans.

The CONTRACTOR shall submit to the County the material aggregate source and the technical data sheets for approval prior to ordering or installation. The County reserves the right to inspect and test any batch of riprap materials at the source or at the site to verify if they meet project specifications.

The basis of payment for **Riprap**, **Rubble**, **F&I**, **Ditch Lining** shall be paid per TON.

530-74 Bedding Stone

The bid price for this item shall include, but not be limited to, the requirements of Section 530 Revetment Systems of the Standard Specifications. The unit cost shall include, but not be limited to all materials, manpower, and equipment for installation as described in the plans. The unit cost shall also include the cost to furnish and install the filter fabric.

The CONTRACTOR shall submit to the County the material aggregate source and the technical data sheets for the bedding stone and filter fabric for approval prior to ordering or installation. The County reserves the right to test any batch of stone at the source or on-site to determine if they meet project specifications.

The basis of payment for **Bedding Stone** shall be paid per TON.

536-73 Guardrail Removal

The bid price for this item shall include, but not be limited to, the requirements of Section 536 Guardrail of the Standard Specifications. The unit cost shall include all materials, manpower and equipment for removal as shown on the plans.

The basis of payment for **Guardrail Removal** shall be paid per LINEAR FOOT.

550-10-110 Fencing, Type A, 4 Ft. Standard

The bid price for this item shall include, but not be limited to, the requirements of Section 550 Fence of the Standard Specifications, Index 550-001 Fence Type A of the Standard Plans. The unit cost shall include all materials, manpower, and equipment for installation.

The CONTRACTOR shall submit to the County, but not limited to, shop drawings and technical data sheets for all hardware and fasteners for installation from the manufacturer for approval prior to ordering or installing the fence. Furnish the County a Certificate of Compliance certifying that the fencing system and materials are in compliance with Standards and Specifications.

The basis of payment for **Fencing**, (**Type A**, **4 Ft. Height**) shall be paid per LINEAR FOOT.

550-60-513 Fence Gate (Remove and Reset)

The bid price for this item shall include, but not be limited to, the requirements of Section 550 Fence Gate of the Standard Specifications. The unit cost shall include all materials, manpower and equipment for installation.

The basis of payment for **Fence Gate (Remove and Reset)** shall be paid as per EACH.

570-1-2 Performance Turf, Sod

The bid price for this item shall include, but not be limited to, the requirements of Section 570 Performance Turf of the Standard Specifications. The unit cost shall include, but not be limited to all materials, manpower, hardware, and equipment necessary to perform the task.

Also included in this item are fertilizing and watering needed to produce a healthy and vigorous stand of grass upon acceptance of the project by the County. All disturbed areas shall be covered to match like kind. The Contractor shall be responsible for repairing all washouts and eroded areas and watering the sod until such time as the project is accepted by the County.

The basis of payment for **Performance Turf**, **Sod** shall be paid per SQUARE YARDS.

700-1-11 Single Post Sign (Ground Mount)(F&I)(<12SF)

The bid price for this item shall meet the requirements of Section 700 Highway Signing of the Standard Specifications. The unit cost shall include all labor, equipment, and material to remove existing signs designated within plans.

The basis of payment for **Single Post Sign (Ground Mount)(F&I)(<12SF)** shall be paid as per ASSEMBLY.

706-1-3 Raised Pavement Marker, Type B

The bid price for this item shall meet the requirements of Section 706 Raised Retro-Reflective Pavement Markers and Marker Adhesive of the Standard Specifications. The unit cost shall include all cleaning and preparing of surfaces, furnishing of all materials, application, curing and protection of traffic, furnishing of all tools, machines and equipment for installation as shown on the plans.

The basis of payment for **Raised Payement Marker**, **Type B** shall be paid as per EACH.

711-11-121 Thermoplastic, Standard, White, Solid, 6"

The bid price for this item shall include, but not be limited to the requirements of Section 711 Thermoplastic Pavement Markings of the Standard Specifications. The unit cost shall include all cleaning

St. Lucie County Engineering Division

and preparing of surfaces, furnishing of all materials, application, curing and protection of traffic, furnishing of all tools, machines and equipment for installation as shown on the plans.

The basis of payment for **Thermoplastic**, **Standard**, **White**, **Solid**, **6**" shall be paid as per LINEAR FOOT.

711-11-231A Thermoplastic, Standard, Yellow, Skip, 6"

The bid price for this item shall include, but not be limited to the requirements of Section 711 Thermoplastic Pavement Markings of the Standard Specifications. The unit cost shall include all cleaning and preparing of surfaces, furnishing of all materials, application, curing and protection of traffic, furnishing of all tools, machines and equipment for installation as shown on the plans.

The basis of payment Thermoplastic, Standard, Yellow, Skip, 6" shall be paid as per LINEAR FOOT..

1000-1A Utility Coordination

The Contractor shall coordinate with the utility companies to facilitate the adjustment, relocation, removal, and any other work necessary to accomplish the project's construction as specified in the plans. The contractor shall call 811 or Sunshine Notification Center at 1-800-432-4770 three business days before digging. The contractor shall notify utility companies two business days before digging to allow them to observe work. This item shall also include but not be limited to all labor, equipment, and materials necessary to adjust, relocate, and hold any utilities required to accommodate the proposed improvements not paid for or itemized elsewhere.

The basis of payment for **Utility Coordination** shall be paid as LUMP SUM.

BIDDER'S QUALIFICATION QUESTIONNAIRE

THE UNDERSIGNED GUARANTEES THE TRUTH AND ACCURACY OF ALL STATEMENTS AND ANSWERS HEREIN CONTAINED:

1.	How many years has your organization been in business as a general contractor?
2.	What is the last project of this nature that you have completed?
3.	Have you ever failed to complete work awarded to you? If so, where and why?
4.	The following are named as three (3) corporations or individuals for which you have performed work and to which you refer.
5.	Have you personally inspected the proposed work and have you a complete plan or schedule for its performance? Provide schedule to describe the amount of work per month that is to be completed.

6.	Will you sublet part of this work? If so, give details.
7.	What equipment do you own that is available for the work?
8	What equipment will you purchase for the proposed work?
9.	What equipment will you rent for the proposed work?
10.	The following is given as a summary of the financial statement of the undersigned: (List assets and liabilities and use insert sheets(s) if necessary)

BIDDER'S QUALIFICATION QUESTIONNAIRE (cont'd)

- 11. Please provide proof of State Certification and/or State Registration by attaching copies of State Certifications. State Registrations shall also be accompanied by proof of St. Lucie County Certificate(s) of Competency by attaching copies of County Certificate(s) **Possession of either a State Certification or County Competency card must be attained prior to bid submittal.**
- 12. State the true, exact, correct and complete name of the partnership, corporation or trade name under which you do business. (If corporation, state the name of the president and secretary. If a partnership, state the name of all partners. If a trade name, state the name of the individuals who do business under the trade name.)

	(Correct name of bidder)
(a.)	The business is a
(b.)	The address of the principal place of business is:
(c.)	The names of the corporate officers, or partners, or individuals doing business under a trade name are as follows:

SECTION 00410 BID BOND

KNOW ALL ME	N THESE PRESENT	S, THAT WE		as
Principal, and			as surety, are f	firmly bound unto the
Board of County	Commissioners, St. Lu	icie County, Flo	orida, hereinafter called t	the Owner in the sum
of	dol:	lars (\$) being	g 5% of the attached
maximum	bid amount	of		dollars
(\$) 1	the payment of	which sum well and truly	y to be made, the said
Principal and the s	aid surety, bind ourselv	es, our heirs, ex	ecutors, administrators, su	accessors, and assigns,
jointly and several	ly, firmly by these pres	ents.		
	orn and Associates, In		ared by Stephen Cooper ract documents prepared	
NOW, THEREFORE, if the Owner shall accept the bid of the Principal and the Principal shall enter into a contract with the owner in accordance with the terms of such bid, and give such 100% Bond as specified in the Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and materials furnished in the prosecution thereof, or in the event the Principal fails to enter such contract and give such bond or bonds, if the Principal shall pay to the Owner the difference not exceeding the penalty hereof between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.				
Signed and sealed	this	da	y of	, 20

FOR CORPORATE BIDDERS:	
	(Principal) (Seal)
(Secretary)	Ву
	Title
WITNESS:	Surety
	By(Attorney-in-Fact)
	Typed Name
	Address
	-
FOR NON-CORPORATE BIDDERS:	
WITNESS:	(Principal) (Seal)
	By
	Title
WITNESS:	Surety
	By
	Typed Name
	Address

SECTION 00480 TRENCH SAFETY ACT COMPLIANCE STATEMENT

Project Name JOHNSTON ROAD AT FPFWCD CANALS 16 & 17 CULVERT REPLACEMENT

Project Number 15-200/16-202
Project Location See Plans

Instructions: Chapter 90-96 of the Laws of Florida requires all contractors engaged by St. Lucie County, Florida to comply with Occupational Safety and Health Administration Standard 29 C.F.R. s. 1926.650 Subpart P. All prospective contractors are required to sign the compliance statement and provide compliance cost information where indicated below. The costs for complying with the Trench Safety Act must be incorporated into this project's base bid.

Certify this form in the presence of a notary public or other officer authorized to administer oaths.

1.0 Certification.

- 1.1 I understand that Chapter 90-96 of the Laws of Florida (The Trench Safety Act) requires me to comply with OSHA Standard 29 C.F.R. s. 1926.650 Subpart P. I will comply with The Trench Safety Act and I will design and provide trench safety systems at all trench excavations in excess of five feet in depth for this project.
- 1.2 The estimated cost imposed by compliance with The Trench Safety Act will be:

		Dollars(Written)		
		(Written) (Figures)		
	1.3	The amount listed above has been included within the Base Bid.		
Certifie	ed:	(Company-Contractor)		
		(Company-Contractor)		
	By: _			_
		(President's Signature)		
		(President's Typed or Printed Name)		
2.0	Notar	ization.		
Sworn		subscribed before me in St. Lucie County, Florida on the, 20		_ day o
			(00 1)	
Notary	Public:		(affix seal)	
M C		on Expires:		

PUBLIC ENTITY CRIME AFFIDAVIT

Any person submitting a quote, bid or proposal in response to this invitation must execute the enclosed form PUR. 7069, SWORN STATEMENT UNDER SECTION 287.133 (3)(A) FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES, including proper check(s), in the space(s) provided, and enclose it with his quote, bid or proposal. If you are submitting a quote, bid, or proposal on behalf of dealers or suppliers who will ship commodities and receive payment from the resulting contract, it is your responsibility to see that copy (s) of the form are executed by them and are included in your quote, bid or proposal. Corrections to the form will not be allowed after the quote, bid or proposal opening time and date. Failure to complete this form in every detail and submit it with your quote, bid or proposal may result in immediate disqualification of your bid or proposal.

The 1988 Florida Legislature passed Senate Bill 458 creating Sec. 287, 132-133, Florida Statutes, effective 7-1-89. Sec. 287.132 (3)(d), Florida Statutes requires the Florida Department of General Services to maintain and make available to other political entities a "convicted vendor" list consisting of persons and affiliates who are disqualified from public contracting and purchasing process because they have been found guilty of a public entity crime. A public entity crime is described by Sec. 287.133, Florida Statute as a violation of any State or Federal law by a person with respect to and directly related to the transaction of business with any public entity in Florida or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or with an agency or political subdivision and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

By law no public entity shall accept any bid from, award any contract to, or transact any business in excess of the threshold amount provided in Section 287.017, Florida Statute for category two (currently \$10,000) with any person or affiliate on the convicted vendor list for a period of 36 months from the date that person or affiliate was placed on the convicted vendor list unless that person or affiliate has been removed from the list pursuant to Section 287.133 (3)(f), Florida Statute.

The attached statement or affidavit will be the form to be utilized and must be properly signed in the presence of a notary public or other officer authorized to administer oaths and properly executed.

The inclusion of the sworn statement or affidavit shall be submitted concurrently with your bid documents. Non-inclusion of this document may necessitate rejection of your bid.

SWORN STATEMENT UNDER SECTION 287.133 (3) (A). FLORIDA STATUTES ON PUBLIC ENTITY CRIMES

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

1.	This sworn statement is submitted with Bid, for the (Johnston Road At FPFWCD Car 16 & 17 Culvert Replacements) in St. Lucie County, Florida.	
2.	This sworn statement is submitted by	
	and (if applicable) its Federal Employer Identification Number (FEIN) is	
3.	My name is and my relationship to the entity	
	named above is	
4.	I understand that a "public entity crime" as defined in Paragraph 287.133 (1)(g), <u>Florida Statutes</u> , means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.	
5.	I understand that "convicted" or "conviction" as defined in Paragraph 287.133 (1)(b) Florida Statutes means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.	
6.	I understand that an "affiliate" as defined in Paragraph 287.133 (1)(a), Florida Statutes means:	
	1. A predecessor or successor of a person convicted of a public entity crime; or	

- 2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
- 7. I understand that a "person" as defined in Paragraph 287.133 (1)(e), FLORIDA STATUTES, means any natural person or entity organized under the laws of any state or St. Lucie County Project #15-200/16-202

of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity.

The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of any entity.

	he statement that I have marked below is true in relation to the nent. (Please indicate which statement applies.)
partners, shareholders, em	ng this sworn statement, nor any officers, directors, executives, apployees, members or agents who are active in management of of the entity have been charged with and convicted of a public July 1, 1989.
executives, partners, shar management of the entity,	s sworn statement, or one or more of the officers, directors, reholders, employees, members, or agents who are active in or an affiliate of the entity has been charged with and convicted sequent to July 1, 1989, <u>AND</u> , (Please indicate which additional
State of Florida, Division	eding concerning the conviction before a hearing officer of the of Administrative Hearings. The final order entered by the ce the person or affiliate on the convicted vendor list. (Please order.)
subsequent proceeding be Administrative Hearings. was in the public interest to (Please attach a copy of the person or affiliate has	vas placed on the convicted vendor list. There has been a perfore a hearing officer of the State of Florida, Division of The final order entered by the hearing officer determined that it to remove the person or affiliate from the convicted vendor list. The final order.) In not been placed on the convicted vendor list. (Please describe adding with the Department of General Services.)
Signature	
STATE OF	, COUNTY OF
PERSONALLY APPEARED BEFO	ORE ME, the undersigned authority,
(Name of individual signing)	
who, after first being sworn by me	e, affixed his/her signature in the space provided above on
the day of	20
NOTARY PUBLIC	
My Commission expires:	
St. Lucie County	Project #15-200/16-202

SECTION 00500 CONTRACT

THIS CONTRACT, made this	day of	_ 20_, between ST. LUCIE
COUNTY, a political subdivision of the State	of Florida, hereinafter called t	he "COUNTY", and XXX,
their successors, executors, administrators, and	assigns hereinafter called the "C	CONTRACTOR".

WITNESSETH:

1. **PURPOSE**

That Contractor agrees with County, for the consideration herein mentioned, at his, its or their own proper cost and expense to do all the Work and furnish all the materials, equipment, supplies, and labor necessary to carry out this Contract in the manner and to the full extent as set forth in the Contract Documents, and to the satisfaction of the duly authorized representatives of St. Lucie County, who shall have at all times full opportunity to inspect the materials to be furnished and the Work to be done under this Contract.

2. GENERAL DESCRIPTION OF WORK

It is agreed that the Work to be done under this Contract consists of replacing two (2) existing 84" CMP's under Johnston Road at FPFWCD canals C-16 and C-17 with 10' X 6' Box Culverts. In addition, removing and replacing eight (8) side drains connected to the box culverts, armoring each bank with Rip Rap at FPFWCD canal 16 and canal 17 under Johnston Road, and the work also is including but not limited to:

- Maintaining the existing drainage
- Guardrail removal
- Installation of mitered end sections on each ends of box culverts
- Slope restoration armoring bank with rip rap
- Reconstruction of roadway
- Restoration and installation of signage, markings, and sod

3. **PROJECT MANAGER**

The Project Manager for the County is <u>Daniel Finz</u> at <u>(772) 462-2742</u>. The Project Manager for the Contractor is XXX at (XXX) XXX-XXXX.

The parties shall direct all matters arising in connection with the performance of this Contract, other than invoices and notices, to the attention of the Project Managers for attempted resolution or action. Except as otherwise provided for in this Contract, the Project Managers shall be responsible for overall resolution or action. The Project Managers shall be responsible for overall coordination and oversight relating to the performance of this Contract. The Project Manager, however, has no authority to approve or execute Change Order Work except as set forth in the County Purchasing Manual.

The Contractor shall keep during the term of this Contract a competent Project Manager, any necessary assistants, all satisfactory to the County's Project Manager. The Contractor, as soon as possible after the award of the contract, but prior to the Notice-to-Proceed, shall furnish in writing to the County's Project manager the name and qualifications of the Project Manager who will be in charge of the project, along with the Project Manager's cell phone/direct connect number. The County's Project Manager may reply within fourteen (14) days to the contractor in writing stating whether he/she has an objection to the proposed Project Manager or requires additional time for review. The failure of the County's Project Manager to make objection to the Contractor's Project Manager within the fourteen (14) days of receipt shall constitute an acceptance of such Project Manager.

The Contractor shall not use a Project Manager to whom the County has made reasonable and timely objection. The Contractor shall not change their Project Manager without the County's consent. The County's Project Manager shall be able to reach the Contractor's Project Manager on their cell phone number at all hours. The Contractor shall give sufficient superintendence to the work using his best skill and attention. At any time the County's Project Manager, with or without cause, may request that the Contractor replace any individual with an individual acceptable to the County.

4. **CONTRACT DOCUMENTS**

The Contract Documents which comprise the Contract between the County and the Contractor are attached hereto and made part hereof and consist of the following:

- A. This Contract, consisting of pages 0500-01 through 0500-17 inclusive.
- B. Bid Documents, consisting of:

Invitation to Bid

Instructions to Bidders (Section 00100)

Bidder's Checklist (Section 00110)

Bid Form and Technical Specifications (Section 00300) pages 01 to 16, inclusive.

Bid Bond (Section 00410)

Trench Safety Act Compliance Statement (Section 00480)

Public Entity Crime Affidavit (Section 00490)

Public Construction Bond (Section 00610)

General Conditions (Section 00700)

Special Conditions (Section 00800)

Environmental Specifications (Section 00900)

Appendix A – Payment Request Forms

Appendix B – Permits

Appendix C – Reports

C. FPFWCD C-16 Culvert Replacement Plans No. 01 through 12, inclusive, (Stephen Cooper, P.E. and Associates, Inc.);

FPFWCD C-17 Culvert Replacement Plans No. 01 through 18, inclusive. (Kimley-Horn and Associates, Inc.);

D. Addenda No. XX to XX, inclusive.

- E. Recorded Public Construction Bond on the form provided by the County (Section 00610), which shall be returned to the County by the Contractor, along with the executed copy of this Contract. The Contractor shall be responsible for recording the Public Construction Bond.
- F. Insurance Certificates which shall be provided by the Contractor, along with the return of an executed copy of this Contract.
- G. Any Modifications, including change orders, duly delivered after execution of this Contract.

Except for duly authorized and executed Modifications including but not limited to change orders and contract amendments, any conflict between the terms and conditions of this Contract and the terms and conditions of any of the other contract documents shall be interpreted in favor of this Contract.

5. <u>CONTRACT PAYMENT</u>

Contingency Definition - Contingency shall only be paid in the event additional work is needed and approved by St. Lucie County for unforeseen work in conformance with this contract. There is no guarantee, if any, of the total amount to be spent from the Contingency.

In accordance with Section 218.72(1), Florida Statutes, the Agent, being the Project Architect, Project Engineer or other agency, employee, or person acting on behalf of the County who is required to review invoices or payment requests submitted on this Project, and to which the Contractor shall submit its payment requests or invoices, shall be as follows:

Name Company Name Address City, State Zip

6. **PAYMENT SCHEDULE**

The County shall make payments on account of the Contract as follows:

Once each month progress payments shall be made during the process of construction in amounts not to exceed ninety-five percent (95%) of the amount due on the Contract on the basis of Work completed as certified by the Contractor and approved by the County's designated employee or Agent, as set forth above, Pursuant to Sections 218.72 (7) and (8), Florida Statutes, payment application or payment requests must be made in the form provided for in the Bid Documents and shall be fully executed and notarized. Contractor shall submit a proper payment application to the County's Project Manager by the 25th day of each month. The application shall be for the dollar amount of the Work complete on the last day preceding the submission of the application. If an Agent must approve the payment request or invoice prior to submission to the County, then

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Payment to the Contractor shall be due within 25 business days after the date on which the payment request or invoice is stamped as received as provided in Section 218.74(1), Florida Statutes. The Contractor may send the County an overdue notice and if the payment request or invoice is not rejected within four (4) business days after delivery of the overdue notice, the payment or invoice is deemed accepted, except for any portion deemed fraudulent or misleading. If no Agent is required to approve the payment request or invoice prior to submission to the County, then payment is due within 20 business days after the date on which payment request or invoice is stamped as received in accordance with Section 218.74(1), Florida Statutes.

The County may reject the payment request or invoice in writing within 20 business days after the date on which the payment request or invoice is stamped as received as provided in Section 218.74(1), Florida Statutes, which shall specify the deficiency and the action necessary to correct the deficiency and to make the payment request or invoice proper. Payment of a corrected payment request or invoice, or rejection thereof, shall be made 10 business days after the date the corrected payment request or invoice is stamped as received as provided in Section 218.74(1), Florida Statutes. All applications for payment submitted by the Contractor shall reference the County's Contract number. The parties agree that any payments withheld as liquidated damages or for any other reason allowed by this Contract, shall not be governed by the Florida Prompt Payment Act, Sections 217.70-80, Florida Statutes.

If a dispute between the County and the Contractor cannot be resolved by the procedure in this subsection, then the dispute must be resolved in accordance with the dispute resolution procedure set forth in this Contract. If the County disputes a portion of the payment request or invoice, then the undisputed portion shall be paid timely in accordance with this subsection.

As a part of this Contract, if the Contractor receives payment, then the Contractor must remit undisputed payment due to subcontractors and suppliers within 10 days after contractor's receipt of payment. A subcontractor who receives payment must remit undisputed payment due to those subcontractors and suppliers within 7 days after subcontractor's receipt of payment.

Prior to final payment, a consultant evaluation form must be completed by the County's Project Manager. Additionally, all Releases of Liens must be submitted and, if applicable, a written certification of the project engineer that the project has been completed per plans and specs must be presented to the Board of County Commissioners for final acceptance. Prior to final payment or any progress payment, the County may require that a Consent of Surety be provided.

7. **PERFORMANCE GUARANTY**

That Contractor guarantees to repair, replace or otherwise make good to the satisfaction of the County any defect in workmanship or material appearing in the Work; and further guarantees the successful performance of the Work for the service intended. Neither inspection nor payment, including final payment, by the County shall relieve the Contractor or its Surety from his or its obligations to do and complete the Work in accordance with this Contract. If the County deems it inexpedient to require the Contractor to correct deficient or defective Work, an equitable deduction from the contract price shall be made therefore or in the alternative, if the expense incurred by the County to correct deficient or defective Work exceeds the unpaid balance on this Contract, the Contractor shall pay the difference to the County. The liability of the Contractor and its surety or sureties for such payment is joint and several.

8. TIME OF PERFORMANCE/DELAYS AND EXTENSIONS OF TIME

The Contractor shall begin work within **Ten** (10) calendar days after the signing, execution and delivery of written notice to proceed, and shall guarantee **Substantial Completion** of the Contract on or before **One hundred fifty** (150) calendar days from the date of notice to proceed and total completion of the Contract on or before **Two hundred fifteen** (215) calendar days from the date of the notice to proceed. Commencement of the Work by the Contractor shall be deemed a waiver of this notice. The Work shall be conducted in such a manner and with sufficient labor, materials, tools, and equipment necessary to complete the Work within the time limit set forth in the Contract. In the event the construction schedule as set forth in the Contract documents is changed, the Contractor shall notify the County, in writing, of the change in schedule. Such schedule change shall not, however, extend the time for completion unless approved by the County in writing.

In the sole opinion of the County, should the organization of the Contractor, or its management, or the manner of carrying on the Work be manifestly incompetent, or inadequate to do the Work specified within the stated time, then the County shall have the right to take charge of the Work and finish it and provide the labor, materials and equipment necessary to complete the Work as planned within the required time and to charge the cost of all such Work against the Contractor and his, or its Surety shall be held responsible therefore. The Contractor fully understands and agrees that the County shall not pay for any obligation incurred or expenditure made by the Contractor prior to the effective date of the notice to proceed described above, unless the County authorizes such payment in writing.

As the Contractor's sole and exclusive remedy for delay, the County may grant an extension of the contract time, when a critical item of Work is delayed by any factors contemplated or not contemplated at the time of the bid. Such extension of time may be allowed for delays occurring during the contract time period or authorized extension of the contract time. All claims for extension of time shall be made in writing to the County. Claims for delay due to inclement weather (i.e., beyond the 10 year mean average) shall be made by the 10th day of the month following the month of the delay. All other claims shall be made no more than twenty (20) days after the commencement of the delay. Claims made beyond these time limits shall be null and void. Requests for extension of time shall be fully documented and shall include copies of daily logs, letters, shipping orders, delivery tickets, and other supporting information. In case of a continuing cause of delay only one (1) claim is necessary. Normal working weeks are based on a five (5) day week. All authorized extensions of time shall only be done by Change Order.

9. **DELAY DAMAGES**

It is mutually agreed between the parties hereto that time is of the essence in the performance of this Contract. In the event the construction of the Work is not completed within the time herein specified the County will suffer damages, the amount of which is difficult if not impossible to ascertain. It is agreed, therefore, that from the compensation otherwise to be paid to the Contractor, the County may retain the sum of \$1,685 per calendar day for each day thereafter, Sundays and holidays included, that the Work remains uncompleted. This sum shall represent liquidated damages which the County will have sustained per calendar day from the inconvenience and expense caused to the County by the delay in the completion of the Work. This sum is not a penalty, being the liquidated damages the County will have sustained in event of such default by the Contractor. The County reserves the right to additionally recover direct job site expenses incurred during the period of any delay. The Contractor shall be liable for liquidated damages even if the

Contract is terminated by the County for cause or if the Contractor abandons the Work. The liability of the Contractor and its surety or sureties for damages provided by this Article is joint and several.

10. **PUNCHLIST PROCEDURES**

Further to Section 218.735(7), Florida Statutes, Punchlist procedures to render the Work complete, satisfactory and acceptable are established as follows:

- A. There shall be the development of a single checklist of items required to render complete, satisfactory, and acceptable, the construction services purchased by the County. Within five (5) days of Substantial Completion of the construction services purchased as defined in the Contract, Contractor shall schedule a walkthrough with St. Lucie County ("Initial Walkthrough" a/k/a "IW"). The purpose of the IW is to develop a preliminary checklist ("Checklist") of items to be performed by the Contractor, based upon observations made jointly between the Contractor and St. Lucie County during the IW. The IW is to occur within ten (10) days of Substantial Completion of the Work as defined by the Contract, again predicated upon the Contractor's timely initiation of a request for the IW. At its option, St. Lucie County may conduct the IW with its Field Inspector.
- B. Contractor shall endeavor to address and complete as many items as possible noted on the Checklist either during the IW itself, or thereafter for a period of fifteen (15) days from the date of the IW.
- C. No later than fifteen (15) days following the scheduled IW, Contractor shall again initiate and request a second walkthrough of the Project with St. Lucie County. The purpose of this second walkthrough is to identify which items remain to be performed from the IW Checklist and to supplement that list as necessary (based, for example, upon work which may have been damaged as a result of the Contractor's performance of completion of items contained on the IW Checklist) and for the purpose of developing a joint single Final Punchlist.
- D. The intent of this section is for St. Lucie County and the Contractor to cooperate to develop a single Final Punchlist to be completed no later than thirty (30) days from the date of reaching Substantial Completion of the construction services purchase as defined in the Contract. The Final Punchlist shall be delivered to the Contractor within five (5) days of its development.
- E. In no event may the Contractor request payment of final retainage under Section 218.735(7)(d), Florida Statutes, until the Contractor considers the Final Punchlist to be 100% complete.
- F. Contractor agrees to complete the single Final Punchlist items within thirty (30) days of the date of its issuance by St. Lucie County.
- G. Contractor acknowledges and agrees that no item contained on the Final Punchlist shall be considered a warranty item until such time as (a) the Final Punchlist is 100% complete, and (b) St. Lucie County has been able to operate or utilize the affected punchlist item for an additional period of fifteen (15) days.
- H. Contractor acknowledges and agrees that St. Lucie County may, at its option, during performance of the Work and prior to Substantial Completion, issue lists of identified non-conforming or corrective work for the Contractor to address. The intent of any such St. Lucie County generated lists prior to Substantial Completion is to attempt to streamline the punchlist

- process upon achieving Substantial Completion, and to allow for the Contractor to address needed areas of corrective work as they may be observed by St. Lucie County during performance of the Work.
- I. Contractor acknowledges and agrees that St. Lucie County shall determine whether an item on the Final Punchlist is completed and shall calculate 150% of the value of the completion of the item to withhold if an item is incomplete. Contractor acknowledges and agrees that in calculating 150% of the amount which may be withheld by St. Lucie County as to any Final Punchlist item for which a good faith basis exists as to it being complete, as provided for by Section 218.735(7)(d), Florida Statutes, St. Lucie County may include within such percentage calculation its total costs for completing such item of work, including its administrative costs as well as costs to address other services needed or areas of work which may be affected in order to achieve full completion of the Final Punchlist item. Such percentage shall in no event relate to the schedule of value associated with such Work activity, but rather total costs are based upon the value (i.e. cost) of completing such Work activity based upon market conditions at the time of Final Punchlist completion.

11. **DEFINITION OF SUBSTANTIAL COMPLETION**

For purposes of this Contract, and for compliance of those procedures, duties and obligations as set forth in Florida Statutes §218.70 and §218.735, the term Substantial Completion shall be as follows, in lieu of any other definition:

"Substantial Completion" is defined as that point where St. Lucie County is able to enjoy beneficial occupancy of the Work and where the Work has achieved that level of completion such that St. Lucie County is able to utilize the entire Project for its intended purposes, including but not limited to the completion of all specified systems and items relating to life safety and regulatory use, with the exception of incidental or incomplete items except where a lack of completion of such incidental or incomplete items of Work will adversely affect the complete operation of other areas of the Work.

12. **SUBCONTRACTORS**

In the event Contractor requires the services of any contractor or professional associate in connection with the Work to be performed under this Contract, the Contractor shall secure the written approval of the County Project Manager before engaging such contractor or professional associate. A subcontractor who receives payment must remit undisputed payment due to those subcontractors and suppliers within 7 days after subcontractor's receipt of payment. See Section 218.735(6), Florida Statutes.

13. **AUDIT**

The Contractor agrees that the County or any of its duly authorized representatives shall, until the expiration of three years after expenditure of funds under this Contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this Contract. The Contractor agrees that payment(s) made under this Contract shall be subject to reduction for amounts charged thereto which are found on the basis of audit examination not to constitute allowable costs under this Contract. The Contractor shall refund by check payable to the County the amount of such reduction of payments. All required

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records shall be maintained until an audit is completed and all questions arising therefrom are resolved, or three years after completion of the project and issuance of the final certificate, whichever is sooner.

14. **PUBLIC RECORDS**

The Contractor shall allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by the Contractor in conjunction with this Contract. Specifically, the Contractor shall:

- (a) Keep and maintain public records that ordinarily and necessarily would be required by the County in order to perform the service.
- (b) Provide the public with access to public records on the same terms and conditions that the County would provide the records and at a cost that does not exceed the cost provided in state law or as otherwise provided by law.
- (c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law.
- (d) Upon completion of the Contract, transfer, at no cost, to the County all public records in possession of the Contractor or keep and maintain public records required by the County to perform the service. If the Contractor transfers all public records to the County upon completion of the Contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public record disclosure requirements. If the Contractor keeps and maintains public records upon completion of the Contract, the Contractor shall meet all applicable requirements for retaining public records. All record stored electronically must be provided to the County, upon request from the County's custodian of public records, in a format that is compatible with the information technology system of the County.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (772)462-1441, BellamyS@stlucieco.org, COUNTY ATTORNEY'S OFFICE 2300 VIRGINIA AVENUE, FORT PIERCE, FL 34982

15. **GUARANTEE**

The Contractor guarantees to repair, replace or otherwise make good to the satisfaction of the County any defects in workmanship or material appearing in the work within one year after the day of the certificate for final performance of the work for the service intended. Contractor further guarantees the successful performance of the work for the service intended. Neither inspection nor payment, including final payment by the County shall relieve the Contractor from his or its obligations to do and complete the work in accordance with this contract. If the County deems it

inexpedient to require the Contractor to correct deficient or defective materials or labor, an equitable deduction from the contract price shall by made therefore or in the alternative, the County may sue for damages. This guarantee is in addition to any other warranty available to the County for the Work including but not limited to manufacturers warranties.

16. **CONTRACTOR RESPONSIBILITY**

The Contractor is an independent contractor and is not an employee or agent of the County. Nothing in this Contract shall be interpreted to establish any relationship other than that of an independent contractor, between the County and the Contractor, its employees, agents, subcontractors, or assigns, during or after the performance of this Contract. The Contractor shall take the whole responsibility for the means, methods, techniques, sequences, and production of the Work.

The Contractor shall bear all losses resulting to him, or its, on account of the amount or character of the Work, or because of the nature of the ground beneath, in or on which the Work is done is different from what was assumed or expected, or because of bad weather, or because of errors or omissions in his or its bid on the Contract price, or except as otherwise provided in the Contract Documents because of any other causes whatsoever. Execution of this Contract by the Contractor is a representation that the Contractor has visited the site, has conducted a sufficient investigation of the surface and sub-surface conditions in order to submit its bid, has become familiar with the local conditions under which the Work is to be performed, and correlated personal observations with the requirements of the Contract Documents.

The Contractor shall protect the entire Work, all materials under the Contract and the County's property (including machinery and equipment) in, or on, or adjacent to the site of the Work until final completion and Work, from the action of the elements, acts of other contractors, or except as otherwise provided in the Contract Documents, and from any other causes whatsoever; should any damage occur by reason of any of the foregoing, the Contractor shall repair at his, or its, own expenses to the satisfaction of the County or its Project Manager. Neither the County nor its officers, employees or agents assume any responsibility for collection of indemnities or damages from any person or persons causing injury to the Work of the Contractor.

At his, or its expense, the Contractor shall take all necessary precautions (including without limitation) the furnishing of guards, fences, warnings signs, walks, flags, cables and lights for the safety of and the prevention of injury, loss and damage to persons and property (including without limitation) in the term persons, members of the public, the County and its employees and agents, the Project Manager and his employees, Contractor's employees, his or its subcontractors and their respective employees, other contractors, their subcontractors and respective employees, on, about or adjacent to the premises where said Work is being performed, and shall comply with all applicable provisions of safety laws, rules, ordinances, regulations and orders of duly constituted public authorities and building codes.

The Contractor assumes all risk of loss, damage and destruction to all of his or its materials, tools appliances and property of every description and that of his or its subcontractors and of their respective employees or agents, and injury to or death of the Contractor, his or its employees, subcontractors or their respective employees or agents, including legal fees, court costs or other legal expenses, arising out of or in connection with the performance of this Contract.

17. **INDEMNITY**

The Contractor shall indemnify and hold harmless the County and its officers, and employees, from any and all liability, losses or damages, including attorney's fees and costs of defense, which the County or its officers and employees may incur as a result of claims, demands, suits, causes of actions or proceedings of any kind or nature, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Contractor and persons employed or utilized by the Contractor in the performance of the construction contract. The Contractor shall pay all claims and losses in connection therewith, and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the County, where applicable, including appellate proceedings, and shall pay all costs, judgments, and attorney's fees which may issue thereon. The Contractor expressly understands and agrees that any insurance protection required by this Agreement or otherwise provided by Contractor shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County or its officers, employees, agents and instrumentalities as herein provided.

18. **INSPECTION**

The project will be inspected by the Project Manager and will be rejected if it is not in conformity with the Contract provisions. Rejected Work will be immediately corrected by the Contractor. When the Work is substantially completed, the Contractor shall notify the County in writing that the Work shall be ready for final inspection on a definite date, at least three (3) calendar days thereafter, which shall be stated in such notice.

19. **PUBLIC CONSTRUCTION BOND**

The Contractor shall, upon execution and return of this Contract to the County, furnish to the County a public construction bond using the attached for or incorporating all of the terms and conditions set forth in the form and covering the faithful performance of this Contract and the payment of all obligations arising hereunder in the amount of one hundred percent (100%) of the Contract amount. The liability of the Contractor and its surety or sureties for the faithful performance of this Contract and the payment of all obligations arising hereunder is joint and several. The Contractor shall record the public construction in the Official Records for St. Lucie County and provide the County with a copy of the recorded bond.

The public construction required hereunder shall meet the following minimum standards:

- A. The surety issuing the bond must be licensed to do business in the State of Florida, hold a certificate of authorization to write surety s in the State, hold a currently valid certificate of authority issued by the United States Department of the Treasury, and otherwise be in compliance with the provisions of the Florida Insurance Code.
- B. The attorney-in-fact must provide a certified copy of his or her power of attorney to sign the bond.
- C. The name, address and telephone number of the surety and its agent must be listed on the bond.
- D. For contracts up to \$499,999.99 the surety shall have twice the minimum surplus and capital required by the Florida Insurance Code at the time the bid is issued for the Work, otherwise the surety shall have the following minimum ratings:

Contract Amount \$500,000 to \$2,499,999.99 Over \$2,500,000 Best Key Rating
Class XII A or better
Class XIV or better

E. The Bond shall specifically incorporate and acknowledge the Surety's responsibility for liquidated damages.

20. **INSURANCE**

Each such General Liability Certificate shall include the following wording: "St. Lucie County, its officers, agents and employees are named as additional insured's with respect to the work performed under this contract for the "JOHNSTON ROAD FPFWCD CANALS 16 & 17 CULVERT REPLACEMENT"

Commercial General Liability:

The Contractor shall maintain and, prior to commencement of this contract, provide the County with evidence of commercial general liability insurance to include: 1) for limits of not less than \$1,000,000 per occurrence; and 2) a general aggregate limit of not less than \$2,000,000. The policy shall also provide the County will be given a thirty (30) day written notice of cancellation or non-renewal and include County as an additional insured.

Business Automobile Liability:

The Contractor shall maintain and, prior to commencement of this contract, provide the County with evidence of business automobile liability insurance to include: 1) coverage for any automobile for limits of not less than \$1,000,000 combined single limit (bodily injury & property damage) per accident and 2) Personal Injury Protection (Florida no-fault) with full statutory limits. The policy shall also provide the County will be given a thirty (30) day written notice of cancellation or non-renewal.

Workers' Compensation and Employers Liability:

The Contractor shall maintain and, prior to commence of this contract, provide the County with evidence of workers' compensation insurance providing Florida statutory (F.S. 440) limits to cover all employees and include Employers Liability coverage with limits of not less than \$500,000 for accidents or disease. The policy shall also provide the County will be given a thirty (30) day written notice of cancellation or non-renewal.

21. **DEFAULT; TERMINATION**

A. <u>FOR CAUSE</u>

If the Contractor fails to fulfill its obligations under this Contract in a timely and proper manner, the County shall have the right, but not the obligation, to terminate this Contract by giving written notice of any deficiency and by allowing the party in default seven (7) calendar days to correct the deficiency. If the Contractor fails to correct the deficiency within the seven calendar day period, this Contract shall terminate at the expiration of that time period.

With regard to the Contractor, the following items shall be considered a default under this Contract:

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- (1) If the Contractor should be adjudged bankrupt, or if he, or it, should make a general assignment for the benefit of his, or its, creditors, or if a receiver should be appointed on account of his, or its, insolvency.
- (2) If the Contractor should refuse or fail, except in cases for which an extension of time is provided, to supply enough properly skilled workmen or proper material to meet the project schedule or if the Contractor should fail to make prompt payment for materials, or labor or other services entering into the Work.
- (3) If the Contractor disregards laws, ordinances, or the instructions of the Project Manager or otherwise be guilty of a substantial violation of the provisions of the Contract.
- (4) Fails to perform any of the terms of this Contract or performs work which fails to conform to the requirements of this Contract.

In the event of termination, the County may take possession of the premises and all materials, tools, and appliances, thereon and finish the Work by whatever method it may deem expedient. In such cases, the Contractor shall only be entitled to receive payment for Work satisfactorily completed prior to the termination date, subject to any setoffs due the County in completing the Project and for reimbursement of damages incurred. The County may take possession of and use any materials, plant, tools, equipment, and property of any kind furnished by Contractor to complete the Work. If the expense incurred by the County to finish the Work exceeds the unpaid balance on this Contract, the Contractor shall pay the difference to the County. The expense incurred by the County as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Project Manager. The Contractor shall be responsible for both liquidated damages attributable to delay and for excess completion costs. The liability of the Contractor and its surety or sureties for such damages and costs is joint and several. The obligations of the Contractor and his surety with respect to the warranty and maintenance shall remain in full force and effect for the portion of the Work completed by the Contractor and shall not expire until the expiration of the prescribed time period measured from the final acceptance of the project in its entirety. These clauses shall survive the termination of this Contract. If the County makes a determination pursuant to this Contract to hold the Contractor in default and terminate the Contract for cause and it is subsequently determined that any such determination was improper, unwarranted, or wrongful, then any such termination shall be deemed for all purposes as a termination without cause as described below. The Contractor agrees that it shall be entitled to no damages, allowances or expenses of any kind other than as provided in this Agreement in connection with such termination, and does expressly waive, in the event of termination, any and all claims for consequential damages, loss of bonding capacity, destruction of business, unabsorbed home office overhead, lost profit and the like.

B. <u>WITHOUT CAUSE</u>

The County may terminate the Contract without cause at any time upon thirty (30) calendar days prior written notice to the Contractor. Upon such termination, the Contractor waives any claims for damages from the termination without cause including, without limitation, any and all consequential claims as set forth above, and as the sole right and remedy of the Contractor, the County shall compensate the Contractor for all authorized Work satisfactorily and responsibly completed through the termination date. In the event of termination by the Contractor without cause, the following shall apply: (1) all bonds shall remain fully in force to insure the County's

ability to construct the project for the Contract amount; (2) the County shall have the right to, at its option, solicit bids for the completion of the unfinished portion of the Work, or to negotiate with the number two bidder under the original bid; and (3) the Contractor and his surety shall be jointly and severally responsible for all costs over the original Contract amount incurred by the County in completion of the project, in addition to liquidated damages, construction costs, such costs may include engineering, advertising, and administrative expenses incurred with the solicitations of bids for the completion of the unfinished portion of the Work. In the event of termination without cause by either party, the obligations of the Contractor and his surety with respect to the warranty and maintenance shall remain in full force and effect for the portion of the Work completed by the Contractor and shall not expire until the expiration of the prescribed time period measured from the final acceptance of the project in its entirety. These clauses shall survive the termination of this Contract.

C. SCRUTINIZED COMPANIES TERMINATION

The County may immediately terminate the Contract without cause at any time upon ascertaining that pursuant to § 287.135, Florida Statutes, a company is ineligible to, and may not, bid on, submit a proposal for, or enter into or renew a contract with an agency or local government entity for goods or services if at the time of bidding or submitting a proposal for a new contract or renewal of an existing contract, or at any time thereafter, the company: (1) is on the Scrutinized Companies that Boycott Israel List, created pursuant to § 215.4725, Florida Statutes, or is engaged in a boycott of Israel; (2) is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to § 215.473, Florida Statutes; or (3) is engaged in business operations in Cuba or Syria. Furthermore, the County may immediately terminate the Contract if it is determined that the company submitted a false certification stating that it was not (1) on the Scrutinized Companies that Boycott Israel List or engaged in a boycott of Israel; (2) was not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List; (3) or was not engaged in business operations in Cuba or Syria when in fact the company was engaged in such activities at the time of the bid or proposal, or at the time of entering into or renewing the Contract.

22. **NON DISCRIMINATION**

Contractor covenants and agrees that Contractor shall not discriminate against any employee or applicant for employment to be employed in the performance of the Contract with respect to hiring, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment because of age, sex or physical handicaps (except where based on a bonafide occupational qualification); or because of marital status, race, color, religion, national origin or ancestry.

23. <u>E-VERIFY/ VERIFICATION OF EMPLOYMENT STATUS</u>

Effective January 1, 2021, As required by Section 448.095(2)(a), the Contractor and subcontractor shall register with and use the E-Verify System to verify the work authorization status of all newly hired employees. The County, Contractor, or subcontractor may not enter into a Contract unless each party to the Contract registers with and uses the E-Verify System. The Contractor shall provide documentation of their compliance of this requirement to the County upon request.

If the Contractor enters into a contract with a subcontractor, the subcontractor must provide the St. Lucie County

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Contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. The Contractor shall maintain a copy of such affidavit for the duration of this Contract.

The County will not intentionally award contracts to any contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions of the Immigration and Nationality Act ("INA"). The County shall consider the employment by the Contractor of unauthorized aliens a violation of 8 U.S.C. Section 1324a(e) [Section 274A(e) of the INA]. The Contractor agrees that such violation by the Contractor shall be grounds for the unilateral cancellation of this Contract by the County.

24. PRODUCTS OR MATERIALS WITH RECYCLED CONTENT

Contractor is required to procure products or materials with recycled content with respect to Work performed or products supplied under the contract when those products or materials are available at reasonable prices. A decision to not procure such items must be based on a determination that such procurement:

- a) Is not available within a reasonable period of time; or
- b) Fails to meet the performance standards set forth in the applicable specifications or fails to meet the reasonable performance standards of the agency.

Contractor shall provide the County with a written statement indicating what recycled products were used or supplied. If a decision was made not to use recycled products, Contractor shall provide County with a written statement indicating the basis for the decision using the above criteria.

25. FLORIDA PRODUCED LUMBER

Where applicable Contractor agrees to comply with the provisions of Section 255.20, Florida Statutes, as may be amended from time to time.

26. **ASBESTOS-FREE MATERIALS**

Contractor shall not use any asbestos or asbestos-based fiber materials in the Work performed under this Contract.

27. ASSIGNMENT

The County reserves the right to freely assign this Contract. The Contractor, however, shall not assign this Contract to any other persons or firm without first obtaining County's written approval. In addition, the Contractor shall not have the right to assign any or all of its rights and interests under this agreement to any subsidiary or parent company, or any successor to its business through merger, consolidation, voluntary sale, or transfer of substantially all of its assets without the express written consent of the County. For purposes of this paragraph, a transfer of substantially all of its assets shall be deemed to occur when the owner(s) of more than 50% of the proprietary interest in the business entity transfer, other than between themselves, their immediate families or their heirs, such proprietary interest to another person, firm, partnership, corporation or business entity. Any attempt to effect an assignment without County's prior written consent shall be deemed a default

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subject to the remedies provided herein.

28. **NOTICES**

All notices, requests, consents, and other communications required or permitted under this Contract shall be in writing and shall be (as elected by the person giving such notice) hand delivered by messenger or courier service, telecommunicated, or mailed by registered or certified mail (postage prepaid) return receipt requested, addressed to:

As to County: With a Copy To:

St. Lucie County Administrator St. Lucie County Attorney Administration Annex Administration Annex 2300 Virginia Avenue 2300 Virginia Avenue

Ft. Pierce, FL 34982 Ft. Pierce, FL 34982

As to Contractor:

XXX XXX XXX

Phone: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

or to such other address as any party may designate by notice complying with the terms of this Section. Each such notice shall be deemed delivered (a) on the date delivered if by personal delivery, (b) on the date upon which the return receipt is signed or delivery is refused or the notice is designated by the postal authorities as not deliverable, as the case may be, if mailed.

29. **NON-WAIVER**

The rights of the parties under this Contract shall be cumulative and the failure of either party to exercise properly any rights given hereunder shall not operate to forfeit any of the said rights.

30. **CONFLICT OF INTEREST**

The Contractor represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of services required hereunder, as provided for in Section 112.311, Florida Statutes and as may be amended from time to time. The Contractor further represents that no person having any interest shall be employed for said performance.

The Contractor shall promptly notify the County in writing by certified mail of all potential conflicts of interest prohibited by existing state law for any prospective business association, interest or other circumstance which may influence or appear to influence the Contractor's judgment or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of Work that the Contractor may undertake and request an opinion of the County as to whether the association, interest or circumstance would, in the opinion of the County, constitute a conflict of interest if entered into by the Contractor. The County agrees to notify the Contractor of its opinion by certified mail within thirty (30) days of receipt of notification by the Contractor. If, in the opinion of the County, the prospective business association, interest or circumstance would not constitute a conflict of interest

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by the Contractor, the County shall so state in the notification and the Contractor shall, at his/her option, enter into said association, interest or circumstance and it shall be deemed not in conflict of interest with respect to services provided to the County by the Contractor under the terms of this Contract.

31. **DISPUTE RESOLUTION**

Any disputes relating to interpretation of the terms of this Contact or a question of fact or arising under this Contract shall be resolved through good faith efforts upon the part of the Contractor and the County or its Project Manager. At all times, the Contractor shall carry on the work and maintain its progress schedule in accordance with the requirements of the Contract and the determination of the County or its representatives, pending a final resolution of the dispute, including, if necessary, any determination by a Court of competent jurisdiction. Any dispute which is not resolved by mutual agreement shall be decided by the County Administrator who shall reduce the decision to writing. The decision of the County shall be final and conclusive unless determined by a court of competent jurisdiction to be fraudulent, capricious, arbitrary, so grossly erroneous as to necessarily imply bad faith, or not be supported by substantial evidence.

32. **MEDIATION**

Prior to initiating any litigation concerning this Contract, the parties agree to submit the disputed issue or issues to a mediator for non-binding mediation. The parties shall agree on a mediator chosen from a list of certified mediators available from the Clerk of Court for St. Lucie County. The fee of the mediator shall be shared equally by the parties. To the extent allowed by law, the mediation process shall be confidential and the results of the mediation or any testimony or argument introduced at the mediation shall not be admissible as evidence in any subsequent proceeding concerning the disputed issue.

33. INTERPRETATION; VENUE

This Contract constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior verbal or written agreements between the parties with respect thereto. This Contract may only be amended by written document, properly authorized, executed and delivered by both parties hereto. This Contract shall be interpreted as a whole unit and section headings are for convenience only. All interpretations shall be governed by the laws of the State of Florida. In the event it is necessary for either party to initiate legal action regarding this Contract, venue shall be exclusively in the Nineteenth Judicial Circuit for St. Lucie County, Florida, for claims under state law and the Southern District of Florida for any claims which are justiciable in federal court.

34. **ANTITRUST ASSIGNMENT**

The Contractor and the County and the State of Florida recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the State of Florida and local governments. Therefore, the Contractor assigns to the State of Florida and the County any and all claims for such overcharges as to goods, materials or services purchased in connection with the Contract.

IN WITNESS WHEREOF, the parties hereto have accepted, made and executed this Agreement in counterparts each of which shall be treated as an original upon the terms and conditions above stated.

ATTEST:	BOARD OF COUNTY COMMISSIONERS ST. LUCIE COUNTY, FLORIDA		
DEPUTY CLERK	By: Chair		
DEPUTY CLERK	CHAIR		
	APPROVED AS TO FORM AND CORRECTNESS:		
	COUNTY ATTORNEY		
WITNESSES:			
(1)	By:		
(2)	PRINT NAME:		
	Title:		

SECTION 00610 PUBLIC CONSTRUCTION BOND

		, as Principal, and	
		, a Corporation, a	as Surety, are bound to the ST.
LUCIE CO	UNTY, herein called "County", in	the sum of \$	for payment of
which we bir	nd ourselves, our heirs, personal re	epresentatives, successors, ar	nd assigns, jointly and severally.
ТНЕ	E CONDITION OF THIS BONI	D is that if Principal:	
1.	the Johnston Road FPFWCI	O Canals 16 & 17 Culvert Fontract being made a part of t	tween Principal and County for Replacement , located within St. this bond reference, at the times
2.		vith labor, materials, or supp	in Section 255.05(1), Florida blies, used directly or indirectly the Contract; and
3.		uding appellate proceedings,	ed to delay damages, expenses, that County sustains because of
4.	Performs the guarantee of all specified in the Contract, then		under the Contract for the time it remains in full force.
•	instituted by a claimant under ime limitation provisions in Sect		
	in or under the contract document th the contract or the changes doe		
	rees to record this bond in the C ent of the work subject of this b		cie County before the
DATED ON	:	, 20	
PRINCIPAL	L:		
Address:			
Phone Numb	er:		
By:			
St. Lucie Cou Engineering I			Project #15-200/16-202

SURETY:	
Address:	
By:(As Attorney-in-Fact)	
(As Attorney-in-Fact)	
STATE OF FLORIDA)	
COUNTY OF)	
The foregoing instrument was acknowledged befor	e me this day of, 20,
, byon behalf of applicable]	the principal (Surety). He/She [please check as
is personally known to me,his/her (state) identification, who being by me first duly sworn upon Principal and that he has been authorized by the Principal named therein in favor of St. Lucie County,	oath, says that he/she is the Attorney-in-Fact, for the pal to execute the foregoing bond on behalf of the
Subscribed and sworn to before me thisday	ofAD
	Notary Public State of Florida-at-Large
(Attach Power of Attorney)	

SECTION 00700 GENERAL CONDITIONS

<u>Article</u>	<u>Title</u>
1.0	Definitions
2.0	Preliminary Matters
3.0	Correlation, Interpretation and Intent of Contract Documents
4.0	Availability of Lands; Subsurface Conditions; Reference Points
5.0	Bonds and Insurance
6.0	Contractor's Responsibilities
7.0	Work by Others
8.0	Owner's Responsibilities
9.0	Engineer's Status During Construction
10.0	Changes in the Work
11.0	Change of Contract Price
12.0	Delays and Extensions of Time
13.0	Guaranty; Tests and Inspections
14.0	Payments and Completions
15.0	Suspension of Work and Termination
16.0	Miscellaneous
17.0	Public Entity Crimes

1.0 Definitions.

Wherever used in these General Conditions or in the other Contract Documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:

- **1.1 Acceptance:** By the OWNER'S PROJECT MANAGER of the Work as being fully complete in accordance with the Contract Documents.
- **1.2 Contract:** The written agreement between the OWNER and the CONTRACTOR covering the Work to be performed; the Contract Documents are attached to and made a part of the Contract. Also designated as the Agreement.
- **1.3 Addenda:** Written or graphic instruments issued prior to the execution of the Contract which modify or interpret the Contract Documents, Drawings and Specifications, by additions, deletions, clarifications or corrections.
- **1.4 Application for Payment:** The form furnished by the OWNER which is to be used by the CONTRACTOR in requesting progress payments and an affidavit of the CONTRACTOR that progress payments theretofore received from the OWNER on account of the Work have been applied by the CONTRACTOR to discharge in full all of the CONTRACTOR'S obligations stated in prior Applications for Payment.
- **1.5 Approval:** Accept as satisfactory.
- **Bid:** The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- **1.7 Bidder:** Any person, firm or corporation submitting a Bid for the Work.
- **Bonds:** Bid, performance and payment bonds and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the Contract Documents and in accordance with the law of the place of the project.
- **1.9 Change Order:** A written order to the CONTRACTOR executed on behalf of the OWNER authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time issued after execution of the Contract.
- 1.10 Contract Documents: The Contract, Addenda, Instructions to Bidders, CONTRACTOR'S Bid, the Bonds, the Notice of Award, these General Conditions, the Supplementary Conditions, Special Conditions, the Specifications, Drawings, Modifications, and the Notice to Proceed.
- **1.11 Contract Price:** The total moneys payable to the CONTRACTOR under the Contract Documents.
- **1.12 Contract Time:** The number of calendar days stated in the Contract for the completion of the Work.
- **1.13 Contractor:** The person, firm or corporation with whom the OWNER has executed the Contract.
- **1.14 Day:** A calendar day of twenty-four hours measured from midnight to the next midnight.
- **1.15 Drawings:** The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by the ENGINEER and are referred to in the Contract Documents.
- **1.16 Engineer:** The person, firm or corporation named as such in the Contract Documents.
- **1.17 Engineer's Representative:** An authorized representative of the ENGINEER assigned to observe the work performed and materials furnished by the CONTRACTOR.

- **1.18 Field Order:** A written order issued by the OWNER'S PROJECT MANAGER or by the ENGINEER which clarifies or interprets the Contract Documents in accordance with paragraph 9.3 or orders minor changes in the Work in accordance with paragraph 10.2.
- **1.19 Modification:** (a) A written amendment of the Contract Documents signed by both parties, (b) a Change Order, 8 a written clarification or interpretation issued by the ENGINEER in accordance with paragraph 9.3 or (d) a written order for a minor change or alteration in the Work issued by the OWNER'S PROJECT MANAGER or by the ENGINEER pursuant to paragraph 10.2. A Modification may only be issued after execution of the Contract.
- **1.20 Notice of Award:** The written notice by OWNER to the apparent successful Bidder stating that upon compliance with the conditions precedent to be fulfilled by him within the time specified, OWNER will execute and deliver the Contract to him.
- **1.22 Notice to Proceed:** A written notice given by the OWNER'S PROJECT MANAGER to the CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform his obligations under the Contract Documents.
- **1.23 Owner:** St. Lucie County, its Board of County Commissioners.
- **1.24 Owners Representative:** The person or persons designated by the OWNER'S PROJECT MANAGER. The OWNER'S PROJECT MANAGER. This may include the ENGINEER.
- **1.25 Project:** The entire construction to be performed as provided in the Contract Documents.
- **1.26 Project Manager:** The individual who is authorized to act on behalf of the OWNER or CONTRACTOR.
- 1.27 Project Representative: (also Construction Observer, Resident Inspector, or Construction Inspector) One or more authorized representatives of the OWNER assigned to observe the Work performed and materials furnished by the CONTRACTOR, or such other persons as may from time to time be appointed by the OWNER'S PROJECT MANAGER as his representative(s). Nothing contained in these General Conditions shall be construed to grant to the Project Representatives the right or authority to modify, alter, revoke, enlarge, or relax the provisions of the Contract Documents in any manner, nor to approve or accept any portion of the completed work, or issue instructions contrary to the Plans and Specifications or the requirements of regulatory agencies having jurisdiction.
- 1.28 Shop Drawings: All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a Subcontractor, manufacturer, supplier or distributor and which illustrate the equipment, material or some portion of the Work and as required by the Contract Documents. Shop Drawings are not part of the Contract Documents and failure of the ENGINEER or the OWNER or any of his representatives to take exception to any product, material, system or installation depicted on Shop Drawings that are not in conformance with the requirements of the Contract Documents shall not constitute a Field Order or Change Order or any other Modification of the Contract Documents, and shall not relieve the CONTRACTOR from complying with any portion of the Contract Documents.
- **Samples:** Physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.
- **1.30 Special Conditions:** When included as a part of the Contract Documents, Special Conditions refer only to the Work under this Contract. Special Conditions take precedent over the General Conditions.

- **1.31 Specifications:** Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work.
- **Subcontractor:** An individual, firm or corporation having a direct contract with CONTRACTOR or with any other subcontractor for the performance of a part of the Work at the site.
- **1.33 Substantial Completion:** The stage in construction when a project can be utilized for the purposes for which it was intended. At substantial completion, minor items and items that are seasonally restricted need not be completed, but the items that affect operational integrity and function of the facility must be capable of continuous use.
- **Supplier:** Any person or organization who supplies materials or equipment for the Work, including that fabricated to a special design, but who does not perform labor at the site.
- **Surety:** The corporate body which is bound with the CONTRACTOR and which engages to be responsible for the CONTRACTOR and his acceptable performance of the Work.
- 1.36 Underground Facilities: All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials; electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.
- **1.37 Work:** Any and all obligations, duties and responsibilities necessary to the successful completion of the Project assigned to or undertaken by CONTRACTOR under the Contract Documents, including all labor, materials, equipment and other incidentals, and the furnished thereof.
- **1.38 Written Notice:** The term "Notice" as used herein shall mean and include all written notices, demands, instructions, claims, approvals, and disapprovals required to obtain compliance with Contract requirements.

2.0 Preliminary Matters.

- 2.1 Award: The award of the Contract, if it is awarded, will be to the lowest qualified, responsible Bidder. No Notice of Award will be given until the OWNER'S PROJECT MANAGER has concluded such investigations as he deems necessary to establish the responsibility, qualification and financial ability of the Bidders to do the Work in accordance with the Contract Documents to the satisfaction of the OWNER'S PROJECT MANAGER within the time prescribed. The OWNER reserves the right to reject the Bid of any Bidder who does not pass such investigation to the OWNER'S satisfaction. In analyzing Bids, the OWNER'S PROJECT MANAGER may take into consideration alternates and unit prices, if requested by the Bid forms.
- 2.2 Execution of Contract: At least three counterparts of the Contract and such other Contract Documents, including bonds, will be executed and delivered by CONTRACTOR to the OWNER'S PROJECT MANAGER within 30 calendar days of receipt from the OWNER'S PROJECT MANAGER.
- **2.3 Forfeiture of Bid Security:** Failure of the successful Bidder to execute and deliver the Contract and deliver the required Bonds and Insurance Certificates or other documentation as stipulated in paragraph 2.2 or in the Instructions to Bidders Section 00100, shall be just cause for the OWNER to annul the Notice of Award and declare the Bid and any security therefore forfeited.

- 2.4 Contractor's Pre-Start Representation: CONTRACTOR represents that he has familiarized himself with, and assumes full responsibility for having familiarized himself with, the nature and extent of the Contract Documents, Work, locality, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that may in any manner affect performance of the Work, and represents that he has correlated his study and observations with the requirements of the Contract Documents.
 CONTRACTOR also represents that he has studied all surveys and investigation reports of subsurface and latent physical conditions referred to in the Specifications and made such additional surveys and investigations as he deems necessary for the performance of the Work at the Contract Price in accordance with the requirements of the Contract Documents and that he has correlated the results of all such data with the requirements of the Contract Documents.
- **2.5 Commencement of Contract Time:** The Contract Time will commence to run on the date identified in the written notification by the OWNER'S PROJECT MANAGER in the form of the Notice to Proceed.
- **2.6 Starting the Project:** CONTRACTOR shall start to perform his obligations under the Contract Documents on the date when the Contract Time commences to run. No Work shall be done at the site prior to the date on which the Contract Time commences to run, except with the written consent of the OWNER'S PROJECT MANAGER.
- 2.7 Before Starting Construction: Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. He shall at once report in writing to ENGINEER any conflict, error or discrepancy which he may discover; however, he shall not be liable to OWNER or ENGINEER for his failure to discover any conflict, error or discrepancy in the Drawings or Specifications, unless Contractor had actual knowledge thereof or should reasonably have known thereof. Work which is considered to be normal to the construction industry and should have been anticipated by the CONTRACTOR will not be eligible for reimbursement by change
- 2.8 Schedule of Completion: CONTRACTOR shall submit to the OWNER'S PROJECT MANAGER, together with the executed Contract and other required documents, an estimated progress schedule with earnings indicating the starting and completion dates of the various stages of the Work, and a preliminary schedule of Shop Drawing Submissions. No payments shall be made by OWNER to CONTRACTOR until the estimated progress schedule has been reviewed and approved by the OWNER'S PROJECT MANAGER. See paragraphs 6.22 through 6.26. The ENGINEER shall review and return this schedule or require revisions thereto within 14 days of its submittal. Said progress schedule shall be updated by CONTRACTOR on a monthly basis.
- 2.9 Pre-Construction Conference: A pre-construction conference will be held, prior to any work being performed and prior to the commencement of the Contract Time, to review the above schedules, to establish procedures for handling Shop Drawings and other submissions and for processing Applications for Payment, and to establish a working understanding between the parties as to the Project. Present at the conference will be the OWNER'S PROJECT MANAGER or his representative, ENGINEER, Resident Project Representatives, CONTRACTOR and his Superintendent, and appropriate parties such as private utilities as deemed necessary.

2.10 Qualification of Subcontractors, Materialmen and Suppliers: Within ten working days after bid opening, the CONTRACTOR will (if required) submit to the OWNER'S PROJECT MANAGER and the ENGINEER for acceptance a list of the names of Subcontractors and such other persons and organizations (including those who are to furnish principal items of materials or equipment) proposed for those portions of the Work as to which the identity of the Subcontractors and other persons and organizations must be submitted as specified in the Contract Documents. Within thirty working days after receiving the list, the ENGINEER will notify the CONTRACTOR in writing if either the OWNER'S PROJECT MANAGER or the ENGINEER, after due investigation, has reasonable objection to any Subcontractor, person or organization on such list. The failure of the OWNER'S PROJECT MANAGER or the ENGINEER to make objection to any Subcontractor, person or organization on the list within thirty days of receipt shall constitute an acceptance of such Subcontractor, person or organization. Acceptance of any such Subcontractor, person or organization shall not constitute a waiver of any right of the OWNER'S PROJECT MANAGER or the ENGINEER to reject defective Work, material or equipment, or Work, material or equipment not in conformance with the requirements of the Contract Documents.

3.0 Correlation, Interpretation and Intent of Contract Documents.

- 3.1 Contract Documents Modifications: It is the intent of the Specifications and Drawings to describe a complete Project to be constructed in accordance with the Contract Documents. The Contract Documents comprise the entire Contract between the OWNER and the CONTRACTOR. They may be altered only by a Modification.
- 3.2 Conflicts, Errors or Discrepancies: The Contract Documents are complementary; what is called for by one is as binding as if called for by all. If CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, he shall call it to the ENGINEER'S attention in writing at once and before proceeding with the Work affected thereby; however, he shall not be liable to OWNER or ENGINEER for his failure to discover any conflict, error or discrepancy in the Specifications or Drawings, unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.
- **3.3 Furnish and Install:** The words "furnish", "furnish and install", and "provide" or words with similar meaning shall be interpreted, unless otherwise specifically stated, to mean "furnish and install complete in place and ready for service".
- 3.4 Miscellaneous Items: Miscellaneous items and accessories which are not specifically mentioned, but which are essential to produce a complete and properly operating installation, or usable structure or plant, providing the indicated function, shall be furnished and installed without change in the Contract Price. Such miscellaneous items and accessories shall be of the same quality standards, including material, style, finish, strength, class, weight and other applicable characteristics, as specified for the major component of which the miscellaneous item or accessory is an essential part, and shall be approved by the ENGINEER before installation. The above requirements are not intended to include major components not covered by or inferable from the Drawings and Specifications.
- **3.5 Trades Work:** The Work of all trades under this Contract shall be coordinated by the CONTRACTOR in such a manner as to obtain the best workmanship possible for the entire Project, and all components of the Work shall be installed or erected in accordance with the best practices of the particular trade.

- 3.6 Manufacturer's Literature: Manufacturer's literature, when referenced, shall be dated and numbered and is intended to establish the minimum requirements acceptable. Whenever reference is given to codes, or standard specifications or other data published by regulating agencies or accepted organizations, including but not limited to National Electrical Code, applicable State Building Code, Federal Specifications, ASTM Specifications, various institute specifications, and the like, it shall be understood that such reference is to the latest edition, including addenda in effect on the date of Bid. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the contract documents) shall be effective to change the duties and responsibilities of the OWNER, CONTRACTOR, or ENGINEER, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to the ENGINEER, or any of the ENGINEER'S consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the provisions of these General Conditions.
- 3.7 **Brand Names:** Brand names where used in the technical specifications, are intended to denote the standard of quality required for the particular material or product. The term "equal" or "equivalent", when used in connection with brand names, shall be interpreted to mean a material or product that is similar and equal in type, quality, size, capacity, composition, finish, color and other applicable characteristics to the material or product specified by trade name, and that is suitable for the same use and capable of performing the same function, in the opinion of the ENGINEER, as the material or product so specified. Determination of whether an item is "equal" or "equivalent" shall be solely at the discretion of the ENGINEER with the concurrence of the OWNER'S PROJECT MANAGER. Proposed equivalent items must be approved by ENGINEER before they are purchased or incorporated in the Work. Failure of the ENGINEER or the OWNER'S PROJECT MANAGER to find an item "equal" or "equivalent" shall not entitle the CONTRACTOR to a change in contract price. Approval of an item as "equal" or "equivalent" shall entitle the OWNER to a credit if use of the approved item results in a savings in material and/or labor cost to the CONTRACTOR. (When a brand name, catalog number, model number, or other identification, is used without the phrase "or equal", the CONTRACTOR shall use the brand specified.)

4.0 Availability of Lands: Subsurface Conditions; Reference Points.

- 4.1 Availability of Lands: The OWNER will furnish, as indicated in Contract Documents, the lands upon which the Work is to be done, rights-of-way and easements for access thereto, and such other lands which are designated for the use of the CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the OWNER, unless otherwise specified in the Contract Documents. Other access to such lands or rights-of-way for the CONTRACTOR'S convenience shall be the responsibility of the CONTRACTOR. The CONTRACTOR will provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.
- **4.2 Subsurface Tests:** The OWNER will furnish to the BIDDERS copies of available subsurface tests if available.
- **Subsurface Conditions:** The CONTRACTOR acknowledges that he has investigated prior to bidding and satisfied himself as to the conditions affecting the Work, including

but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, river stages, tides, water tables or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the Work. The CONTRACTOR further acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done on behalf of the OWNER on the site or any contiguous site, as well as from information presented by the Drawings and Specifications made a part of this Contract, or any other information made available to him prior to receipt of Bids. Any failure by the CONTRACTOR to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the Work. The OWNER and ENGINEER assumes no responsibility for any conclusions or interpretations made by the CONTRACTOR on the basis of the information made available by the OWNER or ENGINEER.

4.4 Differing Site Conditions:

- **4.4.1** The CONTRACTOR shall promptly, and before such conditions are disturbed, notify the OWNER'S PROJECT MANAGER in writing of:
 - **4.1.1.1** Subsurface or latent physical conditions at the site differing materially from those indicated in this contract, or
 - 4.1.1.2 Unknown physical conditions at the site; of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this contract. The OWNER'S PROJECT MANAGER shall promptly investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly.
- **4.4.2** No claim of the CONTRACTOR under this clause shall be allowed unless the CONTRACTOR has given the notice required in (a) above; <u>provided</u>, however, the time prescribed therefore may be extended by the OWNER.
- **4.4.3** No claim by the CONTRACTOR for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.
- **4.5 Physical Conditions Underground Facilities:** The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in the Special Conditions:
 - **4.5.1** OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and,
 - **4.5.2** CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Facilities shown or indicated in the Contract Documents, for coordination of the Work with the owners of such Underground Facilities during construction, for the safety and

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- protection thereof as provided in paragraph 6.19 and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Price. No additional compensation will be allowed the Contractor because of the existence of utility lines which are not shown on drawings.
- **4.5.3** If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 6.21) identify the owner of such Underground Facility and give written notice thereof to that owner and to the OWNER'S PROJECT MANAGER and ENGINEER.
- 4.6 Existing Structures: The plans show the locations of all known surface and subsurface structures. However, the OWNER and ENGINEER assumes no responsibility for failure to show any or all of these structures on the Plans, or to show them in their exact location. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for extra work or for increasing the pay quantities in any manner whatsoever, unless the obstruction encountered is such as to necessitate changes in the lines or grades, or requires the building of special work, provisions for which are not made in the Plans and Proposal in which case the provisions in these Specifications for extra work shall apply.

5.0 Bonds and Insurance.

- 5.1 Public Construction Bond: CONTRACTOR shall furnish a public construction bond as security for the faithful performance and payment of all his obligations under the Contract Documents. This Bond shall be in an amount at least equal to the Contract Price and in such form and with such sureties as are acceptable to OWNER. Bond forms for the aforementioned securities are a part of the Contract Documents and CONTRACTOR shall insure that each executed copy of the bond form is complete and sealed. The Bond shall remain in effect at least until one year after the date when final payment becomes due, except as otherwise provided by Law or Regulation or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents. All Bonds shall be in the forms prescribed by Law or Regulation or by the Contract Documents and be executed by such sureties licensed to do business in Florida, satisfactory to St. Lucie County and with an "A" rating or better as published by Best Insurance Reports. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.
- 5.2 Contractor's Insurance: The CONTRACTOR shall provide the OWNER with insurance certificates, as set forth in the Contract, certifying that all required insurance is in force; and such insurance certificates shall include provisions that the insurance shall not be canceled, allowed to expire or be materially changed without giving the OWNER'S PROJECT MANAGER advance notice by registered mail.
 5.2.1 The Contractor shall maintain all insurance during the life of this Contract as set forth in the Contract.
- **5.3 Cancellation and Re-Insurance:** If any insurance should be canceled or changed by the insurance company or should any insurance expire during the period of this Contract, the CONTRACTOR shall be responsible for securing other acceptable insurance to provide

the coverage specified in this section to maintain continuous coverage during the life of this Contract.

6.0 Contractor's Responsibility.

- 6.1 Supervision and Superintendence: The CONTRACTOR will supervise and direct the Work. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the Work a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the Work. (Copies of written communications given to the Superintendent shall be mailed to the Contractor's home office.)
- 6.2 Labor, Materials and Equipment: The CONTRACTOR will provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. He will at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work, will not permit work to be done between the hours of 5:00 P.M. and 8:00 A.M, or the performance of Work on Saturday, Sunday or any legal holiday, observed by St. Lucie County without the written prior approval or permission of the County's Project Manager
- **6.3 Materials and Equipment:** The CONTRACTOR will furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of the Work.
 - All material stored on the job site shall remain the responsibility of the CONTRACTOR until incorporated into the work. The OWNER will not reimburse the CONTRACTOR for materials lost, stolen, or damaged while stored on the job site.
- **Condition of Materials:** All materials and equipment will be new. When special makes or grades of material which are normally packaged by the supplier or manufacturer are specified or approved, such materials shall be delivered to the site in their original packages or container with seals unbroken and labels intact.
- **6.5 Installation / Assembly:** All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processors, except as otherwise provided in the Contract Documents.
- Materials, Equipment, Products, and Substitutions: Materials, equipment and products incorporated in the Work must be approved for use before being purchased by the CONTRACTOR. The CONTRACTOR shall submit to the ENGINEER and the OWNER'S PROJECT MANAGER a list of proposed materials, equipment or products, together with such samples as may be necessary for him to determine their acceptability and obtain his approval, within ninety calendar days after award of Contract unless otherwise stipulated in the Special Conditions. No request for payment for "or equal"

equipment will be approved until this list has been received and approved by the ENGINEER.

- **6.6.1** Whenever a material, article or piece of equipment is identified on the Drawings or Specifications by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements, and that other products of equal capacities, quality and function may be considered. The CONTRACTOR may request the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the Contract Documents by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER and OWNER, such material, article, or piece of equipment is of equal substance and function to that specified, the ENGINEER with concurrence of the OWNER'S PROJECT MANAGER may approve its substitution and use by the CONTRACTOR. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without an increase in the Contract Price or Contract Time. The CONTRACTOR shall reimburse the OWNER for charges of the ENGINEER and ENGINEER'S consultants for evaluating each proposed substitution. These costs shall include transportation to operating installation at factories, etc.
- **6.6.2** No substitute shall be ordered or installed without the written approval of the ENGINEER with the OWNER'S PROJECT MANAGER's concurrence.
- **6.6.3** Delay caused by obtaining approvals for substitute materials will not be considered justifiable grounds for an extension of construction time.
- 6.6.4 Should any work or materials, equipment or products not conform with requirements of the Drawings and Specifications or become damaged during the progress of the Work, such Work or materials shall be removed and replaced, together with any work disarranged by such alterations, at any time before completion and acceptance of the Project. All such work shall be done at the expense of the CONTRACTOR.
- 6.6.5 No materials or supplies for the Work shall be purchased by the CONTRACTOR or by any Subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the Seller. The CONTRACTOR warrants that he has good title to all materials and supplies used by him in the Work.
- 6.7 Concerning Subcontractors: The CONTRACTOR will not employ any Subcontractor, other person or organization of the types referred to in paragraph 2.10 (whether initially or as a substitute) against whom the OWNER or the ENGINEER may have reasonable objection, nor will the CONTRACTOR be required to employ any Subcontractor against whom he has reasonable objection. The CONTRACTOR will not make any substitution for any Subcontractor who has been accepted by the OWNER'S PROJECT MANAGER and the ENGINEER, unless the ENGINEER determines that there is good cause for doing so.
- **Responsibility:** The CONTRACTOR shall be fully responsible for all acts and omissions of his Subcontractors and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship

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- between OWNER or ENGINEER and any Subcontractor or other person or organization having a direct contract with CONTRACTOR, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any Subcontractor or other person or organization, except as may otherwise be required by law. OWNER or ENGINEER may furnish to any Subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to CONTRACTOR on account of specific Work done in accordance with the schedule of values.
- **6.9 Division of Work:** The divisions and sections of the Specifications and the identifications of any Drawings shall not control the CONTRACTOR in dividing the Work among Subcontractors or delineating the Work to be performed by any specific trade.
- **6.10 Terms and Conditions:** The CONTRACTOR agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the OWNER.
- **Agreement:** All Work performed for the CONTRACTOR by a Subcontractor shall be pursuant to any appropriate agreement between the CONTRACTOR and the Subcontractor.
- **Responsibility:** The CONTRACTOR shall be responsible for the coordination of the trades, Subcontractors and materialmen engaged upon His Work.
 - 6.12.1 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind Subcontractors to the CONTRACTOR by the terms of these General Conditions and other Contract Documents insofar as applicable to the Work of Subcontractors, and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provisions of the Contract Documents.
 - **6.12.2** The OWNER or ENGINEER will not undertake to settle any differences between the CONTRACTOR and his Subcontractors or between Subcontractors.
 - **6.12.3** If in the opinion of the OWNER'S PROJECT MANAGER or ENGINEER, any Subcontractor on the Project proves to be incompetent or otherwise unsatisfactory, he shall be replaced if and when directed in writing.
- 6.13 Patent, Fees and Royalties: The CONTRACTOR will pay all license fees and royalties and assume all costs incident to the use of any invention, design, process or device which is the subject of patent rights or copyrights held by others. He will indemnify and hold harmless the OWNER and ENGINEER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses arising out of any infringement of such rights during or after completion of the Work, and shall defend all such claims in connection with any alleged infringement of such rights.
- **6.14 Patent Rights:** The CONTRACTOR shall be responsible for determining the application of patent rights and royalties on materials, appliances, articles or systems prior to bidding. However, he shall not be responsible for such determination on systems which do not involve purchase by him of materials, appliances and articles.
- **6.15 Permits:** The CONTRACTOR will secure and pay for all construction permits and licenses and will pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of his Bid. The OWNER shall assist the CONTRACTOR, when necessary, in obtaining such permits and licenses. The CONTRACTOR will also pay all public utility charges. The Contractor shall be

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- responsible for obtaining dewatering permits as required. CONTRACTOR shall be responsible for complying with the South Florida Water Management District, Florida Department of Environmental Regulation, United States Environmental Protection Agency and any other regulatory agency requirements including financial responsibility (fines, etc.).
- 6.16 Laws and Regulations: The CONTRACTOR will give all notices and comply with all laws, ordinances, rules and regulations applicable to the Work. If the CONTRACTOR observes that the Specifications or Drawings are at variance therewith, he will give the ENGINEER prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate Modification. If the CONTRACTOR performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the ENGINEER, he will bear all costs arising therefrom; however, it shall not be his primary responsibility to make certain that the Drawings and Specifications are in accordance with such laws, ordinances, rules and regulations.
- **Taxes:** Cost of all sales and other taxes for which the CONTRACTOR is liable under the Contract shall be included in the Contract Price stated by the CONTRACTOR.
- **6.18 Record Drawings:** The CONTRACTOR will keep one record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These shall be available to the ENGINEER and shall be delivered to him for the OWNER upon completion of the project. It shall be used for this purpose only. Final acceptance of the project will be withheld until approval of the documents is made by the OWNER'S PROJECT MANAGER.
- **6.19 Safety and Protection:** The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to:
 - **6.19.1** All employees on the Work and other persons who may be affected thereby,
 - **6.19.2** All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and
 - **6.19.3** Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- **6.20 Superintendent:** The CONTRACTOR will designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the CONTRACTOR'S superintendent unless otherwise designated in writing by the CONTRACTOR to the OWNER'S PROJECT MANAGER.
- 6.21 Emergencies: In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER or the OWNER'S PROJECT MANAGER, is obligated to act, at his discretion, to prevent threatened damage, injury or loss. If the CONTRACTOR believes that additional work done by him in an emergency which arose from causes beyond his control entitles him to an increase in the Contract Price or an extension of the Contract Time, he may make a claim therefore as provided in Articles 11 and 12.
- **6.22 Shop Drawings and Samples:** After checking and verifying all field measurements, the CONTRACTOR will submit to the ENGINEER and the OWNER'S PROJECT

- MANAGER for review, in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.8) copies (or at the ENGINEER'S option, one reproducible copy) of all Shop Drawings, which shall have been checked by and stamped with the approval of the CONTRACTOR. The data shown on the Shop Drawings will be complete with respect to dimensions, design criteria, materials of construction and the like to enable the ENGINEER to review the information as required.
- **6.23 Samples:** The CONTRACTOR will also submit to the ENGINEER for review, with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and stamped with the approval of the CONTRACTOR, identified clearly as to material, manufacturer, any pertinent catalog numbers and the use for which intended.
- **6.24 Deviations:** At the time of each submission, the CONTRACTOR will in writing call the ENGINEER'S attention to any deviations that the Shop Drawings or sample may have from the requirements of the Contract Documents.
- 6.25 **Conformance Review:** The ENGINEER will review with reasonable promptness Shop Drawings and samples, but his review shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The review of a separate item as such will not indicate review of the assembly in which the item functions. The CONTRACTOR will make any corrections required by the ENGINEER and will return the required number of corrected copies of Shop Drawings and resubmit new samples until the review is satisfactory to the ENGINEER. The CONTRACTOR shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections called for by the ENGINEER on previous submissions. The CONTRACTOR'S stamp of approval on any Shop Drawings or sample shall constitute a representation to the OWNER and the ENGINEER that the CONTRACTOR has either determined and verified all quantities, dimensions, field construction criteria, materials, catalogue numbers and similar data or he assumes full responsibility for doing so, and that he has reviewed or coordinated each Shop Drawing or sample with the requirements of the Work and the Contract Documents. Shop Drawings submitted without the CONTRACTOR'S stamp or specific written indication will be returned without action. Shop Drawings and submittal data will be reviewed two times, thereafter all further review time will be charged to the CONTRACTOR.
- **6.26 Approval:** No work requiring a Shop Drawing or sample submission shall be commenced until the submission has been reviewed and approved by the ENGINEER. A copy of each Shop Drawing and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.
- 6.27 Specific Deviations: The ENGINEER'S review of Shop Drawings or samples shall not relieve the CONTRACTOR from his responsibility for any deviations from the requirements of the Contract Documents unless the CONTRACTOR has in writing called the ENGINEER'S attention to such deviation at the time of submission and the ENGINEER has given written approval to the specific deviation, nor shall any review by the ENGINEER relieve the CONTRACTOR from responsibility for errors or omissions in the Shop Drawings.
- **6.28 Site Cleaning Up:** The CONTRACTOR shall clean up behind the Work as much as is reasonably possible as the Work progresses. Upon completion of the Work, and before acceptance of and final payment for the Project by the OWNER, the CONTRACTOR

- shall remove all his surplus and discarded materials, excavated material and rubbish from the roadways, sidewalks, parking areas, lawns and all adjacent property; shall clean his portion of Work involved in any building under this Contract, so that no further cleaning by the OWNER is necessary prior to his occupancy; shall restore all property, both public and private, which has been disturbed or damaged during the prosecution of the Work; and shall leave the whole in a neat and presentable condition.
- **6.29 Building Clean-up:** Clean-up operations shall consistently be carried on by the CONTRACTOR at all times to keep the premises free from accumulation of waste materials and rubbish. Upon completion of the Work he shall remove all rubbish, tools, scaffolding, surplus materials, etc., from the building and shall leave his work "broom clean", or its equivalent, unless more exactly specified elsewhere in the Contract. The CONTRACTOR shall do the following special cleaning for all trades upon completion of the Work:
 - **6.29.1** Remove putty stains and paint from and wash and polish all glass. Do not scratch or otherwise damage glass.
 - **6.29.2** Remove all marks, stains, fingerprints and other soil and dirt from painted, stained and decorated work.
 - **6.29.3** Remove all temporary protections and clean and polish floors.
 - **6.29.4** Clean and polish all hardware for all trades; this shall include removal of all stains, dust, dirt, paint, etc.
- **6.30 General:** In case of dispute, the OWNER may remove the rubbish and charge the cost to the CONTRACTOR.
- Work in such a manner as to insure the least practicable obstruction to public travel. The convenience of the general public and of the residents along and adjacent to the area of the Work shall be provided for in a satisfactory manner, consistent with the operation and local conditions. "Street Closed" signs shall be placed immediately adjacent to the Work, in a conspicuous position, at such locations as traffic demands. At any time that streets are required to be closed, Contractor shall obtain approval to close the street from the appropriate regulatory agencies having jurisdiction. The CONTRACTOR shall notify law enforcement agencies, fire departments, and parties operating emergency vehicles before the street is closed and again as soon as it is opened. Approval from the Board of County Commissioners shall be coordinated through the office of the Director of the Public Works Department including notification of the news media and affected property owners. Access to fire hydrants and other fire extinguishing equipment shall be provided and maintained at all times. Traffic paths shall be maintained for local traffic.
- **6.32 Sanitary Provisions:** The CONTRACTOR shall furnish necessary toilet conveniences, secluded from public observation, for use of all personnel on the Work, whether or not in his employ. They shall be kept in a clean and sanitary condition and shall comply with the requirements and regulations of the Public Authorities having jurisdiction. He shall commit no public nuisance. Temporary sanitary facilities shall be removed upon completion of the Work and the premises shall be left clean.
- **6.33 Indemnification:** To the extent of the insurance requirements set forth in the Contract, the CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees and interested third parties from and against all claims, damages, losses and expenses direct, indirect or consequential, including but not limited to fees and charges of engineers, architects, and other professionals and court costs

- arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than Work itself)including the loss of use resulting therefrom and (b) is caused in whole or in part by any negligent act or omission of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.
- **Claims:** In any and all claims against the OWNER or the ENGINEER or any of their agents or employees, by any employee of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.33 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any Subcontractor under worker's compensation acts, disability benefit acts or other employee benefit acts.
- **Obligation:** The obligations of the CONTRACTOR under paragraph 6.34 shall not extend to the liability of the Engineer's negligent acts, errors or omissions or those of his employees or agents.
- **Responsibility for Connecting to Existing Work:** It shall be the express responsibility of the CONTRACTOR to connect his Work to each part of the existing work or work previously installed as required by the Drawings and Specifications to provide a complete installation.
- 6.37 Work in Street, Highway and Other Rights-Of-Way: Excavation, grading, fill, storm drainage, paving and any other construction or installations in rights-of-way of streets, highways, public carrier lines, utility lines (either aerial, surface or subsurface), etc., shall be done in accordance with requirements of these Specifications and authorities having jurisdiction. The CONTRACTOR will be responsible for obtaining all permits necessary for the work. Upon completion of the Work, CONTRACTOR shall present to ENGINEER certificates, in triplicate, from the proper authorities stating that the Work has been done in accordance with their requirements.
 - **6.37.1** The OWNER will cooperate with the CONTRACTOR in obtaining action from any utilities or public authorities involved in the above requirements.
- 6.38 Cooperation with Governmental Departments, Public Utilities, Etc.: The CONTRACTOR shall be responsible for making all necessary arrangements with governmental departments, public utilities, public carriers, service companies and corporations owning or controlling roadways, railways, water, sewer, gas, electrical, cable television, telephone, and telegraph facilities such as pavements, tracks, piping, wires, cables, conduits, poles, guys, etc., including incidental structures connected therewith, that are encountered in the Work in order that such items may be properly shored, supported and protected, or the CONTRACTOR may relocate them with Utility Owner's approval, if he so desires. The CONTRACTOR shall give all proper notices, shall comply with requirements of such parties in the performance of his Work, shall permit entrance of such parties on the Project in order that they may perform their necessary work, and shall pay all charges and fees made by such parties for this work.
 - **6.38.1** The CONTRACTOR'S attention is called to the fact that there may be delays on the Project due to work to be done by governmental departments, public utilities, and others in repairing or moving poles, conduits, etc. The CONTRACTOR

- shall cooperate with the above parties, in every way possible, so that the construction can be completed in the least possible time.
- **6.38.2** The CONTRACTOR shall have made himself familiar with all codes, laws, ordinances and regulations which in any manner affect those engaged in the Work, or materials and equipment used in or upon the Work, or in any way affect the conduct of the Work, and no plea of misunderstanding will be considered on account of his ignorance thereof.
- **6.39 Use of Premises:** CONTRACTOR shall confine his apparatus, storage of materials, and operations of his workmen to limits indicated by law, ordinances, permits, and directions of the OWNER'S REPRESENTATIVE, and shall not unnecessarily encumber any part of the site.
 - **6.39.1** CONTRACTOR shall not overload or permit any part of any structure to be loaded with such weight as will endanger its safety, nor shall he subject any part of the Work to stresses or pressures that will endanger it.
 - **6.39.2** CONTRACTOR shall enforce the OWNER'S PROJECT MANAGER's instructions in connection with signs, advertisements, fires and smoking.
 - **6.39.3** CONTRACTOR shall arrange and cooperate with OWNER in routing and parking of automobiles of his employees, Subcontractors and other personnel, and in routing material delivery trucks and other vehicles to the Project site.
- 6.40 Protection of Existing Property Improvements: Any existing surface or subsurface improvements, such as pavements, curbs, sidewalks, pipes or utilities, footings, or structures (including portions thereof), trees and shrubbery, not indicated on the Drawings or noted in the Specifications as being removed or altered shall be protected from damage during construction of the Project. Any such improvements damaged during construction of the Project, whether or not such improvements appear on the drawings, shall be restored to a condition equal, or better, to that existing at time of award of Contract. Such restoration or repair shall be at the sole expense of the Contractor, and no claim for an increase in the Contract Price under paragraph 6.21 or under Article 10 shall be allowed.
- 6.41 Temporary Heat: The CONTRACTOR shall provide heat, fuel and services as necessary to protect all work and materials, within all habitable areas of permanent building construction, for all contracts against injury from dampness and cold until final acceptance of all work and materials for the Project, unless building is fully occupied by the OWNER prior to such acceptance, in which case the OWNER shall assume all expenses of heating from date of full occupancy. Unless otherwise specifically permitted by Special Conditions, the permanent heating system shall not be used to provide temporary heat. CONTRACTOR'S proposed methods of heating shall be submitted for approval.

7.0 Work By Others.

7.1 The OWNER may perform additional work related to the Project by himself, or he may let other direct contracts therefore which shall contain General Conditions similar to these. The CONTRACTOR will afford the other contractors who are parties to such direct contracts (or the OWNER, if he is performing the additional work himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of work, and shall properly connect and coordinate his Work with theirs.

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- 7.2 If any part of the CONTRACTOR'S work depends for proper execution or results upon the work of any such other CONTRACTOR (or the OWNER), the CONTRACTOR will promptly report to the OWNER'S REPRESENTATIVE in writing any defects or deficiencies in such work that render it unsuitable for such proper execution and results.
- 7.3 The CONTRACTOR will do all cutting, fitting, and patching of his Work that may be required to make its several parts come together properly and fit it to receive or be received by such other work. The CONTRACTOR will not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of the ENGINEER and of the other contractors whose work will be affected.
- 7.4 If the performance of additional work by other contractors or the OWNER is not noted in the Contract Documents prior to the execution of the Contract, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional work. If the CONTRACTOR believes that the performance of such additional work by the OWNER or others involves him in additional expense or entitles him to an extension of the Contract Time, he may make a claim therefore as provided in Articles 11 and 12.
- **7.5** Where practicable, the CONTRACTOR shall build around the work of other separate Contractors.
- 7.6 Cooperation is required in the use of site facilities and in the detailed execution of the Work. The CONTRACTOR shall coordinate his operations with those of any other CONTRACTORS for the best interest of the Work in order to prevent delay in the execution thereof.
- 7.7 The CONTRACTOR shall keep himself informed of the progress of the work of other Contractors. Should lack of progress or defective workmanship on the part of other Contractors interfere with his operations, the CONTRACTOR shall notify the OWNER'S REPRESENTATIVE immediately. Lack of such notice to the OWNER'S REPRESENTATIVE will be construed as acceptance by the CONTRACTOR of the status of the work of other Contractors as being satisfactory for proper coordination of his own Work.
- 7.8 CONTRACTOR shall give notices of the progress of his work so as to allow other contractors adequate opportunity to properly direct and coordinate their work. All such notices shall be submitted to the OWNER'S REPRESENTATIVE with copies to other Contractors on the Project Site sufficiently ahead of job progress to permit adequate time for the other Contractors to coordinate their work.

8.0 Owner's Responsibilities.

- **8.1** The OWNER will issue all communications to the CONTRACTOR through the ENGINEER, OWNER'S PROJECT MANAGER or OWNER'S REPRESENTATIVE (Project Manager).
- 8.2 In case of termination of the employment of the ENGINEER, the OWNER'S PROJECT MANAGER will appoint an engineer against whom the CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER. Any dispute in connection with such appointment shall be subject to arbitration, if mutually agreeable.
- **8.3** The OWNER will furnish the data required of him under the Contract Documents promptly and shall make payments to the CONTRACTOR promptly after they are due as provided in Article 14.

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- 8.4 OWNER'S duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1, 4.4 and the Special Conditions. Paragraph 4.2 refers to ENGINEER'S identifying and making available to CONTRACTOR copies of surveys and investigation reports of subsurface and latent physical conditions at the site or otherwise affecting performance of the Work which have been relied upon by ENGINEER in preparing the Drawings and Specifications.
- In connection with the OWNER'S right to stop Work or suspend Work, see paragraph 15.1. Paragraph 15.4 deals with the OWNER'S right to terminate services of the CONTRACTOR under certain circumstances.
- 8.6 The OWNER shall have the right to take possession of and use any completed or partially completed portions of the Work, notwithstanding the fact that the time for completing the entire Work or any portion thereof may not have expired; but such taking possession and use shall not be deemed an acceptance of any Work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the Work, the CONTRACTOR shall be entitled to such extra compensation or extension of time or both, except by prior agreement, as the ENGINEER may determine. See paragraph 14.11.
- **8.7** OWNER'S responsibility in respect of certain inspections, tests and approvals is set forth in paragraphs 9.5, 9.6, and 13.3 through 13.8.

9.0 Engineer's Status During Construction.

- 9.1 Owner's Representative: The ENGINEER (if specifically designated), or a specifically designated employee of the OWNER, shall act as the OWNER'S REPRESENTATIVE during the construction period. The duties and responsibilities and the limitations of authority of the ENGINEER as one of the OWNER'S REPRESENTATIVES during construction are set forth in Articles 1 through 17 of these General Conditions and shall not be extended without written consent of the OWNER'S PROJECT MANAGER and the ENGINEER.
 - **9.1.1** The ENGINEER's decision with the consent of the OWNER'S PROJECT MANAGER in matters relating to aesthetics, shall be final, if within the terms of the Contract Documents.
 - 9.1.2 Except as may be otherwise provided in the Contract or elsewhere in the Contract Documents, all claims, counter-claims, disputes and other matters in question between the OWNER and the Contractor arising out of or relating to the Contract or the breach thereof will be decided in a court of competent jurisdiction with the State in which the OWNER is located.
- 9.2 Visits to Site: The ENGINEER will make periodic visits to the site to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. He will not be required to make continuous on-site observations to check the quality or quantity of the Work. His efforts will be directed toward ascertaining on behalf of the OWNER that the completed Project will conform to the requirements of the Contract Documents. On the basis of his on-site observations as an experienced and qualified design professional, he will keep the OWNER informed of the progress of the Work and will endeavor to guard the OWNER against defects and deficiencies in the Work.
- **9.3 Clarifications and Interpretations:** The ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the Contract Documents (in the form of Drawings or otherwise) as he may determine necessary, which shall be

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- consistent with or reasonably inferable from the overall intent of the Contract Documents. If the CONTRACTOR believes that a written clarification and interpretation entitles him to an increase in the Contract Price or extension of Contract Time, he may make a claim therefore as provided in Articles 11 and 12.
- 9.4 Measurement of Quantities: All Work completed under the Contract will be measured by the ENGINEER'S or OWNER'S REPRESENTATIVE or PROJECT REPRESENTATIVE according to the United States Standard Measures. All linear surface measurements will be made horizontally or vertically as required by the item measured.
- 9.5 Rejecting Defective Work: The ENGINEER, OWNER'S REPRESENTATIVE or PROJECT REPRESENTATIVE will have authority to disapprove or reject Work which is "defective" (which term is hereinafter used to describe Work that is unsatisfactory, faulty or defective, or does not conform to the requirements of the Contract Documents or does not meet the requirements of any inspection, test or approval referred to in the Contract Documents, or has been damaged prior to final acceptance). They will also have authority to require special inspection or testing of the Work as they may individually or severally deem necessary, whether or not the Work is fabricated, installed or completed.
- 9.6 Correction of Defective Work: Upon presentation of a Defective Work Notice to the Contractor's Representative from the OWNER'S REPRESENTATIVE, the contractor shall have fourteen days to begin corrective action and repairs. If the Contractor believes that the necessary corrective action should not begin at the end of that fourteen day period, he shall submit to the OWNER'S PROJECT MANAGER, with a copy to the OWNER'S ENGINEER, a schedule for review with an explanation for not wanting to comply with the fourteen day requirement. The OWNER'S PROJECT MANAGER shall determine if the Contractor's request is valid, and shall reply to the Contractor. If the Contractor refuses to comply with the fourteen day requirement (or an agreed upon schedule), the OWNER has the right to do either (or more) of the following:

The OWNER has the right to correct any work so performed by the CONTRACTOR and deduct the expenses for doing so from the final payment due the CONTRACTOR, or

The OWNER will hold back final payment due CONTRACTOR until such time as the work is completed to the satisfaction of the OWNER'S PROJECT MANAGER and in compliance with the County's specifications. The OWNER'S PROJECT MANAGER shall have the sole discretion to determine if the work is satisfactory and in compliance with specifications.

The remedies contained herein are not exclusive and the OWNER reserves the right to pursue any and all other remedies it deems applicable.

- **9.7 Shop Drawings:** In connection with the ENGINEER's responsibility as to Shop Drawings and samples, see paragraphs 6.22 through 6.27, inclusive.
- **9.8 Change Orders:** In connection with the ENGINEER's responsibility for Change Orders, see Articles 10, 11 and 12.
- **Payments:** In connection with the ENGINEER'S responsibilities in respect to Application for Payment, etc., see Article 14.

10.0 Change in the Work.

- Without invalidating the Contract, the OWNER'S PROJECT MANAGER may, at any time or from time to time, order additions, deletions or revisions in the Work. Upon request of the OWNER'S PROJECT MANAGER, or at the request of the ENGINEER with the concurrence of the OWNER'S PROJECT MANAGER, the ENGINEER shall issue a Request for Proposal to the CONTRACTOR detailing the proposed additions, deletions or revisions to the Work. The CONTRACTOR shall provide a binding proposal to the ENGINEER for the items requested. This proposal shall include any increases or decreases in Contract Time or Contract Price and shall include any additional modifications required by virtue of the requested change, whether or not such additional modifications were specifically identified in the Request for Proposal. The ENGINEER shall review the Proposal and submit it together with his comments to the OWNER'S PROJECT MANAGER. The OWNER'S PROJECT MANAGER shall then instruct the ENGINEER to 1) modify the Request for Proposal, or 2) instruct the ENGINEER to withdraw the Request for Proposal, or 3) arrange for a Change Order to be issued, in accordance with the provisions of Articles 10 and 11 of these General Conditions, covering the additions, deletions or revisions covered by the Proposal.
- The ENGINEER with the OWNER'S PROJECT MANAGER's approval may authorize minor changes or alterations in the Work not involving extra cost and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order. If the CONTRACTOR believes that any minor change or alterations authorized by the ENGINEER entitles him to an increase in the Contract Price or extension of Contract Time, he shall treat the Field Order as a Request for Proposal and issue a Proposal for the changes in Contract Price and Contract Time prior to proceeding with the Work covered in the Field Order. The procedures outlined in paragraph 10.1 shall then be followed. Acceptance of the Final Payment by the CONTRACTOR shall constitute acknowledgment by the CONTRACTOR that all payments due for modifications required under Field Orders have been incorporated into the Final Payment.
- 10.3 Additional Work performed by the CONTRACTOR without authorization of a Change Order will not entitle him to an increase in the Contract Price or an extension of the Contract Time, except in the case of an emergency as provided in paragraph 6.21.
- 10.4 The OWNER will execute appropriate Change Orders prepared by the ENGINEER covering changes in the Work to be performed as provided in paragraphs 10.1 and 10.2, and Work performed in an emergency as provided in paragraph 6.21.
- 10.5 It is the CONTRACTOR'S responsibility to notify his surety of any changes affecting the general scope of the Work or change in the Contract Price and the amount of the applicable bonds shall be adjusted accordingly. The CONTRACTOR will furnish proof of such adjustment to the OWNER.

11.0 Change of Contract Price.

11.1 The Contract Price constitutes the total compensation payable to the CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the CONTRACTOR shall be at his expense without changing the Contract Price.

- 11.2 (a) The OWNER'S PROJECT MANAGER may, at any time, without notice to the sureties, by Field Order pursuant to a Proposal from the Contractor or by properly executed Change Order, make any change in the Work within the general scope of the contract, including but not limited to changes:
 - **11.2.1** in the specifications (including drawings and designs);
 - **11.2.2** in the method or manner of performance of the work;
 - 11.2.3 in the Owner-furnished facilities, equipment, materials, services or site; or
 - **11.2.4** directing acceleration in the performance of the work.

Any other written order or an oral order (which terms as used in this paragraph shall include direction, instruction, interpretation or determination) from the OWNER'S PROJECT MANAGER, which causes any such change shall be treated as a Field Order under this clause, <u>provided</u> that the CONTRACTOR shall follow the procedures outlined in paragraph 10.2.

Except as herein provided, no order, statement, or conduct of the OWNER shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment hereunder.

If any change under this clause causes an increase or decrease in the CONTRACTOR'S cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any order, an equitable adjustment shall be made and the contract modified in writing accordingly: Provided, however, that except for the claims based on defective specifications, no claim for any Change Order under paragraph 11.2(b) above shall be allowed for any costs incurred more than 20 days before the CONTRACTOR gives written notice as therein required: And provided further, that in the case of defective specifications for which the OWNER is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the CONTRACTOR in attempting to comply with such defective specifications.

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

Change Orders involving a decrease in Contract Price or an increase in Contract Price will be executed and processed pursuant to the policies and procedure of the St. Lucie County Purchasing Manual.

- 11.3 The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:
 - 11.3.1 Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved. Should the quantity of Work be significantly increased or decreased from that stipulated in the Contract Documents, the OWNER'S PROJECT MANAGER or the CONTRACTOR may request adjustment of the unit price(s) by negotiation.
 - **11.3.2** By negotiated lump sum.
 - 11.3.3 The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work plus a fixed amount to be agreed upon, but not to exceed 15% of the other costs, to cover administrative costs and profit.
- 11.4 The term Cost of the Work means the sum of all costs necessarily incurred and paid by St. Lucie County

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the CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by OWNER'S PROJECT MANAGER such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.5:

- 11.4.1 Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, worker's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing work after regular working hours on Sunday or legal holidays shall be included in the above to the extent authorized by the OWNER'S PROJECT MANAGER.
- **11.4.2** Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and manufacturers' field services required in connection therewith.

All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER.

All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

- 11.4.3 Payments made by CONTRACTOR to the Subcontractors for Work performed by Subcontractors. If required by the OWNER'S PROJECT MANAGER, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to him and shall deliver such Bids to the OWNER'S PROJECT MANAGER who will then determine with the advice of ENGINEER, which Bids will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of Work Plus a Fee, the Cost of the Work shall be determined in accordance with paragraphs 11.4 and 11.5. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.
- **11.4.4** Costs of special consultants (including, but not limited to, engineers, architects, testing laboratories, surveyors, and accountants) employed for services specifically related to the Work.
- **11.4.5** Supplemental costs including the following:
 - **11.4.5.1** The proportion of necessary transportation, traveling and subsistence expenses of CONTRACTOR'S employees incurred in discharge of duties connected with the Work.
 - 11.4.5.2 Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of CONTRACTOR.

- 11.4.5.3 Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by the OWNER'S PROJECT MANAGER with the advice of ENGINEER, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof All in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.
- **11.4.5.4** Sales, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by any governmental authority.
- **11.4.5.5** Deposits lost for causes other than CONTRACTOR'S negligence, royalty payments and fees for permits and licenses. Costs for permits and licenses must be shown as a separate item.
- 11.4.5.6 Losses, damages and expenses, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the execution of, and to, the Work, provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of the OWNER'S PROJECT MANAGER. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR'S Fee. If, however, any such loss or damage requires reconstruction and CONTRACTOR is placed in charge thereof, he shall be paid for his services a fee proportionate to that stated in paragraph 11.6.2.
- **11.4.5.7** Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.
- **11.4.5.8** Cost of premiums for additional Bonds and Insurance be required because of changes in the Work.
- 11.5 The term Cost of the Work shall not include any of the following:
 - 11.5.1 Payroll costs and other compensation of CONTRACTOR'S officers, executives, principals (of partnership and sole proprietorships), general managers, engineer, architects, estimators, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, Clerks and other personnel employed by CONTRACTOR whether at the site or in his principal or a branch office for general administration of the Work and not specifically included in the schedule referred to in subparagraph 11.4.1 all of which are to be considered administrative costs covered by the CONTRACTOR'S Fee.
 - **11.5.2** Expenses of CONTRACTOR'S principal and branch offices other than his office at the site.
 - **11.5.3** Any part of CONTRACTOR'S capital expenses, including interest on CONTRACTOR'S capital employed for the Work and charges against CONTRACTOR for delinquent payments.

- **11.5.4** Cost of premiums for all bonds and for all insurance policies whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except as otherwise provided in subparagraph 11.4.5.8).
- 11.5.5 Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied and making good any damage to property.
- **11.5.6** Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.
- 11.5.7 Attorneys' fees and costs associated with any pre-suit claims, disputes, administrative actions, legal actions, and/or appeals. Each party shall bear their own attorneys' fees and costs. There shall be no determination of a prevailing party and no entitlement to recover attorneys' fees and costs by either party. Notwithstanding any provision to the contrary, this section governs in the event of an inconsistency.
- 11.6 The CONTRACTOR'S Fee which shall be allowed to CONTRACTOR for his administrative expenses, general overhead and profit shall be determined as follows:
 - **11.6.1** A mutually acceptable firm fixed price; or if none can be agreed upon,
 - **11.6.2** A mutually acceptable fixed fee based on the estimate of the various portions of the Cost of the Work.
 - **11.6.3** In no case shall the CONTRACTOR'S Fee exceed 15% of the cost of the additional work being performed.
- 11.7 The amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost, will be the amount of the actual net decrease. When both additions and credits are involved in any one change, the net shall be computed to include overhead and profit, identified separately, for both additions and credits.
- 11.8 Whenever the cost of any Work is to be determined pursuant to paragraphs 11.4 and 11.5, CONTRACTOR will submit in form prescribed by ENGINEER an itemized cost breakdown together with supporting data.
- 11.9 Allowances: It is understood that the CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such materialmen, suppliers or Subcontractors and for such sums within the limit of the allowances as the ENGINEER may approve. Upon final payment, the Contract Price shall be adjusted as required and an appropriate Change Order issued. The CONTRACTOR agrees that the original Contract Price includes such sums as he deems proper for costs and profit on account of cash allowances. No demand for additional cost or profit in connection therewith will be allowed.
 - **11.9.1** These allowances shall cover the cost to the CONTRACTOR, less any applicable trade discount, of the materials and equipment required by the allowance delivered at the site, and all applicable taxes.
 - **11.9.2** The CONTRACTOR'S costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Price and not in the allowance.

11.9.3 Whenever the cost, as described in 11.9.1 above, is more than or less than the allowance, the Contract Price shall be adjusted accordingly by Change Order. The amount of the Change Order will recognize changes, if any, in handling costs on the site, labor, installation costs, overhead, profit and other expenses, except that whenever unit price allowances are stipulated for brick, the Change Order will not include any cost as described in 11.5 above.

12.0 Delays and Extension of Time.

- **12.1** All time limits stated in the Contract Documents are of the essence of the Contract.
- 12.2 As the CONTRACTOR'S only remedy for delay, the OWNER may grant an extension of the contract time, when a controlling item of work is delayed by any factors contemplated or not contemplated at the time of the bid. Such extension of time may be allowed for delays occurring during the contract time period or authorized extension of the contract time
- 12.3 All claims for extension of time shall be made in writing to the ENGINEER. Claims for delay due to inclement weather shall be made by the 10th day of the month following the month of the delay. All other claims shall be made no more than twenty (20) days after the commencement of the delay. Claims made beyond these time limits shall be null and void. Requests for extension of time shall be fully documented and shall include copies of daily logs, letters, shipping orders, delivery tickets, and other supporting information. In case of a continuing cause of delay only one (1) claim is necessary. Normal working weeks are based on a five (5) day week.
- 12.4 The right is reserved by the OWNER to have other work performed by other contractors and to permit public utility companies and others to do work during the construction, and within the limits of, or adjacent to the project. The CONTRACTOR shall conduct his operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. Should a difference of opinion arise as to the rights of the CONTRACTOR and others working within the limits of, or adjacent to the project, the ENGINEER will decide as to the relative priority of all concerned.
- 12.5 All authorized extensions of time shall be done by Change Order.

13.0 Guaranty: Tests and Inspection.

- and Work performed for a period of one (l) year from the date when final payment becomes due. The CONTRACTOR warrants and guarantees for a period of one (l) year from the date when final payment becomes due that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER'S PROJECT MANAGER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or the Work that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Public Construction BOND shall remain in full force and effect through the guarantee period. Express warranties are set forth in the Special Conditions, or in the Technical Specifications.
- **Access to Work:** ENGINEER and ENGINEER's representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will

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- have access to the Work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide proper and safe conditions for such access.
- 13.3 Tests and Inspections: Testing shall be in accordance with the Florida Department of Transportation Standard Specifications for Road and Bridge Construction unless otherwise directed by any public body having jurisdiction. Other than as provided for in paragraph 13.5, OWNER shall pay for all tests, except that any test not meeting specification requirements shall be charged to the CONTRACTOR and deducted from any monies due him.
 - 13.3.1 An independent Testing Laboratory shall be selected by the OWNER to provide testing services as directed by the ENGINEER. All inspections, tests or approvals required by Laws or Regulations of any authority having jurisdiction shall be performed by organizations acceptable to those authorities having jurisdiction.
 - **13.3.2** The Testing Laboratory shall mail copies of all test reports independently to the OWNER, ENGINEER, and the CONTRACTOR.
- 13.4 CONTRACTOR shall give ENGINEER and the OWNER'S PROJECT MANAGER timely notice of readiness of the Work for all required inspections, tests or approvals.
- 13.5 If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved independently of the requirements of the OWNER, ENGINEER, and the Contract Documents, CONTRACTOR shall assume full responsibility therefore, pay all costs in connection therewith and furnish ENGINEER and the OWNER'S PROJECT MANAGER the required certificates of inspection, testing or approval. CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with the OWNER'S PROJECT MANAGER'S or ENGINEER's acceptance of a Supplier or materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval prior to CONTRACTOR's purchase thereof, for incorporation in the Work.
- 13.6 If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of the Project Representative, it must, if requested by the OWNER'S PROJECT MANAGER, be uncovered for observation. Such uncovering shall be at CONTRACTOR's expense.
- 13.7 Neither observations by ENGINEER nor inspections, tests or approvals by others, including the Project Representative, OWNER'S REPRESENTATIVE or OWNER'S PROJECT MANAGER, shall relieve CONTRACTOR from CONTRACTOR's obligations to perform the Work in accordance with the Contract Documents.
- **13.8** County's Project Representative (Inspector): A County Project Representative will be assigned to all projects.
 - **13.8.1** The Project Representative shall inspect all construction and materials, and shall inspect preparation, fabrication or manufacture of components, and materials and supplies.
 - 13.8.2 The Project Representative is <u>not</u> authorized to revoke, alter or waive any requirements of the specifications, but is authorized and expected to call to the attention of Engineer and/or Contractor any failure of work or materials to conform to the Drawings and Specifications. Inspectors shall have no authority to permit deviation from or to modify any of the provisions of the Drawings or Specifications without the written permission or instruction of the Owner with

- the concurrence of the Engineer, or to delay the Contractor by failure to observe the materials and work with reasonable promptness.
- **13.8.3** The Project Representative shall have the authority to reject materials or suspend the work until questions of issue can be resolved to the County's satisfaction.
- **13.8.4** The Project Representative shall in no case act as foreman, give advice or perform other duties for the Contractor nor interfere with the management of the work.
- 13.8.5 The normal work shift for Project Representatives shall begin at 8:00 A.M. and end at 5:00 P.M. Monday through Friday. Any inspections performed before or after the normal work shift, or on Saturday, Sunday, or legal holidays shall be considered overtime and shall be paid for by the Contractor. If permission is obtained from the County's Project Manager to work between 5:00 P.M. and 8:00 A.M., the Contractor shall bear all expenses for Inspection. Such overtime inspection expenses will be recovered by deductions from the final payment application

14.0 Payments and Completions.

- **Payment to Contractor:** At least twenty (20) days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. Measurements for progress payments shall be made by the Contractor. Such measurements are subject to the Engineer's review and correction. Measurements for progress payments shall be made on in-place quantities. If payment is requested on the basis of equipment not incorporated in the Work but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER'S PROJECT MANAGER. The ENGINEER will either indicate in writing his approval of payment and present the partial payment estimate to the OWNER'S PROJECT MANAGER, or return the partial payment estimate to the CONTRACTOR indicating in writing his reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will within twenty (20) days of presentation to him of an approved partial payment estimate, pay the CONTRACTOR progress payment on the basis of the approved partial payment estimate. The OWNER may retain a portion of the amount otherwise due the CONTRACTOR. Except as State law otherwise provides, the amount the OWNER will retain shall be 5 percent of the payment claimed until work is 100 percent complete. Each request for a partial payment shall be submitted on an Application for Payment Form which shall be accompanied by an executed copy of the Certification of CONTRACTOR. The OWNER'S PROJECT MANAGER will provide the forms.
- 14.2 Contractor's Warranty of Title: The CONTRACTOR warrants and guarantees that title to all Work and equipment covered by an Application for Payment, whether incorporated in the Project or not, will have passed to the OWNER prior to the making of the Application for Payment, free and clear of all liens, claims, security interests and encumbrances (hereafter in these General Conditions referred to as "Liens"); and that no work or equipment covered by an Application for Payment will have been acquired by

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- the CONTRACTOR or by any other person performing the Work at the site or furnishing equipment for the Project, subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the CONTRACTOR or such other person.
- 14.3 **Approval of Payments:** The ENGINEER'S approval of any payment requested in an Application for Payment shall constitute a representation by him to the OWNER, based on the ENGINEER'S on-site observations of the Work in progress as an experienced and qualified design professional and on his review of the Application for Payment and the supporting data, that the Work has progressed to the point indicated; that, to the best of his knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning Project upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and any qualifications stated in his approval); and that the CONTRACTOR is entitled to payment of the amount approved. However, by approving any such payment the ENGINEER shall not thereby be deemed to have represented that he made exhaustive or continuous on-site observations to check the quality or the quantity of the Work, or that he has reviewed the means, methods, techniques, sequences, and procedures of construction or that he has made any examination to ascertain how or for what purpose the CONTRACTOR has used the money paid or to be paid to him on account of the Contract Price, or that title to any Work or equipment has passed to the OWNER free and clear of any Liens.
- 14.4 The CONTRACTOR shall make the following certification on each request for payment: "I hereby certify that the labor and materials listed on this request for payment have been used in the construction of this work or that all equipment included in this request for payment and not yet incorporated into the construction are now on the site or stored at an approved location; and payment received from the last request for payment has been used to make payments to all first tier subcontractors and suppliers except as listed below."
- 14.5 The ENGINEER's approval of final payment shall constitute an additional representation by him to the OWNER that the conditions precedent to the CONTRACTOR's being entitled to final payment as set forth in paragraph 14.11 have been fulfilled.
- 14.6 The ENGINEER may refuse to approve the whole or any part of any payment if, in his opinion, he is unable to make such representations to the OWNER. He may also refuse to approve any such payment, or, because of subsequently discovered evidence or the results of subsequent inspection or tests, nullify any such payment previously approved, to such extent as may be necessary in his opinion to protect the OWNER from loss because:
 - **14.6.1** The Work is defective, or complete Work has been damaged requiring correction or replacement,
 - **14.6.2** The Work for which payment is requested cannot be verified,
 - **14.6.3** Claims or Liens have been filed or there is reasonable evidence indicating the probable filing thereof,
 - 14.6.4 The Contract Price has been reduced because of Modifications,
 - **14.6.5** The OWNER has been required to correct defective Work or complete the Work in accordance with paragraph 9.6,
 - **14.6.6** Of unsatisfactory prosecution of the Work, including failure to clean up as required by paragraphs 6.28, 6.29 and 6.30,
 - 14.6.7 Of persistent failure to cooperate with other Contractors on the Project and

- persistent failure to carry out the Work in accordance with the Contract Documents.
- **14.6.8** Of liquidated damages payable by the CONTRACTOR, or
- **14.6.9** Of any other violation of, or failure to comply with, the provisions of the Contract Documents.
- 14.7 Prior to Substantial Completion, the OWNER, with the approval of the ENGINEER and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portion of the Work. Such use shall not constitute an acceptance of such portions of the Work.
- 14.8 The OWNER shall have the right to enter the premises for the purpose of doing work not covered by the Contract Documents. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the Work, or the restoration of any damaged Work except such as may be caused by agent or employees of the OWNER.
- 14.9 Upon completion and acceptance of the Work the ENGINEER shall issue a certificate attached to the final payment request that the Work has been accepted by him under the conditions of the Contract Documents. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within thirty (30) days of completion and acceptance of the Work.
- 14.10 The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workmen, mechanics, materialmen, and furnisher's of machines and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the Work. The CONTRACTOR shall, at the OWNER'S PROJECT MANAGER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTOR'S pay from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed in accordance with the terms of the Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, his Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the Contract Documents by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.
- 14.11 Acceptance of Final Payment as Release: The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this Work and for every act and neglect of the OWNER and others relating to or arising out of this Work. Any payment, however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the Contract Documents or the Public Construction Bond and Payment Bonds.

15.0 Suspension of Work and Termination.

- 15.1 Owner May Suspend Work: The OWNER'S PROJECT MANAGER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to the CONTRACTOR and the ENGINEER which shall fix the date on which Work shall be resumed. The CONTRACTOR will resume the Work on the date so fixed. The CONTRACTOR will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if he makes a claim therefore as provided in Articles 11 and 12.
- 15.2 Owner May Stop Work: The OWNER or his REPRESENTATIVE may stop the Work or any portion thereof when it has been determined that the Contractor is not complying with the Drawings or Specifications or the intent thereof. The Stop Work order may be verbal and the CONTRACTOR shall cease work immediately except for leaving the Work area in a safe and acceptable condition. A verbal Stop Work order will be confirmed in writing. The CONTRACTOR will not be allowed an increase in the contract price or an extension of the Contract time during the Stop Work period. A Start Work order may be verbal and will be confirmed in writing.
- 15.3 Work During Inclement Weather: No work shall be done under these Specifications except by permission of the OWNER'S PROJECT MANAGER when the weather is unfit for good and careful work to be performed. Should the severity of the weather continue, the CONTRACTOR, upon the direction of the OWNER'S PROJECT MANAGER, shall suspend all work until instructed to resume operations by the OWNER'S PROJECT MANAGER and the CONTRACT Time shall be extended to cover the duration of the order. Work damaged during periods of suspension due to inclement weather shall be repaired and/or replaced by the CONTRACTOR. Any compensation for repairs or replacements shall be subject to approval of the OWNER'S PROJECT MANAGER.
- Owner May Terminate: If the CONTRACTOR is adjudged bankrupt or insolvent, or if 15.4 he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws, or if he fails to supply sufficient skilled workmen or suitable materials or equipment, or if he fails to make prompt payments to Subcontractors or for labor, materials or equipment or he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction, or if he disregards the authority of the ENGINEER, or if he otherwise violates any provision of the CONTRACT Documents, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and his surety seven days' written notice, terminate the services of the CONTRACTOR and take possession of the Project and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the Work by whatever method he may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Project, including compensation for additional professional services, such excess shall be paid to the CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR or the Surety will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a Change Order.
- 15.5 Where the CONTRACTOR'S services have been so terminated by the OWNER, said terminations shall not affect any rights of the OWNER against the CONTRACTOR then

- existing or which may thereafter accrue. Any retention or payment of moneys by the OWNER due the CONTRACTOR will not release the CONTRACTOR from liability.
- 15.6 Upon seven days written notice to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Project and terminate the Contract. In such case, the CONTRACTOR shall be paid for all Work executed and any expense sustained plus a reasonable profit.
- 15.7 Removal of Equipment: In the case of termination of this Contract before completion, for any cause whatever, the CONTRACTOR, if notified to do so by the OWNER'S PROJECT MANAGER, shall promptly remove any part or all of this equipment and supplies from the property of the OWNER. Should the CONTRACTOR not remove such equipment and supplies, the OWNER shall have the right to remove them at the expense of the CONTRACTOR. Equipment and supplies shall not be construed to include such items for which the CONTRACTOR has been paid in whole or in part.
- 15.8 Contractor May Stop Work or Terminate: If, through no act or fault of the CONTRACTOR, the Work is suspended for a period of more than ninety days by the OWNER, or under an order of court or other public authority as a result of actions by others not under the control of the CONTRACTOR, or the ENGINEER fails to act on any Application for Payment within thirty days after it is submitted, or the OWNER fails to pay the CONTRACTOR any sum approved by the ENGINEER or awarded by arbitrators within thirty days of its approval and presentation, then the CONTRACTOR may, upon seven days written notice to the OWNER'S PROJECT MANAGER and the ENGINEER, terminate the Contract and recover from the OWNER payment for all Work executed and any expense sustained plus a reasonable profit. In addition and in lieu of terminating the Contract, if the ENGINEER has failed to act on an Application for Payment or the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon twenty one days notice to the OWNER'S PROJECT MANAGER and the ENGINEER stop the Work until he has been paid all amounts then due.
- **15.9 Owner Furnished Equipment:** In case the OWNER furnishes equipment to the CONTRACTOR to install, but fails to deliver it to the CONTRACTOR as required by SPECIAL CONDITIONS, and in case such failure causes the CONTRACTOR additional expense or need for extension of time, the CONTRACTOR may make such claims upon the OWNER and obtain adjustments as provided herein.
- **15.10 Liquidated Damages:** If the CONTRACTOR shall fail to complete the work within the contract time, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the Contract for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the Contract Documents.

16.0 Miscellaneous.

- Whenever any provision of the Contract Documents requires the giving of written notice it shall be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to him who gives the notice.
- All Specifications, Drawings and copies thereof furnished by the ENGINEER shall remain his property. They shall not be used on another Project, and, with the exception

St. Lucie County
Engineering Division

- of those sets which have been signed in connection with the execution of the Contract, shall be returned to him on request upon completion of the Project.
- 16.3 The duties and obligations imposed by these General Conditions, Special Conditions and Supplemental Conditions and the rights and remedies available hereunder, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR and those in the Special Conditions and the rights and remedies available to them which are otherwise imposed or available by law, by special guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, warranties and guarantees made in the Contract Documents will survive final payment and termination or completion of the Contract.
- 16.4 Should the OWNER or the CONTRACTOR suffer injury or damage to its person or property because of any error, omission or act of the other or of any of his employees or agents or others for whose acts he is legally liable, claim shall be made in writing to the other party within a reasonable time of the first observance of such injury or damage.
- 16.5 The Contract Documents shall be governed by the law of the State of Florida.
- 16.6 Before the Contractor disposes of any existing improvements or equipment which are to be removed as a portion of the work, and for which disposition is not specifically provided for elsewhere in these Specifications, he will contact the Owner and determine if the removal items are to be salvaged. Items to be salvaged by the OWNER will be neatly stockpiled or stored in a neat and acceptable manner at the construction site easily accessible to the Owner. Equipment and materials which will not be salvaged by the Owner shall become the property of the Contractor to be removed from the site and disposed of in an acceptable manner.

17.0 Public Entity Crimes.

Any person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to the County, may not submit a bid on a contract to the County for the construction or repair of a building or public work, may not submit bids on leases of real property to the County, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under contract with the County, and may not transact business with the County in excess of \$10,000.00 for a period of 36 months from the date of being placed on the convicted list.

The County will not intentionally award publicly-funded contracts to any contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions contained in U.S.C. Section 1324a(e) [Section 274A9e) of the Immigration and Nationality Act (AINA@)]. The County shall consider the employment by any contractor of unauthorized aliens a violation of Section 274A(e) of the INA. Such a violation by the Recipient of the employment provisions contained in Section 274A(e) of the INA shall be grounds for unilateral cancellation of this Agreement by the County.

SECTION 00800 SPECIAL CONDITIONS

1.0 Scope.

The Project consists of <u>JOHNSTON ROAD FPFWCD CANALS 16 & 17 CULVERT REPLACEMENT</u>, associated appurtenances, and other related work.

2.0 Work Schedules and Overtime.

- 2.1 No work shall be done between the hours of 5:00 P.M. and 8:00 A.M., nor on Saturday, Sunday, or legal holidays observed by St. Lucie County, in any case without the written approval or permission of the Project Manager.
- 2.2 The normal work shift for County Inspectors shall begin at 8:00 A.M. and end at 5:00 P.M. Monday through Friday. Any inspections performed before or after the normal work shift, or on Saturday, Sunday, or legal holidays shall be considered overtime and shall be paid for by the Contractor. If permission is obtained from the County's Project Manager to work between 5:00 P.M. and 8:00 A.M., the Contractor shall bear all expenses for Inspection. Such overtime inspection expenses will be recovered by deductions from the final payment application.

3.0 Observed County Holidays

New Year's DayIndependence DayDay After ThanksgivingMartin Luther King Jr. DayLabor DayChristmas EvePresidents' DayVeterans DayChristmas Day

Memorial Day Thanksgiving Day

4.0 Modifications to the General Conditions, Section 00700

Whenever the term ENGINEER is used it shall be construed to refer to:

St. Lucie County Engineering Division 2300 Virginia Avenue Ft. Pierce, FL 34982

Telephone: (772) 462 - 1707

5.0 Maintenance of Traffic

If a Maintenance of Traffic plan is included within the plans and the contractor chooses to use an alternate plan, that plan will have to be signed & sealed by a Registered Florida Professional Engineer and submitted to the County for review and approval before implementation.

6.0 Permits

The Contractor shall review and be familiar with all permit conditions provided in the bid package.

7.0 Geotechnical Reports

The Contractor shall review and be familiar with the geotechnical reports provided in the bid package.

SECTION 00900 ENVIRONMENTAL SPECIFICATIONS

<u>Article</u>	<u>Description</u>	<u>Page</u>
1.0	Water Resources	00900-2
2.0	Fish and Wildlife Resources	00900-2
3.0	Environmental Protection	00900-3
4.0	Control and Disposal of Waste	00900-3
5.0	Dust Control	00900-3

1.0 Water Resources.

- 1.1 Description: The Contractor shall not discharge or permit discharge into the waters of lakes, rivers, canals, waterways and ditches, any fuels, oils, bitumens, garbage, sewage, or other materials which may be harmful to fish, wildlife, or vegetation, or that may be detrimental to outdoor recreation. The Contractor shall be responsible for investigating and complying with all applicable Federal, State and local laws and regulations governing pollution of waters. All work under this contract shall be performed in such a manner that objectionable conditions will not be created in waters through or adjacent to the project areas
- **1.2 Turbidity:** The Contractor shall exercise extreme care to minimize degradation of water quality at the site. All necessary provisions shall be taken to ensure compliance with the water quality standards of the State of Florida. Adequate silt containment procedures and equipment shall be used as necessary to control turbidity within Federal and State standards.
- 1.3 Water Quality Measurements: When required by any Government agency, the Contractor shall make water quality measurements and submit results to Agency and Engineer, in addition to those required herein, at no cost to the Owner to assure construction operations are in compliance with the Federal and State regulations. All water quality measurements shall conform to the test methods specified in Chapter 40, Part 136 of the Code of Federal Regulations.
- **Disposal:** Disposal of any materials, wastes, effluents, trash, garbage, oil, grease and chemicals, in areas adjacent to waters shall not be permitted. If any waste material is dumped in unauthorized areas, the Contractor shall remove the material and restore the area to the condition of the adjacent undisturbed area. If necessary, contaminated ground shall be excavated, disposed of as directed by the Engineer and replaced with suitable fill materials, compacted and finished with topsoil, all at the expense of the Contractor.
- 1.5 Method of Measurement and Basis of Payment: All materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the Contractor as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the Owner.

2.0 Fish and Wildlife Resources.

- **2.1 Description:** The Contractor shall at all times perform all work and take such steps required to prevent any interference or disturbance to fish and wildlife. The Contractor shall not be permitted to alter water flows or otherwise significantly disturb native habitat adjacent to the project area which are critical to fish and wildlife except as may be indicated or specified.
- 2.2 Method of Measurement and Basis of Payment: All materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the Contractor as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the Owner.

3.0 Environmental Protection.

3.1 **Description:** In order to prevent and to provide for abatement and control of any environmental pollution arising from the work of the Contractor and his Subcontractors in the performance of this Contract, the Contractor shall comply with all applicable Federal, State and Local laws and regulations concerning environmental pollution control and abatement, and all applicable provisions of the Army Corps of Engineers manual, EM 385-1-1, entitled *General Safety Requirements*, in effect on the date of the work, as

St. Lucie County Engineering Division well as the specifications, including the Corps of Engineers and South Florida Water Management District permits, if applicable to this project. See attached copies of applicable permits in Appendix B - Permits.

The Contractor shall provide and maintain environmental protection during the term of the Contract. Environmental protection measures shall be provided to control pollution that develops during normal dredging and/or excavation practices. The Contractor's operations shall comply with all Federal, State, and Local regulations pertaining to water, air, solid waste and noise pollution. Compliance with the provisions of this Section by Subcontractors shall be the responsibility of the Contractor.

3.2 Method of Measurement and Basis of Payment: All materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the Contractor as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the Owner.

4.0 Control and Disposal of Waste.

- **4.1 General:** Wastes shall be picked up and placed in containers which are emptied on a regular schedule. All handling and disposal shall be so conducted as to prevent contamination of the site and any other areas. On completion, the areas shall be left clean and natural looking. All signs of temporary construction and activities incidental to construction of the required permanent work in place shall be obliterated.
- **4.2 Disposal of Rubbish and Debris:** Contractor shall transport all waste off of Owner's property and dispose of it in a manner that complies with federal, state and local requirements.
- **4.3 Method of Measurement and Basis of Payment:** All materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the Contractor as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the Owner.

5.0 Dust Control.

Dust shall be kept down at all times, including nonworking hours, weekends and holidays. Soil at the site and other areas disturbed by the Contractor's operations shall be sprinkled or treated with dust suppressor as necessary to control dust. Blowing will be permitted only for cleaning off nonparticulate debris, such as reinforcing bars. No sandblasting will be permitted unless the dust therefrom is confined, except in areas approved by the Owner.

APPENDIX A PAY REQUEST FORMS

CONSTRUCTION SERVICES

APPLICATION FOR PARTIAL PAYMENT

The following to be com	pleted by the Contracto	r	
Application Number:		Date:	
Project:			
Contractor:			
Application Amount:			
For Period Ending:			
Scheduled Subtantial Completion Date:			
# of Days Worked/# of Contract Days:			
Tabulation of Amount Due This Application	By Contractor	As Approved by PM	
Total Original Contract Amount \$		\$	
Total Amount Completed to Date		\$	
(See Attached Estimate of Completed Work)		Ψ	
Current Change Order \$		\$	
Total of Previous Change Orders \$		\$	
Total Revised Contract Amount \$		\$	
Gross Amount Due \$		\$	
5% Retainage \$		\$	
Amount Due to Date \$		\$	
Less Previous Payments		ф	
(Total Amount of Previous Payments)		\$	
Amount Due this Application \$		\$	
The undersigned Contractor hereby swears under penalty of perjury	R'S AFFIDAVIT that all previous payments	received by the Contractor	
under this Contract have been used to discharge in full all obligation			
Contractor:	Date:	payments.	
By:	Title:		
	Ct. I		
Before me this day of	_ 20 personally appea	red	
known to me, who being duly sworn, did depose and say that he is the			
the Contractor above mentioned; that he executed the above applica	tion for payment and stater	ment on behalf of said	
Contractor; and that all of the statements contained therein are true	, correct, and complete.		
My commission expires:			
	NT.	, p.11.	
Who following to be completed by		otary Public	
The following to be completed by the polynomial of the polynomial	· · · · · · · · · · · · · · · · · · ·	wanager	
TO: THE BOARD OF COUNTY COMMISSIONERS, ST. LUCIE CO		m p' · · · (p.11)	
The above application for payment by the Contractor has been revie			
Works hereby approves the payment under this application in the ar	nount of: \$, SUBJECT TO	
CONTRACTOR SIGNING ABOVE AFFIDAVIT.	GINEERING DIVISION	ī	
SI. LUCIE COUNTI EN	GINEERING DIVISION	•	
Director of Public Works:		Date:	
County Engineer:	Date:		
Assistant County Engineer:	Date:		
Program Coordinator:		Date:	
Project Manager:		Date:	

CONSTRUCTION SERVICES

APPLICATION FOR FINAL PAYMENT

The following to be	completed by the Contractor	r	
Application Number:		Date:	
Project:			
Contractor:			
Application Amount:			
For Period Ending:			
Scheduled Subtantial Completion Date:			
# of Days Worked/# of Contract Days:			
Tabulation of Amount Due This Application	By Contractor	As Approved by PM	
Total Original Contract Amount	\$	\$	
Total Amount Completed to Date	s	\$	
(See Attached Estimate of Completed Work)	Ψ	Ψ	
Current Change Order	\$	\$	
Total of Previous Change Orders	\$	\$	
Total Revised Contract Amount	\$	\$	
Total Work to Date	\$	\$	
Less Previous Payments	\$	\$	
Subtotal	\$	\$	
Less Failed Laboratory Tests	\$	\$	
Amounty Due Final Payment	¢	0	
(Except Liquidated Damages Assessed by the Board)	*	\$	
CONTRAC	CTOR'S AFFIDAVIT		
under this Contract have been used to discharge in full all oblig Contractor: By: County Of: Before me this day of known to me, who being duly sworn, did depose and say that he the Contractor above mentioned; that he executed the above ap Contractor; and that all of the statements contained therein are	Date: Title: State: 20 personally appea e is the oplication for payment and stater	red (office) of	
My commission expires:	N	otary Public	
The following to be comple	ted by the County's Project I	Manager	
TO: THE BOARD OF COUNTY COMMISSIONERS, ST. LUCIE The above application for payment by the Contractor has been Works hereby approves the payment under this application in t CONTRACTOR SIGNING ABOVE AFFIDAVIT. ST. LUCIE COUNT	reviewed by the Project Manager	, SUBJECT TO	
Director of Public Works:		Date:	
County Engineer:	Date:		
Assistant County Engineer:	Date:		
Program Coordinator:	Date:		
Project Manager:		Date:	

APPENDIX - B PERMITS



South Florida Water Management District Environmental Resource General Permit No. 56-108911-P Date Issued: June 7, 2023

Permittee: St Lucie County

2300 Virginia Avenue Ft Pierce, FL 34982

Project: Johnston Rd Canal 16 Culvert Replacement

Location: St Lucie County, See Exhibit 1

Application No. 230511-38591

Description: Replace an existing 84" CMP with a 6' x 10' RCBC within FPFWCD Canal No. 16 under

Johnston Road in St. Lucie County. The project includes 0.1 acres of work in other surface waters. No impacts to wetlands are proposed. See Exhibit Nos. 1 and 2.

Rule: 62-330.447, F.A.C.: General Permit to the Florida Department of Transportation,

Counties, and Municipalities for Minor Activities within Existing Rights-of-Way or

Easements.

Expiration: June 7, 2028

Your application to use a General Environmental Resource Permit has been approved. This action is taken based on Chapter 373, Part IV, of Florida Statutes (F.S.) and the rules in Chapter 62-330, Florida Administrative Code (F.A.C.). Please read this entire agency action thoroughly and understand its contents.

This permit is subject to:

- Not receiving a filed request for a Chapter 120, F.S., administrative hearing.
- The attached General Conditions for Environmental Resource General Permits.
- The attached Specific Conditions.
- All referenced Exhibits.

Should you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights", we will assume that you concur with the District's action.

Certificate of Service

I hereby certify that this written notice has been mailed or electronically transmitted to the Permittee (and the persons listed in the distribution list) on June 7, 2023, in accordance with Section 120.60(3), F.S. Notice was also electronically posted on this date through a link on the home page of the District's website (www.sfwmd.gov/ePermitting).

Gary R. Priest, P.E.

Engineering Section Administrator, Environmental Resource Bureau

General Conditions for All General Permits, 62-330.405, F.A.C.

- The general permit is valid only for the specific activity indicated. Any deviation from the specified activity and the conditions for undertaking that activity shall constitute a violation of the permit and shall subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
- 2. The general permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any construction, alteration, operation, maintenance, removal or abandonment authorized by this permit; and it does not authorize any violation of any other applicable federal, state, local, or special district laws (including, but not limited to, those governing the "take" of listed species).
- 3. This general permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the general permit.
- 4. The general permit does not relieve the permittee from liability and penalties when the permitted activity causes harm or injury to: human health or welfare; animal, plant or aquatic life; or property. It does not allow the permittee to cause pollution that violates state water quality standards.
- 5. Section 253.77, F.S., provides that a person may not commence any excavation, construction, or other activity involving the use of state-owned or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required consent, lease, easement, or other form of authorization authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on state-owned lands.
- 6. The authorization to conduct activities under a general permit may be modified, suspended or revoked in accordance with Chapter 120, F.S., and Section 373.429, F.S.
- 7. The general permit is not transferable to a new third party. To be used by a different permittee, a new notice to use a general permit must be submitted in accordance with rule 62-330.402, F.A.C. Activities constructed in accordance with the terms and conditions of a general permit are automatically authorized to be operated and maintained by the permittee and subsequent owners in accordance with subsection 62-330.340(1), F.A.C. Any person holding the general permit, persons working under the general permit, and owners of land while work is conducted under the general permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to sale, conveyance, or other transfer of ownership or control of the permitted project, activity, or the real property at which the permitted project or activity is located.
- 8. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the permitted system to ensure conformity with the plans and specifications approved by the general permit.
- 9. The permittee shall maintain any permitted project or activity in accordance with the plans submitted to the Agency and authorized in this general permit.
- 10. A permitee's right to conduct a specific activity under this general permit is authorized for a duration of five years.
- 11. Activities shall be conducted in a manner that does not cause or contribute to violations of

state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including other measures specified in the permit to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007), available at https://www.flrules.org/Gateway/reference.asp?No=Ref-04227, and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida. July 2008). available http://publicfiles.dep.state.fl.us/DEAR/ at Stormwater_Training_Docs/erosion-inspectors-manual.pdf.

- 12. Unless otherwise specified in the general permit, temporary vehicular access within wetlands during construction shall be performed using vehicles generating minimum ground pressure to minimize rutting and other environmental impacts. Within forested wetlands, the permittee shall choose alignments that minimize the destruction of mature wetland trees to the greatest extent practicable. When needed to prevent rutting or soil compaction, access vehicles shall be operated on wooden, composite, metal, or other non-earthen construction mats. In all cases, access in wetlands shall comply with the following:
 - (a) Access within forested wetlands shall not include the cutting or clearing of any native wetland tree having a diameter four inches or greater at breast height;
 - (b) The maximum width of the construction access area shall be limited to 15 feet;
 - (c) All mats shall be removed as soon as practicable after equipment has completed passage through, or work has been completed, at any location along the alignment of the project, but in no case longer than seven days after equipment has completed work or passage through that location; and
 - (d) Areas disturbed for access shall be restored to natural grades immediately after the maintenance or repair is completed.
- 13. Barges or other work vessels used to conduct in-water activities shall be operated in a manner that prevents unauthorized dredging, water quality violations, and damage to submerged aquatic communities.
- 14. The construction, alteration, or use of the authorized project shall not adversely impede navigation or create a navigational hazard in the water body.
- 15. Except where specifically authorized in the general permit, activities must not:
 - (a) Impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands; or
 - (b) Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to section 373.042, F.S., or a Works of the District established pursuant to section 373.086, F.S.
- 16. If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850)245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with section 872.05, F.S.
- 17. The activity must be capable, based on generally accepted engineering and scientific

- principles, of being performed and of functioning as proposed, and must comply with any applicable District special basin and geographic area criteria.
- 18. The permittee shall comply with the following when performing work within waters accessible to federally- or state-listed aquatic species, such as manatees, marine turtles, smalltooth sawfish, and Gulf sturgeon:
 - (a) All vessels associated with the project shall operate at "Idle Speed/No Wake" at all times while in the work area and where the draft of the vessels provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
 - (b) All deployed siltation or turbidity barriers shall be properly secured, monitored, and maintained to prevent entanglement or entrapment of listed species.
 - (c) All in-water activities, including vessel operation, must be shut down if a listed species comes within 50 feet of the work area. Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the in-water work, or until 30 minutes elapses since the last sighting within 50 feet. Animals must not be herded away or harassed into leaving. All onsite project personnel are responsible for observing water-related activities for the presence of listed species.
 - (d) Any listed species that is killed or injured by work associated with activities performed shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1(888)404-3922 and ImperiledSpecies@myFWC.com.
 - (e) Whenever there is a spill or frac-out of drilling fluid into waters accessible to the above species during a directional drilling operation, the FWC shall be notified at ImperiledSpecies@myfwc.com with details of the event within 24 hours following detection of the spill or frac-out.
- 19. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any activity authorized by the general permit.
- 20. The permittee shall immediately notify the Agency in writing of any submitted information that is discovered to be inaccurate.

Specific Conditions for General Permits, 62-330.447, F.A.C.

- 1. (a) The permittee shall limit stream channel relocation to streams which have an average discharge of 10 cubic feet per second or less. The length of relocated channels or those significantly altered shall be limited to 200 feet per stream. A stream channel shall be altered only when such a measure will reduce the long term adverse water quality impacts and will maintain or restore the stream's natural hydraulic capability; and
 - (b) This general permit shall not apply to ditch construction in Class I or Class II surface waters, Outstanding National Resource Waters or waters designated as Outstanding Florida Waters.
 - (c) Activities under this general permit must not diminish existing stormwater treatment, attenuation, or conveyance capacity.
 - (d) This general permit does not authorize the construction of additional traffic lanes. Activities that require additional traffic lanes must first obtain an individual environmental resource permit under this chapter, as applicable, before the start of construction.

Distribution List

City of Port St Lucie - Planning and Zoning Division

City of Port St Lucie - Public Works

US Army Corps of Engineers - Permit Section

St. Lucie County Engineer

St. Lucie County Planning and Development Services

City Of Fort Pierce

Permit No: 56-108911-P, Page 6

Exhibits

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website (http://my.sfwmd.gov/ePermitting) and searching under this application number 230511-38591.

Exhibit No. 1.0 Location Map

Exhibit No. 2.0 SWM Plans

Permit No: 56-108911-P, Page 7

NOTICE OF RIGHTS

As required by Chapter 120, Florida Statutes, the following provides notice of the opportunities which may be available for administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes, or judicial review pursuant to Section 120.68, Florida Statutes, when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Some of the legal proceedings detailed below may not be applicable or appropriate for your situation. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Florida Statutes. Persons seeking a hearing on a District decision which affects or may affect their substantial interests shall file a petition for hearing in accordance with the filing instructions set forth herein within 21 days of receipt of written notice of the decision unless one of the following shorter time periods apply: (1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Florida Statutes; or (2) within 14 days of service of an Administrative Order pursuant to Section 373.119 (1), Florida Statutes. "Receipt of written notice of agency decision" means receipt of written notice through mail, electronic mail, posting, or publication that the District has taken or intends to take final agency action. Any person who receives written notice of a District decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

If the District takes final agency action that materially differs from the noticed intended agency decision, persons who may be substantially affected shall, unless otherwise provided by law, have an additional point of entry pursuant to Rule 28-106.111, Florida Administrative Code.

Any person to whom an emergency order is directed pursuant to Section 373.119(2), Florida Statutes, shall comply therewith immediately, but on petition to the board shall be afforded a hearing as soon as possible.

A person may file a request for an extension of time for filing a petition. The District may grant the request for good cause. Requests for extension of time must be filed with the District prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and whether the District and any other parties agree to or oppose the extension. A timely request for an extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

FILING INSTRUCTIONS

A petition for administrative hearing must be filed with the Office of the District Clerk. Filings with the Office of the District Clerk may be made by mail, hand-delivery, or e-mail. Filings by facsimile will not be accepted. A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the Office of the District Clerk at the District's headquarters in West Palm Beach, Florida. The District's normal business hours are 8:00 a.m. – 5:00 p.m., excluding weekends and District holidays. Any document received by the Office of the District Clerk after 5:00 p.m. shall be deemed filed as of 8:00 a.m. on the next regular business day.

Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the District Clerk, 3301 Gun Club Road, West Palm Beach, Florida 33406.
- Filings by hand-delivery must be delivered to the Office of the District Clerk. Delivery of a petition to the District's security desk does not constitute filing. It will be necessary to request that the District's security officer contact the Office of the District Clerk. An employee of the District's Clerk's office will receive and process the petition.
- Filings by e-mail must be transmitted to the Office of the District Clerk at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the Office of the District Clerk receives the complete document.

INITIATION OF ADMINISTRATIVE HEARING

Pursuant to Sections 120.54(5)(b)4. and 120.569(2)(c), Florida Statutes, and Rules 28-106.201 and 28-106.301, Florida Administrative Code, initiation of an administrative hearing shall be made by written petition to the District in legible form and on 8 1/2 by 11 inch white paper. All petitions shall contain:

- 1. Identification of the action being contested, including the permit number, application number, District file number or any other District identification number, if known.
- 2. The name, address, any email address, any facsimile number, and telephone number of the petitioner, petitioner's attorney or qualified representative, if any.
- 3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
- 4. A statement of when and how the petitioner received notice of the District's decision.
- 5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
- 6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the District's proposed action.
- 7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the District's proposed action.
- 8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
- 9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the District to take with respect to the District's proposed action.

MEDIATION

The procedures for pursuing mediation are set forth in Section 120.573, Florida Statutes, and Rules 28-106.111 and 28-106.401–.405, Florida Administrative Code. The District is not proposing mediation for this agency action under Section 120.573, Florida Statutes, at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Section 120.68, Florida Statutes, and in accordance with Florida Rule of Appellate Procedure 9.110, a party who is adversely affected by final District action may seek judicial review of the District's final decision by filing a notice of appeal with the Office of the District Clerk in accordance with the filing instructions set forth herein within 30 days of rendition of the order to be reviewed, and by filing a copy of the notice with the appropriate district court of appeals via the Florida Courts E-Filing Portal.



South Florida Water Management District Environmental Resource General Permit No. 56-104656-P Date Issued: February 19, 2021

Permittee: St Lucie County

2300 Virginia Avenue 2nd Floor Annex

Ft Pierce, FL 34982

Project: Johnston Road At Canal 17 Cross Drain Replacement

Location: St Lucie County, See Exhibit 1

Application No. 210204-5283

Description: Proposed replacement of the existing 84-in. diameter culvert at the road crossing of the

Fort Pierce Farms Water Control District (FPFWCD) Canal No. 17 and Johnston Road, with a 6-ft. x 10-ft. box culvert structure to provide a design flow of 222 cfs. Rubble riprap will be placed upstream and downstream of the new culvert. Proposed replacement of the existing 24-in. diameter culverts within the Johnston Road right-of-way at the FPFWCD Canal No. 17 with four mitered end sections and conveyance piping. Please refer to Exhibit Nos. 1.0 and 2.0 for additional details. Division of State Lands provided a title determination which recommends that proprietary authorization not apply to this site

due to prior dredging of the project area.

Rule: 62-330.443, F.A.C.: General Permit to the Florida Department of Transportation,

Counties, and Municipalities for Minor Bridge Alteration, Placement, Replacement,

Removal, Maintenance, and Operation

Expiration: February 19, 2026

Your application to use a General Environmental Resource Permit has been approved. This action is taken based on Chapter 373, Part IV, of Florida Statutes (F.S.) and the rules in Chapter 62-330, Florida Administrative Code (F.A.C.). Please read this entire agency action thoroughly and understand its contents.

This permit is subject to:

- Not receiving a filed request for a Chapter 120, F.S., administrative hearing.
- The attached General Conditions for Environmental Resource General Permits.
- The attached Specific Conditions.
- · All referenced Exhibits.

Should you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights", we will assume that you concur with the District's action.

Certificate of Service

I hereby certify that this written notice has been mailed or electronically transmitted to the Permittee (and the persons listed in the distribution list) on February 19, 2021, in accordance with Section 120.60(3), F.S. Notice was also electronically posted on this date through a link on the home page of the District's website (www.sfwmd.gov/ePermitting).

Gary R. Priest, P.E.

Section Leader, Environmental Resource Bureau

General Conditions for All General Permits, 62-330.405, F.A.C.

- The general permit is valid only for the specific activity indicated. Any deviation from the specified activity and the conditions for undertaking that activity shall constitute a violation of the permit and shall subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
- 2. The general permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any construction, alteration, operation, maintenance, removal or abandonment authorized by this permit; and it does not authorize any violation of any other applicable federal, state, local, or special district laws (including, but not limited to, those governing the "take" of listed species).
- 3. This general permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the general permit.
- 4. The general permit does not relieve the permittee from liability and penalties when the permitted activity causes harm or injury to: human health or welfare; animal, plant or aquatic life; or property. It does not allow the permittee to cause pollution that violates state water quality standards.
- 5. Section 253.77, F.S., provides that a person may not commence any excavation, construction, or other activity involving the use of state-owned or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required consent, lease, easement, or other form of authorization authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on state-owned lands.
- 6. The authorization to conduct activities under a general permit may be modified, suspended or revoked in accordance with Chapter 120, F.S., and Section 373.429, F.S.
- 7. The general permit is not transferable to a new third party. To be used by a different permittee, a new notice to use a general permit must be submitted in accordance with rule 62-330.402, F.A.C. Activities constructed in accordance with the terms and conditions of a general permit are automatically authorized to be operated and maintained by the permittee and subsequent owners in accordance with subsection 62-330.340(1), F.A.C. Any person holding the general permit, persons working under the general permit, and owners of land while work is conducted under the general permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to sale, conveyance, or other transfer of ownership or control of the permitted project, activity, or the real property at which the permitted project or activity is located.
- 8. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the permitted system to ensure conformity with the plans and specifications approved by the general permit.
- 9. The permittee shall maintain any permitted project or activity in accordance with the plans submitted to the Agency and authorized in this general permit.

- 10. A permitee's right to conduct a specific activity under this general permit is authorized for a duration of five years.
- 11. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including other measures specified in the permit to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007), available at https://www.flrules.org/Gateway/reference.asp?No=Ref-04227, and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), available at http://publicfiles.dep.state.fl.us/DEAR/Stormwater_Training_Docs/erosion-inspectors-manual.pdf.
- 12. Unless otherwise specified in the general permit, temporary vehicular access within wetlands during construction shall be performed using vehicles generating minimum ground pressure to minimize rutting and other environmental impacts. Within forested wetlands, the permittee shall choose alignments that minimize the destruction of mature wetland trees to the greatest extent practicable. When needed to prevent rutting or soil compaction, access vehicles shall be operated on wooden, composite, metal, or other non-earthen construction mats. In all cases, access in wetlands shall comply with the following:
 - (a) Access within forested wetlands shall not include the cutting or clearing of any native wetland tree having a diameter four inches or greater at breast height;
 - (b) The maximum width of the construction access area shall be limited to 15 feet;
 - (c) All mats shall be removed as soon as practicable after equipment has completed passage through, or work has been completed, at any location along the alignment of the project, but in no case longer than seven days after equipment has completed work or passage through that location; and
 - (d) Areas disturbed for access shall be restored to natural grades immediately after the maintenance or repair is completed.
- 13. Barges or other work vessels used to conduct in-water activities shall be operated in a manner that prevents unauthorized dredging, water quality violations, and damage to submerged aquatic communities.
- 14. The construction, alteration, or use of the authorized project shall not adversely impede navigation or create a navigational hazard in the water body.
- 15. Except where specifically authorized in the general permit, activities must not:
 - (a) Impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands; or
 - (b) Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to section 373.042, F.S., or a Works of the District established pursuant to section 373.086, F.S.
- 16. If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all

activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850)245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with section 872.05, F.S.

- 17. The activity must be capable, based on generally accepted engineering and scientific principles, of being performed and of functioning as proposed, and must comply with any applicable District special basin and geographic area criteria.
- 18. The permittee shall comply with the following when performing work within waters accessible to federally- or state-listed aquatic species, such as manatees, marine turtles, smalltooth sawfish, and Gulf sturgeon:
 - (a) All vessels associated with the project shall operate at "Idle Speed/No Wake" at all times while in the work area and where the draft of the vessels provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
 - (b) All deployed siltation or turbidity barriers shall be properly secured, monitored, and maintained to prevent entanglement or entrapment of listed species.
 - (c) All in-water activities, including vessel operation, must be shut down if a listed species comes within 50 feet of the work area. Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the in-water work, or until 30 minutes elapses since the last sighting within 50 feet. Animals must not be herded away or harassed into leaving. All onsite project personnel are responsible for observing water-related activities for the presence of listed species.
 - (d) Any listed species that is killed or injured by work associated with activities performed shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1(888)404-3922 and ImperiledSpecies@myFWC.com.
 - (e) Whenever there is a spill or frac-out of drilling fluid into waters accessible to the above species during a directional drilling operation, the FWC shall be notified at ImperiledSpecies@myfwc.com with details of the event within 24 hours following detection of the spill or frac-out.
- 19. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any activity authorized by the general permit.
- 20. The permittee shall immediately notify the Agency in writing of any submitted information that is discovered to be inaccurate.

Specific Conditions for General Permits, 62-330.443, F.A.C.

- 1. (a) No dredging of access or work channels is authorized by this general permit;
 - (b) Temporary fill roads shall not be constructed waterward of mean high water or ordinary high water:
 - (c) All fill placed in wetlands, other than fill on which a bridge or approach is constructed, shall be regraded to the original wetland elevations and revegetated with native wetland species endemic to adjoining, undisturbed wetlands, within seven days of completion of construction. Within "clear zones," revegetation shall be with native herbaceous species endemic to adjoining, undisturbed wetlands. During the five-year period following the initial planting or restoration of the site, these areas shall be maintained to ensure planted or naturally recruited native wetland species are surviving and growing, and that the areal coverage of exotic and invasive species constitutes less than 10% areal coverage:
 - (d) Hydraulic openings of bridges shall be sufficient to prevent downstream scour, increased downstream water velocities, and increased flood elevations on the property of others;
 - (e) Minimum horizontal and vertical navigational clearances on bridges over navigable waters of the United States shall be established in accordance with procedures outlined in Chapter 2 of the U.S. Coast Guard Bridge Administration Manual, COMDTINST M16590.5C, (March 26, 2004), and in no circumstance shall placement or replacement of a bridge result in a reduction of horizontal and vertical navigational clearances;
 - (f) Replacement or modification of a bridge that includes changes in the configuration of the bridge and fill areas due to changes in materials, construction techniques, or meeting current construction codes or safety standards are authorized under this permit. Any connecting road expansion or alteration associated with such replacement or modification must be authorized by a separate general or individual permit under chapter 62-330, F.A.C., as applicable, before the start of construction; and
 - (g) This general permit does not authorize the construction of additional travel lanes for motorized vehicles, except that any single-lane bridge may be widened to two travel lanes, provided the bridge widening does not exceed that reasonably necessary to match the existing travel lane alignment of a two-lane road. This permit does not authorize new corridors or roadway connections where there is no existing structure over wetlands or waterways.

Distribution List

Brian Good, Kimley Horn and Associates

City of Port St Lucie - Planning and Zoning Division

City of Port St Lucie - Public Works

US Army Corps of Engineers - Permit Section

St. Lucie County Engineer

St. Lucie County Planning and Development Services

City Of Fort Pierce

Exhibits

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website (http://my.sfwmd.gov/ePermitting) and searching under this application number 210204-5283.

Exhibit No. 1.0 Location Map

Exhibit No. 2.0 SWM Plans

NOTICE OF RIGHTS

As required by Chapter 120, Florida Statutes, the following provides notice of the opportunities which may be available for administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes, or judicial review pursuant to Section 120.68, Florida Statutes, when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Some of the legal proceedings detailed below may not be applicable or appropriate for your situation. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Florida Statutes. Persons seeking a hearing on a District decision which affects or may affect their substantial interests shall file a petition for hearing in accordance with the filing instructions set forth herein within 21 days of receipt of written notice of the decision unless one of the following shorter time periods apply: (1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Florida Statutes; or (2) within 14 days of service of an Administrative Order pursuant to Section 373.119(1), Florida Statutes. "Receipt of written notice of agency decision" means receipt of written notice through mail, electronic mail, posting, or publication that the District has taken or intends to take final agency action. Any person who receives written notice of a District decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

If the District takes final agency action that materially differs from the noticed intended agency decision, persons who may be substantially affected shall, unless otherwise provided by law, have an additional point of entry pursuant to Rule 28-106.111, Florida Administrative Code.

Any person to whom an emergency order is directed pursuant to Section 373.119(2), Florida Statutes, shall comply therewith immediately, but on petition to the board shall be afforded a hearing as soon as possible.

A person may file a request for an extension of time for filing a petition. The District may grant the request for good cause. Requests for extension of time must be filed with the District prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and whether the District and any other parties agree to or oppose the extension. A timely request for an extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

FILING INSTRUCTIONS

A petition for administrative hearing must be filed with the Office of the District Clerk. Filings with the Office of the District Clerk may be made by mail, hand-delivery, or e-mail. Filings by facsimile will not be accepted. A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the Office of the District Clerk at the District's headquarters in West Palm Beach, Florida. The District's normal business hours are 8:00 a.m. – 5:00 p.m., excluding weekends and District holidays. Any document received by the Office of the District Clerk after 5:00 p.m. shall be deemed filed as of 8:00 a.m. on the next regular business day.

Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the District Clerk, 3301 Gun Club Road, West Palm Beach, Florida 33406.
- Filings by hand-delivery must be delivered to the Office of the District Clerk. Delivery of a petition to the District's security desk does not constitute filing. It will be necessary to request that the District's security officer contact the Office of the District Clerk. An employee of the District's Clerk's office will receive and process the petition.
- Filings by e-mail must be transmitted to the Office of the District Clerk at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the Office of the District Clerk receives the complete document.

INITIATION OF ADMINISTRATIVE HEARING

Pursuant to Sections 120.54(5)(b)4. and 120.569(2)(c), Florida Statutes, and Rules 28-106.201 and 28-106.301, Florida Administrative Code, initiation of an administrative hearing shall be made by written petition to the District in legible form and on 8 1/2 by 11 inch white paper. All petitions shall contain:

- 1. Identification of the action being contested, including the permit number, application number, District file number or any other District identification number, if known.
- 2. The name, address, any email address, any facsimile number, and telephone number of the petitioner, petitioner's attorney or qualified representative, if any.
- 3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
- 4. A statement of when and how the petitioner received notice of the District's decision.
- 5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
- 6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the District's proposed action.
- 7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the District's proposed action.
- 8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
- 9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the District to take with respect to the District's proposed action.

MEDIATION

The procedures for pursuing mediation are set forth in Section 120.573, Florida Statutes, and Rules 28-106.111 and 28-106.401–.405, Florida Administrative Code. The District is not proposing mediation for this agency action under Section 120.573, Florida Statutes, at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Section 120.68, Florida Statutes, and in accordance with Florida Rule of Appellate Procedure 9.110, a party who is adversely affected by final District action may seek judicial review of the District's final decision by filing a notice of appeal with the Office of the District Clerk in accordance with the filing instructions set forth herein within 30 days of rendition of the order to be reviewed, and by filing a copy of the notice with the appropriate district court of appeals via the Florida Courts E-Filing Portal.



FLORIDA DEPARTMENT OF Environmental Protection

Southeast District Office 3301 Gun Club Road, MSC 7210-1 West Palm Beach, FL 33406 561-681-6600 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

October 28, 2022

St. Lucie County c/o Dan Zrallack 2300 Virginia Avenue Ft. Pierce, FL. 34982

Sent via e-mail: ZrallackD@stlucieco.org

File No. 56-419011-001,002-SFG, St. Lucie County

Dear Mr. Zrallack:

On April 4th, 2022, we received your notice of intent to use General Permits (GP), pursuant to Rules 62-331.216 and 62-331.210, Florida Administrative Code (F.A.C.), to perform maintenance of existing stormwater features and bank stabilization activities, including: 1) placement of approximately 500 tn. of riprap over no more than 100 ln. ft. of shoreline, and; 2) construction of a 6' x 10' box culvert, which spans 144 ln. ft. Impacts to wetland resources or surface water functions are not anticipated to occur as a result of the proposed work; therefore, the Department has determined that the activities will not result in more than minimal adverse environmental effects and mitigation is not required. The project is located in Ft Pierce, adjacent to Johnston Road and the FPFWCD Canal No. 17, in St. Lucie County (Latitude N 27° 29' 56.668", Longitude W -80° 25' 10.43").

Your intent to use a general permit has been reviewed by Department staff for State 404 Program authorization. **Your project qualifies for authorization**. However, this letter does not relieve you from the responsibility of obtaining other federal, state, or local authorizations that may be required for the activity.

State 404 Program Review – Approved

Based on the forms, drawings, and documents submitted with your notice, it appears that the project meets the requirements for the General Permits under Rules 62-331.216 and 62-331.210, F.A.C. Any activities performed under a general permit are subject to general conditions required in Rule 62-331.201, F.A.C., the conditions of Rules 62-331.216 and 62-331.210, F.A.C. (attached), and any specific conditions, below. Any deviations from these conditions may subject the permittee to enforcement action and possible penalties. Please read each section carefully.

Please be advised that the construction phase of the GP must be completed by December 22, 2025. State 404 Program permits cannot be extended or renewed.

Specific Conditions SPECIFIC CONDITIONS - PRIOR TO CONSTRUCTION

File No: 56-0419011-001,002-SFG

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(1) Prior to initiation of any work authorized by this permit, all wetlands, surface waters, and storm drains, outside the specific limits of construction authorized by this permit shall be protected from erosion, siltation, sedimentation, and/or scouring, including the placement of turbidity curtains and staked erosion control devices around the project area and staging area(s) that are located outside of any authorized impact areas.

SPECIFIC CONDITIONS – CONSTRUCTION ACTIVITIES

- (2) The permittee shall be responsible for ensuring turbidity and erosion control devices/procedures are inspected and maintained daily during all phases of construction authorized by this permit until areas disturbed during construction are sufficiently stabilized to prevent erosion, siltation, and turbid discharges.
- (3) This permit authorizes permanent impacts to the surface water areas shown in the attached permit drawings only. No other wetland or surface water areas are authorized to be impacted, which includes but is not limited to clearing with the use of heavy equipment, filling, or excavation.

SPECIFIC CONDITIONS – LISTED SPECIES

(4) This permit does not authorize the permittee to cause any adverse impact to or "take" of state listed species and other regulated species of fish and wildlife. Compliance with state laws regulating the take of fish and wildlife is the responsibility of the owner or applicant associated with this project. Please refer to Chapter 68A-27 of the Florida Administrative Code for definitions of "take" and a list of fish and wildlife species. If listed species are observed onsite, FWC staff are available to provide decision support information or assist in obtaining the appropriate FWC permits. Most marine endangered and threatened species are statutorily protected and a "take" permit cannot be issued. Requests for further information or review can be sent to FWCConservationPlanningServices@MyFWC.com.

Authority for review – Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62, F.A.C.

Additional Information

Please retain this general permit. The activities may be inspected by authorized state personnel in the future to ensure compliance with appropriate statutes and administrative codes. If the activities are not in compliance, you may be subject to penalties under Chapter 373, F.S., and Chapter 18-14, F.A.C.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the subsequent order may modify or take a different position than this action.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if

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known;

(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399- 3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62- 110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver will not apply to persons who have not received written notice of this action.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of

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time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399- 3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING

Executed in West Palm Beach, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jeffrey L. Meyer

Environmental Administrator

Southeast District

Southeast District Enclosures: 62-331.210, 216, F.A.C.

General Conditions for All General Permits, Ch. 62-331.201, F.A.C.

Project drawings, 9 pages

Certification of Compliance with State 404 Program General Permit, form 62-331.200(1)

File No: 56-0419011-001,002-SFG

Page 5 of 5

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

FDEP – Norva Blandin, Jeffrey Meyer, Alexander Brockett Brian Good, Kimley-Horn, <u>Brian.Good@kimley-horn.com</u>

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk Date

62-331.216 General Permit for Bank Stabilization.

- (1) This general permit authorizes the following activities:
- (a) Bank stabilization activities necessary for erosion control or prevention, such as vegetative stabilization, bioengineering, sills, rip rap, revetment, gabion baskets, stream barbs, and bulkheads, or combinations of bank stabilization techniques, provided the activity meets all of the following criteria:
 - 1. No material is placed in excess of the minimum needed for erosion protection;
- 2. The activity is no more than 500 feet in length along the bank, unless the Agency waives this criterion by making a written determination concluding that the activity will result in no more than minimal adverse environmental effects (an exception is for bulkheads the Agency cannot issue a waiver for a bulkhead that is greater than 1,000 feet in length along the bank);
- 3. The activity will not exceed an average of one cubic yard per running foot, as measured along the length of the treated bank, below the plane of the mean or ordinary high water line, unless the Agency waives this criterion by making a written determination concluding that the activity will result in no more than minimal adverse environmental effects;
- 4. The activity does not involve dredging or filling into special aquatic sites, unless the Agency waives this criterion by making a written determination concluding that the activity will result in no more than minimal adverse environmental effects;
- 5. No material is of a type, or is placed in any location, or in any manner, that will impair surface water flow into or out of any state-assumed water;
- 6. No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored native trees and treetops may be used in low energy areas);
- 7. Native plants appropriate for current site conditions, including salinity, must be used for bioengineering or vegetative bank stabilization;
 - 8. The activity is not a stream channelization activity; and
- 9. The activity must be properly maintained, which may require repairing it after severe storms or erosion events.
 - (b) Maintenance and repair of the bank stabilization activities if they require authorization.
- (c) Temporary structures, fills, and work, including the use of temporary mats, necessary to construct the bank stabilization activity.
- 1. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and fill [including cofferdams] are necessary for construction activities, access fills, or dewatering of construction sites.
- 2. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows or stormwater.
- 3. After construction, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations.
 - 4. The areas affected by temporary fills must be revegetated.
- (2) The permittee must submit a notice of intent to use this general permit to the Agency prior to commencing the activity if the bank stabilization activity:
 - (a) Involves dredging or filling into special aquatic sites;
 - (b) Is in excess of 500 feet in length;
- (c) Will involve filling greater than an average of one cubic yard per running foot as measured along the length of the treated bank, below the plane of the mean or ordinary high water line; or
 - (d) The project is in the following rivers, creeks, and their tributaries:
 - 1. Escambia River
 - 2. Yellow River
 - 3. Shoal River
 - 4. Choctawhatchee River
 - 5. Chipola River
 - 6. Apalachicola River

- 7. Ochlockonee River
- 8. Santa Fe River
- 9. New River (Bradford and Union County line)
- 10. Econfina Creek.

Editor notes: The effective date of the rule will be the effective date of assumption, which is the date identified by EPA as published in the Federal Register §373.4146, F.S.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.4131, 373.414(9), 373.4145, 373.4146(2), 403.805(1) FS. Law Implemented 373.118, 373.129, 373.136, 373.413, 373.4131, 373.414, 373.4145, 373.4146, 373.416, 373.422, 373.423, 373.429 FS. History—New 12-22-20.

62-331.210 General Permit for Maintenance or Removal

- (1) This general permit authorizes the following activities:
- (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR § 330.3 as of July 1, 2019, incorporated by reference herein (https://www.flrules.org/Gateway/reference.asp?No=Ref-12074), provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized.
- (b) The removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project.
- (c) The removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill.
- (d) The repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the Agency, provided the permittee can demonstrate funding, contract, or other similar delays.
- (e) The removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built but cannot extend farther than 200 feet in any direction from the structure. This 200-foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no state-assumed waters unless otherwise specifically approved by the Agency under separate authorization.
- (f) Temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and fill, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated.
 - (2) This general permit does not authorize:

- (a) Beach restoration.
- (b) New stream channelization or stream relocation projects.
- (c) Maintenance or removal of projects that capture and store water, such as Dispersed Water Management Projects (DWMPs).
- (3) Notice of intent to use this general permit is required for activities authorized by paragraph (1)(e), The notice must include information regarding the original design capacities and configurations of the outfalls, intakes, and small impoundments.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.4131, 373.414(9), 373. 373.4145, 373.4146(2), 403.805(1) FS
Law Implemented 373.118, 373.129, 373.136, 373.413, 373.4131, 373.414, 373.4145, 373.4146, 373.416, 373.422, 373.42
373.429 FS. History – New .

Conditions for General Permits – Rule 62-331.201, F.A.C.

- (1) General permits shall be subject to the conditions in subsections (2) and (3), below, and the general conditions for all general permits in Rule 62-330.405, F.A.C., except subsections 62-330.405(7) and (10), F.A.C. The Agency may revise the general conditions in Rule 62-330.405, F.A.C. to include references to applicable rules under this Chapter, as necessary.
- (2) When a project requires submittal of a notice of intent to use a general permit, the Agency shall impose specific conditions as necessary to assure that the activities will be conducted in compliance with this Chapter, and in a manner which minimizes adverse impacts upon the physical, chemical, and biological integrity of wetlands or other surface waters, such as mitigation, monitoring, reporting, or recordkeeping requirements and protection measures for listed species or historical resources.
- (3) In addition, general permits under this Chapter are subject to the following conditions:
- (a) Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing shall be designed and constructed to minimize adverse effects to aquatic life movements.
- (b) Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- (c) Migratory Bird Breeding Areas. Activities in state-assumed waters that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- (d) Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by general permits in Rule 62-331.211 or 62-331.244, F.A.C., or is a shellfish seeding or habitat restoration activity authorized by the general permit in Rule 62-331.225, F.A.C.
- (e) Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or fill must be free from toxic pollutants in toxic amounts as listed in section 307 of the CWA, which is incorporated by reference in subparagraph 62-331.053(3)(a)3., F.A.C., or state law.
- (f) Water Supply Intakes. No activity may occur within 1000 feet of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

- (g) Fills Within 100-year Floodplains. The activity shall comply with applicable FEMA-approved state or local floodplain management requirements.
- (h) Single and Complete Project. The activity must be a single and complete project. The same general permit cannot be used more than once for the same single and complete project unless otherwise stated within the general permit. (See 404 Handbook, section 3.2.1).
- (i) Wild and Scenic Rivers. No general permit activity may occur in a component of the National Wild and Scenic Rivers System, or in a river officially designated by Congress as a study river for possible inclusion in the System while the river is in an official study status, unless the appropriate federal agency with direct management responsibility for such river has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.
- (j) Tribal Rights. No general permit activity may cause more than minimal adverse effects on tribal rights (including treaty rights, settlement rights, or rights reserved under state or federal law), protected tribal resources (including cultural or burial resources off reservation), tribal waters, or to tribal lands.
- (k) Listed species. No activity is authorized under any general permit which is likely to directly or indirectly jeopardize the continued existence of an endangered or threatened species or a species proposed for such designation, or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any general permit which may affect a listed species or critical habitat, unless the Agency has consulted with, or been provided technical assistance by the Florida Fish & Wildlife Conservation Commission, the U.S. Fish & Wildlife Service, and the National Marine Fisheries Service under their respective authorities and appropriate measures to address the effects of the proposed activity have been implemented or are required as a specific condition to the general permit.
- (l) Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act, 16 U.S.C. §§ 703 712 (2018), incorporated by reference herein (https://www.flrules.org/Gateway/reference.asp?No=Ref-12068), and the Bald and Golden Eagle Protection Act, 16 U.S.C. §§ 668 668(d) (2018), incorporated by reference herein (https://www.flrules.org/Gateway/reference.asp?No=Ref-12069). The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether incidental take permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.
- (m) Historic Properties. In cases where the Agency determines, based on information from SHPO, that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized until a determination of "no effect" or "no adverse effect" is provided by SHPO.

- (n) Manatees. In waters that are accessible to manatees, the permittee shall follow the "Standard Manatee Conditions for In-Water Work (2011)", incorporated by reference herein (https://www.flrules.org/Gateway/reference.asp?No=Ref-12070).
- (o) Sea turtles, smalltooth sawfish, Gulf sturgeon, or shortnose sturgeon. In waters that are accessible to these species, the permittee shall follow the "Sea Turtle and Smalltooth Sawfish Construction Conditions" (March 23, 2006), incorporated by reference herein (https://www.flrules.org/Gateway/reference.asp?No=Ref-12071).
- (p) Use of Multiple General Permits. The use of more than one general permit under this Chapter for a single and complete project is prohibited, except when specified within a specific general permit, or when the acreage loss of state-assumed waters authorized by the general permits does not exceed the acreage limit of the general permit with the highest specified acreage limit.
- (q) Transfer of General Permit Verifications. If the permittee sells the property associated with the general permit verification, the permittee shall transfer the general permit verification to the new owner by submitting a completed Form 62-331.100(1) "Transfer of State 404 Program General Permit Verification" (effective date), incorporated by reference in subsection 62-331.100(2), F.A.C., within 30 days of the sale, to the Agency that processed the original notice.
- (r) Compliance Certification. Each permittee who receives a general permit verification letter under this Chapter must submit a completed Form 62-331.200(1) "Certification of Compliance with a State 404 Program General Permit" (effective date), incorporated by reference in subsection 62-331.200(4), F.A.C., within 30 days of completion of the authorized activity, or the implementation of any required compensatory mitigation, whichever is later.
- (s) Activities Affecting Structures or Work Built by the United States. If an activity also requires permission from the Corps pursuant to 33 U.S.C. § 408 because it will alter or temporarily or permanently occupy or use a Corps federally authorized Civil Works project, the prospective permittee is responsible for obtaining such permission separately from the Corps prior to commencing activities authorized by the general permit.
- (t) If during the ground disturbing activities and construction work within the permit area, there are archaeological or cultural materials encountered which were not the subject of a previous cultural resources assessment survey or to which such impacts were not anticipated, including but not limited to pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement; the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Agency within the same business day. The Agency shall then notify the State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) or tribe when the interested tribe does not have a THPO, to assess the significance of the discovery and devise appropriate actions.

- (u) Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries or effects to historic properties as referenced in accordance with condition (t), above, and if deemed necessary by the SHPO, or THPO(s), Tribes, or Agency. Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Agency may modify, suspend, or revoke the permit in accordance with Rule 62-331.080, F.A.C. Such activity shall not resume without written authorization from the SHPO and THPO(s), or tribe when the interested tribe does not have a THPO, concerning potential effects to cultural resources or historic properties for finds under their jurisdiction, and from the Agency.
- (v) In the event that unmarked human remains are identified, they shall be treated in accordance with Section 872.05, F.S. All work and ground-disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Agency, and State Archaeologist within the same business day. The Agency shall then notify the appropriate SHPO and THPO(s) and appropriate tribes and other appropriate consulting parties. Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Agency may modify, suspend, or revoke the permit in accordance with Rule 62-331.080, F.A.C. Such activity shall not resume without written authorization from the medical examiner, State Archaeologist, and from the Agency. Additionally, if the unmarked remains were identified on federal lands, or lands where the Archaeological Resources Protection Act, 16 U.S.C. §§ 470aa – 470mm (2018), incorporated by reference herein (https://www.flrules.org/Gateway/reference.asp?No=Ref-12072), or the Native American Graves Protection Repatriation 25 U.S.C. §§ 3001-3013 (2018), incorporated by reference herein (https://www.flrules.org/Gateway/reference.asp?No=Ref-12073), applies, such activity shall not resume without written authorization from the SHPO, the appropriate THPO(s), and the federal land manager.
- (w) Noncompliance. The permittee shall timely notify the Agency of any expected or known actual noncompliance.
- (x) Inspection and entry. The permittee shall allow the Agency, upon presentation of proper identification, at reasonable times to:
- 1. Enter upon the permittee's premises where a regulated activity is located or where records must be kept under the conditions of the permit,
- 2. Have access to and copy any records that must be kept under the conditions of the permit,
- 3. Inspect operations regulated or required under the permit, and
- 4. Sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.
- (y) The permittee shall comply with all conditions of the permit, even if that requires halting or reducing the permitted activity to maintain compliance. Any permit violation constitutes a violation of Part IV of Chapter 373, F.S., and this Chapter, as well as a violation of the CWA.
- (z) The permittee shall take all reasonable steps to prevent any unauthorized dredging or filling in violation of this permit.

(aa) Upon Agency request, the permittee shall provide information necessary to determine compliance status, or whether cause exists for permit modification, revocation, or termination.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.4131, 373.414(9), 373.4145, 373.4146(2), 403.805(1) FS. Law Implemented 373.118, 373.129, 373.136, 373.413, 373.4131, 373.414, 373.4145, 373.4146, 373.416, 373.422, 373.423, 373.429 FS. History – New 12.22.2020.

62-330.405 General Conditions for All General Permits.

The following general permit conditions are binding upon the permittee and are enforceable under chapter 373, F.S. These conditions do not apply to the general permit for stormwater management systems under section 403.814(12), F.S

- (1) The general permit is valid only for the specific activity indicated. Any deviation from the specified activity and the conditions for undertaking that activity shall constitute a violation of the permit and may subject the permittee to enforcement action and revocation of the permit under chapter 373, F.S
- (2) The general permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any construction, alteration, operation, maintenance, removal or abandonment authorized by this permit; and it does not authorize any violation of any other applicable federal, state, local, or special district laws (including, but not limited to, those governing the "take" of listed species).
- (3) The general permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the general permit.
- (4) The general permit does not relieve the permittee from liability and penalties when the permitted activity causes harm or injury to: human health or welfare; animal, plant or aquatic life; or property. It does not allow the permittee to cause pollution that violates state water quality standards.
- (5) Section 253.77, F.S., provides that a person may not commence any excavation, construction, or other activity involving the use of state-owned or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required consent, lease, easement, or other form of authorization authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on state-owned lands.
- (6) The authorization to conduct activities under a general permit may be modified, suspended or revoked in accordance with chapter 120, F.S., and section 373.429, F.S.
- (7) Not applicable.
- (8) Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the permitted system to ensure conformity with the

plans and specifications approved by the general permit.

- (9) The permittee shall maintain any permitted project or activity in accordance with the plans submitted to the Agency and authorized in the general permit.
- (10) Not applicable.
- (11) Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including other measures specified in the permit to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007)*, available at https://www.flrules.org/Gateway/reference.asp?No=Ref-04227, and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008)*, available at http://publicfiles.dep.state.fl.us/DEAR/Stormwater_Training_Docs/erosion-inspectors-manual.pdf.
- (12) Unless otherwise specified in the general permit, temporary vehicular access within wetlands during construction shall be performed using vehicles generating minimum ground pressure to minimize rutting and other environmental impacts. Within forested wetlands, the permittee shall choose alignments that minimize the destruction of mature wetland trees to the greatest extent practicable. When needed to prevent rutting or soil compaction, access vehicles shall be operated on wooden, composite, metal, or other non-earthen construction mats. In all cases, access in wetlands shall comply with the following:
- (a) Access within forested wetlands shall not include the cutting or clearing of any native wetland tree having a diameter four inches or greater at breast height;
- (b) The maximum width of the construction access area shall be limited to 15 feet;
- (c) All mats shall be removed as soon as practicable after equipment has completed passage through, or work has been completed, at any location along the alignment of the project, but in no case longer than seven days after equipment has completed work or passage through that location; and
- (d) Areas disturbed for access shall be restored to natural grades immediately after the maintenance or repair is completed.
- (13) Barges or other work vessels used to conduct in-water activities shall be operated in a manner that prevents unauthorized dredging, water quality violations, and damage to submerged aquatic communities.

- (14) The construction, alteration, or use of the authorized project shall not adversely impede navigation or create a navigational hazard in the water body.
- (15) Except where specifically authorized in the general permit, activities must not:
- (a) Impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands; or
- (b) Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to section 373.042, F.S., or a Works of the District established pursuant to section 373.086, F.S.
- (16) If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850)245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with section 872.05, F.S.
- (17) The activity must be capable, based on generally accepted engineering and scientific principles, of being performed and of functioning as proposed, and must comply with any applicable District special basin and geographic area criteria.
- (18) The permittee shall comply with the following when performing work within waters accessible to federally- or state-listed aquatic species, such as manatees, marine turtles, smalltooth sawfish, and Gulf sturgeon:
- (a) All vessels associated with the project shall operate at "Idle Speed/No Wake" at all times while in the work area and where the draft of the vessels provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- (b) All deployed siltation or turbidity barriers shall be properly secured, monitored, and maintained to prevent entanglement or entrapment of listed species.
- (c) All in-water activities, including vessel operation, must be shut down if a listed species comes within 50 feet of the work area. Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the in-water work, or until 30 minutes elapses since the last sighting within 50 feet. Animals must not be herded away or harassed into leaving. All onsite project personnel are responsible for observing water-related activities for the presence of listed species.
- (d) Any listed species that is killed or injured by work associated with activities performed shall

be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1(888)404-3922 and ImperiledSpecies@myFWC.com.

- (e) Whenever there is a spill or frac-out of drilling fluid into waters accessible to the above species during a directional drilling operation, the FWC shall be notified at ImperiledSpecies@myfwc.com with details of the event within 24 hours following detection of the spill or frac-out.
- (19) The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any activity authorized by the general permit.
- (20) The permittee shall immediately notify the Agency in writing of any submitted information that is discovered to be inaccurate.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.4145, 373.418, 403.805(1) FS. Law Implemented 373.044, 373.118(1), 373.129, 373.136, 373.406(5), 373.413, 373.4131, 373.414(9), 373.4145, 373.416, 373.422, 373.423, 373.429, 403.814(1) FS. History—New 10-3-95, Amended 10-1-07, Formerly 62-341.215, Amended 10-1-18.

District Use Only:	No.		023	- 005	/	6
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FORT PIERCE FARMS WATER CONTROL DISTRICT

("District")

14666 Orange Avenue • Fort Pierce, Florida 34945 • (772) 461-5050 • FAX (772) 461-9446

Application to Connect to, or Use, District Facilities, or for Utility Construction*

Applicant Information: Name: Address: Address: Address: Telephone: 100 Ab Telephone: () Email: 000 Control of the Applicant from Applicant): Email: 000 Control of the Applicant from Applicant): Downer Information (if different from Applicant): Name: Address: Address: () Email: Email:						
Address: Address: Address: Telephone: ()						
Telephone: 1(2) 462-10 Telephone: ()						
03-54						
03-54						
Email: Email:	+					
	+					
Engineer of Record Information (if applicable): Billing Contact Information:						
Name: Stephen Cooper SCPE Name: Sense IS North Con						
Address: 7450 5. Federal Wisy Address:						
Port St. Lucir, F1 34952						
Telephone: (1) 33(-2933 Telephone: ()						
Email: 5000 er Erscheine, com Email:						
B. Project Information: (Check appropriate box and attach drawings to show location and details):						
Culvert Connection to District canal for irrigation or gravity drainage.						
Pump Connection to District canal for irrigation or drainage.						
Installation of culvert or water control structure in District canal for crossing or water control.						
Utility Crossing:						
☐ Electric ☐ Telephone ☐ Gas						
Cable Television Water Main Force Main						
Other (specify): Replacement from 89 cmp to 10 x 6 Pe	x Cul					
Location: Section(s): 22 Township: 34 Range: 39 Canal No.:						
Description of Indirect Connection:						
Drainage area served:acres (Culvert or pump Connections.)						
C. Construction Schedule:						
Estimated commencement date: 10/23 Estimated completion date: 1/24						
D. Application, Use Fee: \$ 75 Review Deposit: \$						
(Submit fee with this application in accordance with the District's fee schedule.)						
ACKNOWLEDGEMENT AND ACCEPTANCE:						
As reflected by my signature below, I hereby certify that the information shown above is accurate to the best of my knowledge, and agree to satisfy or abide by all requirements of this Permit, including "Standard Provisions" itemized on the reverse, and "Special	I that I					
Conditions" imposed by the District Further, Lacknowledge that the District and its Engineers are doing work to benefit the proper	rty and					
non-payment may result in filing of a construction lien as permitted by the Florida Statutes.						
Owner Signature:						
Owner Name (Type or Print):						

District Use Only:	No.	- 023	- 005	- 15
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FORT PIERCE FARMS WATER CONTROL DISTRICT

("District")

14666 Orange Avenue • Fort Pierce, Florida 34945 • (772) 461-5050 • FAX (772) 461-9446

Application to Connect to, or Use, District Facilities, or for Utility Construction*

SPECIAL CONDITIONS: (for District Use Only):

attached

1	
Application App	proved and Permit for Construction Issued:
1/1./1/1	
By:	Date of Approval: \(\sqrt{9} \)
For the Fort Pierce Farms Water Control District	3/16/21
Permit Expiration Date: 5-8-25	3/16/21
remit Expiration Date:	Construction Expiration Date:
*****************	*************************
Project C	Certification Received and Accepted:
By:	Date of Approval:
For the Fort Pierce Farms Water Control District	Date of Approval.
Certification Expiration Date:	
*This Application will become a Permit if and when approved and	signed by an authorized representative of the District.
***************************************	***********************

St. Lucie County Culvert Crossing at Johnston Rd. and Canal 16 FPFWCD Permit Application No. 023-004-005

Permit Conditions

- 1. This permit has been approved for a proposed 10 ft. x 6 ft. concrete box culvert, approximately 120 feet in length, to replace the 84-inch existing corrugated metal pipe culvert. The culvert replacement will be located at Canal 16 and Johnston Road. The permittee shall install the proposed improvements in accordance with the plans prepared by Stephen Cooper, P.E. & Associates, Inc. received on April 26, 2023.
- 2. The permittee shall be responsible for all permit application review fees associated with this permit application.
- 3. At least two (2) week prior to commencement of construction, the permittee shall contact the FPFWCD Office and FPFWCD Engineer to schedule a pre-construction meeting.
- The contractor shall provide the FPFWCD with a 24-hour contact number and personnel for emergency situations.
- 5. The applicant shall be responsible for installing and maintaining measures to prevent sedimentation and turbidity issues within Canal 16. At a minimum, the Board recommends installing turbidity curtains downstream of the construction site and installing silt fence as applicable. The contractor shall stake all turbidity barriers at the canal high water line at minimum.
- 6. The applicant shall be responsible for notifying the District of deviations from the approved plans during construction that would impact or affect District right-of-way or facilities. Any revisions or modifications to the approved plans shall be submitted to the District for review and approval.
- 7. All disturbed areas shall be sodded and pinned, except for areas calling for other material (i.e. riprap stabilization) as on the approved plans.
- 8. The applicant shall provide a one (1) year warranty on the slope areas affected by the proposed project within the District Right-of-Way. If any failure occurs during this one (1) year time frame, the applicant shall repair to the satisfaction of the District.
- 9. No materials or equipment may be staged within FPFWCD rights-of-way without prior approval from the District Supervisor of Works. If the contractor wishes to seek approval to stage within FPFWCD right-of-way, the contractor shall submit a staging plan to the District at least 2 weeks prior to the start of construction staging for review and approval. Additionally, if approval is granted for staging with FPFWCD right-of-way any regarding of the construction staging area shall be such that the bank area is sloped from the top of bank away from the canal section.
- 10. If dewatering is proposed, the permittee shall furnish a copy of the proposed dewatering plan to this District prior to the start of construction. The permittee may need to provide a stand by pump for bypassing the canal flow over the temporarily closed canal crossing. However, in the event of forecasted landfall of a named storm event, the permittee shall be prepared to provide additional pumping capabilities or reopen the

- canal crossing so that the historical canal flow can be maintained. The permittee shall coordinate with the District Superintendent of Works to assess if, or when, bypass pumping is necessary.
- 11. Pursuant to the FPFWCD Permit Information and Criteria Manual, the installation and maintenance responsibility for the use of, or construction of facilities, in, on, or over District rights-of-way (including, but not limited to, riprap and culverts) shall be that of the permittee or the entity identified in the permit. Failure to maintain the permitted use or works may result in the revocation of the permit, and at the District's sole discretion, the removal of the crossing, connection, or use. If dewatering is proposed, the permittee shall furnish a copy of the proposed dewatering plan to this District prior to the start of construction.
- 12. The permittee shall ensure that the project complies with current State Water Quality Standards. The permittee shall be responsible for installing and maintaining measures to prevent sedimentation and turbidity issues within District canals. At a minimum, the Board recommends installing turbidity curtains downstream of the construction site and installing silt fence as applicable. The contractor shall stake all turbidity barriers at the canal high water line at minimum. Please be advised that the contractor will need to coordinate with the District Supervisor or Works as necessary for the removal of any turbidity barriers in the event of forecasted landfall of a named storm event
- 13. Within 30 days after completion of the permitted activity, the permittee shall submit notice of completion to the District for approval. This shall consist of a written notice of completion letter, and two (2) complete sets of the final "Record Drawings" or as-builts, signed and sealed by a licensed surveyor. These statements must specify the actual date of construction completion and must certify that all improvements have been constructed in substantial conformance with the approved permit and will function as intended and designed. All surveyed dimensions and elevations shall be certified by a registered surveyor.

STANDARD PROVISIONS

for

Application / Permit No. 023-005-14

If this Application for a Permit is approved, I do acknowledge, understand, and agree that:

- 1. I hereby indemnify and hold the District harmless from claims for property damage or personal injury arising from the installation or use of the permitted facility, and that this indemnification extends to damage to the facility itself that may occur from District operation and maintenance work.
- 2. Approval of this application does not relieve the Permittee from securing any and all other permits that may be required by other entities or governmental agencies, including, but not limited to, the South Florida Water Management District, the Florida Department of Environmental Protection, and St. Lucie County.
- 3. The use of, or construction within, the District's right-of-way shall conform to the details of the attached approved drawings supporting this application. Modifications must be approved by the District in writing prior to construction.
- 4. If required in the interests of the District's operation and maintenance program, or by any modifications to the District's Standard Provisions, I agree to alter, replace, relocate, or remove the permitted facilities at no cost to the District, all as is more fully set forth by District Policy Resolution duly recorded in O.R. Book 673 at page 224 of the Public Records of St. Lucie County, Florida, but subject to the limitations thereof.
- 5. The lands to be benefited by this application are, or may be, subject to flooding during periods of high water resulting from heavy rains or other acts of God. This Permit will be accepted subject to this possibility, which is recognized not to be within the control of the District.
- 6. Any other requirements that may be imposed by the District are binding upon me, my successors and assigns.
- 7. Any Permit issued as an approval of this application other than one issued in irrevocable, recordable form pursuant to the Policy Resolution referenced in item 4, above, shall not be transferable from the Permittee to a subsequent owner or owners of all, or a portion of, the subject property without the express, written approval of the District.
- 8. Any Permit issued as approval of this application is strictly subject to all of the rules of the District, duly promulgated from time to time, which are on file and available for examination at the offices of the District by those having interest.
- 9. If a Permit is granted, I shall notify the District not less than 24 hours prior to the beginning and completion of the work, to enable the coordination and scheduling of inspections.
- 10. I accept total responsibility for any erosion of, or shoaling in, the District's right-of-way or canals that results from the permitted work, and I shall repair or remove same promptly, at no expense to the District.
- 11. During and after construction, I shall prevent material from the construction area from being discharged to, or settling in, District canals.
- 12. Unless authorized by Permit, I shall neither place, construct or plant, nor cause to be placed, constructed or planted, any object or improvement within the District right-of-way without the express written prior approval of the District.
- 13. Within thirty (30) days of completion of the work, I shall submit a written statement to the District certifying that the work was performed and completed in accordance with the Permit and the approved drawings. If the work deviates from the Permit or approved drawings, the certification shall state the nature and extent of those deviations.
- 14. If this Permit is for a drainage connection, then drainage discharge from the area served shall not exceed the volumetric equivalent of 2.6 inches of depth over the area for any 24-hour period (50 gallons per minute per acre) from the 10-year frequency, 72-hour duration rainfall.
- 15. If a Permit is issued for a hydraulic connection of property with a District canal, I shall not discharge hyacinths or other aquatic vegetation into the District canal.
- 16. The Permittee, his agents and contractors, shall conduct the work in a manner that will not impair the use, or potential use, of the District right-of-way and facilities. In no case shall drainage or irrigation canals or appurtenant works be obstructed or restricted.
- 17. All irrigation and drainage connections to District facilities shall be clearly marked with a post of contrasting colors to identify the location and extent of the permitted installation.
- 18. If access is permitted via an existing culvert crossing installed in District right-of-way, the Permittee is advised that the crossing may be permitted for use by other affected owners, as such crossings are limited in number by the District.
- 19. The District reserves the right to permit the use of culvert crossings installed in rights-of-ways by other affected owners of District lands, as culvert crossings are subject to distance limitations imposed by the District.
- 20. All utility installations shall be clearly marked with above-ground signs or markers, as required by the District's "Permit Information and Criteria Manual."

District Use Only:	No.	- 020	- 011		7
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FORT PIERCE FARMS WATER CONTROL DISTRICT

("District")

14666 Orange Avenue • Fort Pierce, Florida 34945 • (772) 461-5050 • FAX (772) 461-9446

Application to Connect to, or Use, District Facilities, or for Utility Construction*

A.	General Information: Applicant Information:	Owner Information (if different from Applicant):				
	Name: St. Lucie County c/o Kim Graham	Name:				
	Address: 2300 Virginia Avenue	Address:				
	Fort Pierce, FL 34982					
	Telephone: (772) 462-1667	Telephone: ()				
	Email: grahamk@stlucieco.gov	Email:				
	Engineer of Record Information (if applicable):	Billing Contact Information:				
	Name: Kimley-Horn and Associates, Inc. c/o Brian Good, P.E.	Name: Kimley-Horn and Associates, Inc. c/o Brian Good, P.E.				
	Address: 445 24th Street, Suite 200	Address: 445 24th Street, Suite 200				
	Vero Beach, FL 32960	Vero Beach, FL 32960				
	Telephone:(772) 794-4083	Telephone: (772) 794-4083				
	Email: brian.good@kimley-horn.com	Email: brian.good@kimley-horn.com				
B.	Project Information: (Check appropriate box and attach drawings	to show location and details):				
	☐ Culvert Connection to District canal for irrigation or gravity da	rainage.				
	☐ Pump Connection to District canal for irrigation or drainage.					
	Installation of culvert or water control structure in District canal for crossing or water control.					
	Utility Crossing:					
	☐ Electric ☐ Telephone ☐ Gas					
	☐ Cable Television ☐ Water Main ☐ Force Main					
	Other (specify):					
	Location: Section(s): Township: 34 Description of Indirect Connection: acres (Culvert or pump Connection)	Range: <u>39</u> Canal No.: <u>17</u>				
	Dramage area served:acres (Culvert or pump Co	onnections.)				
C.	Construction Schedule: Estimated commencement date: 09/01/2021 Est	imated completion date:12/01/2021				
D.	Application, Use Fee: \$ Re	view Deposit: \$				
	(Submit fee with this application in accordance with the District's fe	ee schedule.)				
As r agre Con non-	KNOWLEDGEMENT AND ACCEPTANCE: reflected by my signature below, I hereby certify that the information re to satisfy or abide by all requirements of this Permit, including "St ditions" imposed by the District. Further, I acknowledge that the Di repayment may result in filing of a construction lien as permitted by the ref Signature: Digitally signed by Kimberly of Date: 2020.10.08 09:23:08-04	landard Provisions" itemized on the reverse, and "Special strict and its Engineers are doing work to benefit the property and the Florida Statutes.				
	ner Name (Type or Print): St. Lucie County c/o Kim Graham					

					-
District Use Only:	No.	 226	- 011	/	7

FORT PIERCE FARMS WATER CONTROL DISTRICT

("District")

14666 Orange Avenue • Fort Pierce, Florida 34945 • (772) 461-5050 • FAX (772) 461-9446

Application to Connect to, or Use, District Facilities, or for Utility Construction*

SPECIAL CONDITIONS: (for District Use Only):

attached

Application Approved and Permit for Construction Issued:				
By: Date of Approval: 2-10-21 For the Fort Pierce Farms Water Control District Date of Approval: 2-10-21				
Permit Expiration Date: 2-10-23 Construction Expiration Date:				

Project Certification Received and Accepted:				
By:				
Certification Expiration Date:*This Application will become a Permit if and when approved and signed by an authorized representative of the District.				

St. Lucie County Culvert Crossing at Johnston Rd. and Canal 17 FPFWCD Permit Application No. 020-011-17

Permit Conditions

- 1. This permit has been approved for proposed 6 ft x 10 ft concrete box culvert approximately 144 feet in length Crossing Canal 17 at Johnston Rd. The permittee shall install the proposed improvements in accordance with the plans prepared by Kimley Horn dated February 4, 2021.
- The permittee shall be responsible for all permit application review fees associated with this permit application.
- 3. At least two (2) week prior to commencement of construction, the permittee shall contact the FPFWCD Office and FPFWCD Engineer to schedule a pre-construction meeting.
- 4. The contractor shall provide the FPFWCD with a 24-hour contact number and personnel for emergency situations.
- 5. The applicant shall be responsible for installing and maintaining measures to prevent sedimentation and turbidity issues within Canal 17. At a minimum, the Board recommends installing turbidity curtains downstream of the construction site and installing silt fence as applicable. The contractor shall stake all turbidity barriers at the canal high water line at minimum.
- 6. The applicant shall be responsible for notifying the District of deviations from the approved plans during construction that would impact or affect District right-of-way or facilities. Any revisions or modifications to the approved plans shall be submitted to the District for review and approval.
- 7. All disturbed areas shall be sodded and pinned, except for areas calling for other material (i.e. riprap stabilization) as on the approved plans.
- 8. The applicant shall provide a one (1) year warranty on the slope areas affected by the proposed project within the District Right-of-Way. If any failure occurs during this one (1) year time frame, the applicant shall repair to the satisfaction of the District.
- 9. No materials or equipment may be staged within FPFWCD rights-of-way without prior approval from the District Supervisor of Works. If the contractor wishes to seek approval to stage within FPFWCD right-of-way, the contractor shall submit a staging plan to the District at least 2 weeks prior to the start of construction staging for review and approval. Additionally, if approval is granted for staging with FPFWCD right-of-way any regarding of the construction staging area shall be such that the bank area is sloped from the top of bank away from the canal section.
- 10. If dewatering is proposed, the permittee shall furnish a copy of the proposed dewatering plan to this District prior to the start of construction. The permittee may need to provide a stand by pump for bypassing the canal flow over the temporarily closed canal crossing. However, in the event of forecasted landfall of a named storm event, the permittee shall be prepared to provide additional pumping capabilities or reopen the canal crossing so that the historical canal flow can be maintained. The permittee shall coordinate with the District Superintendent of Works to assess if, or when, bypass pumping is necessary.
- 11. Pursuant to the FPFWCD Permit Information and Criteria Manual, the installation and maintenance responsibility for the use of, or construction of facilities, in, on, or over District rights-of-way (including, but not limited to, riprap and culverts) shall be that of the permittee or the entity identified in the permit. Failure to maintain the permitted use or works may result in the revocation of the permit, and at the District's sole discretion, the removal of the crossing, connection, or use. If dewatering is proposed, the permittee shall furnish a copy of the proposed dewatering plan to this District prior to the start of construction.

- 12. The permittee shall ensure that the project complies with current State Water Quality Standards. The permittee shall be responsible for installing and maintaining measures to prevent sedimentation and turbidity issues within District canals. At a minimum, the Board recommends installing turbidity curtains downstream of the construction site and installing silt fence as applicable. The contractor shall stake all turbidity barriers at the canal high water line at minimum. Please be advised that the contractor will need to coordinate with the District Supervisor or Works as necessary for the removal of any turbidity barriers in the event of forecasted landfall of a named storm event
- 13. Within 30 days after completion of the permitted activity, the permittee shall submit notice of completion to the District for approval. This shall consist of a written notice of completion letter, and two (2) complete sets of the final "Record Drawings" or as-builts, signed and sealed by a licensed surveyor. These statements must specify the actual date of construction completion and must certify that all improvements have been constructed in substantial conformance with the approved permit and will function as intended and designed. All surveyed dimensions and elevations shall be certified by a registered surveyor.

STANDARD PROVISIONS

for

Application / Permit No. 626-6/1-17

If this Application for a Permit is approved, I do acknowledge, understand, and agree that:

- 1. I hereby indemnify and hold the District harmless from claims for property damage or personal injury arising from the installation or use of the permitted facility, and that this indemnification extends to damage to the facility itself that may occur from District operation and maintenance work.
- 2. Approval of this application does not relieve the Permittee from securing any and all other permits that may be required by other entities or governmental agencies, including, but not limited to, the South Florida Water Management District, the Florida Department of Environmental Protection, and St. Lucie County.
- 3. The use of, or construction within, the District's right-of-way shall conform to the details of the attached approved drawings supporting this application. Modifications must be approved by the District in writing prior to construction.
- 4. If required in the interests of the District's operation and maintenance program, or by any modifications to the District's Standard Provisions, I agree to alter, replace, relocate, or remove the permitted facilities at no cost to the District, all as is more fully set forth by District Policy Resolution duly recorded in O.R. Book 673 at page 224 of the Public Records of St. Lucie County, Florida, but subject to the limitations thereof.
- 5. The lands to be benefited by this application are, or may be, subject to flooding during periods of high water resulting from heavy rains or other acts of God. This Permit will be accepted subject to this possibility, which is recognized not to be within the control of the District.
- 6. Any other requirements that may be imposed by the District are binding upon me, my successors and assigns.
- 7. Any Permit issued as an approval of this application other than one issued in irrevocable, recordable form pursuant to the Policy Resolution referenced in item 4, above, shall not be transferable from the Permittee to a subsequent owner or owners of all, or a portion of, the subject property without the express, written approval of the District.
- 8. Any Permit issued as approval of this application is strictly subject to all of the rules of the District, duly promulgated from time to time, which are on file and available for examination at the offices of the District by those having interest.
- 9. If a Permit is granted, I shall notify the District not less than 24 hours prior to the beginning and completion of the work, to enable the coordination and scheduling of inspections.
- 10. I accept total responsibility for any erosion of, or shoaling in, the District's right-of-way or canals that results from the permitted work, and I shall repair or remove same promptly, at no expense to the District.
- 11. During and after construction, I shall prevent material from the construction area from being discharged to, or settling in, District
- 12. Unless authorized by Permit, I shall neither place, construct or plant, nor cause to be placed, constructed or planted, any object or improvement within the District right-of-way without the express written prior approval of the District.
- 13. Within thirty (30) days of completion of the work, I shall submit a written statement to the District certifying that the work was performed and completed in accordance with the Permit and the approved drawings. If the work deviates from the Permit or approved drawings, the certification shall state the nature and extent of those deviations.
- 14. If this Permit is for a drainage connection, then drainage discharge from the area served shall not exceed the volumetric equivalent of 2.6 inches of depth over the area for any 24-hour period (50 gallons per minute per acre) from the 10-year frequency, 72-hour duration rainfall.
- 15. If a Permit is issued for a hydraulic connection of property with a District canal, I shall not discharge hyacinths or other aquatic vegetation into the District canal.
- 16. The Permittee, his agents and contractors, shall conduct the work in a manner that will not impair the use, or potential use, of the District right-of-way and facilities. In no case shall drainage or irrigation canals or appurtenant works be obstructed or restricted.
- 17. All irrigation and drainage connections to District facilities shall be clearly marked with a post of contrasting colors to identify the location and extent of the permitted installation.
- 18. If access is permitted via an existing culvert crossing installed in District right-of-way, the Permittee is advised that the crossing may be permitted for use by other affected owners, as such crossings are limited in number by the District.
- 19. The District reserves the right to permit the use of culvert crossings installed in rights-of-ways by other affected owners of District lands, as culvert crossings are subject to distance limitations imposed by the District.
- 20. All utility installations shall be clearly marked with above-ground signs or markers, as required by the District's "Permit Information and Criteria Manual."

APPENDIX - C GEOTECHNICAL

Subsurface Soil Exploration Culvert Replacement Project Johnston Road at FPF Canal 16 St. Lucie County, Florida



CORPORATE HEADQUARTERS

8008 S. Orange Avenue, Orlando, FL 32809 - Phone: (407) 855-3860 Fax: (407) 859-8121

Branch Office Locations

Florida: Bartow, Cocoa, Fort Myers, Miami, Orlando, Port St. Lucie, Sarasota, Tallahassee, Tampa, West Palm Beach Louisiana: Baton Rouge, Monroe, New Orleans, Shreveport

MEMBERS:

ASTM International
American Concrete Institute
Geoprofessional Business Association
Society of American Military Engineers
American Council of Engineering Companies



Stephen Cooper, P.E. & Associates, Inc. 7450 South Federal Highway Port St. Lucie, Florida 34982

Attention: Mr. Stephen Cooper, P.E.

Subject: Subsurface Soil Exploration and

Geotechnical Engineering Evaluation

Culvert Replacement Project Johnston Road at FPF Canal 16 St. Lucie County, Florida

Mr. Cooper:

As requested, we have completed a subsurface soil exploration for the subject project. The purposes of performing this exploration were to evaluate the general subsurface conditions at the proposed culvert replacement location and to provide recommendations for site preparation and foundation support. Our work included soil borings, laboratory testing, and engineering analysis. This report documents the exploration and presents our findings and engineering recommendations.

SITE LOCATION AND DESCRIPTION

The subject site is located on Johnston Road at the crossing of the Fort Pierce Farms Water Control District (FPFWCD) Canal No. 16 in St. Lucie County, Florida (Section 22, Township 34 South, Range 39 East). The site location is shown superimposed on the Oslo, Florida USGS quadrangle map presented as Figure 1.

Canal No. 16 currently crosses beneath Johnston Road by means of a corrugated metal pipe. Johnston Road in the project area consists of a two-lane asphalt paved roadway.

REVIEW OF SOIL SURVEY MAPS

The Soil Survey of St. Lucie County, Florida, which was issued by the U.S. Department of Agriculture, Soil Conservation Service in 1980, states that the predominant surficial soil type in the area where the site is located is *Winder loamy sand*. Following is a brief description of this soil type as taken from the Soil Survey.

Winder loamy sand is poorly drained, nearly level soil found in hammocks and along drainageways. Slopes are smooth to convex and range from 0 to 2 percent. Typically, the surface layer is 6 inches thick. It is black loamy sand in the upper 3 inches and very dark gray loamy sand in the lower 3 inches. The subsurface layer is sand 6 inches thick. It is grayish brown in the upper 3 inches and light brownish gray in the lower 3 inches. The subsoil extends to a depth of 61 inches. In sequence, it is dark grayish brown sandy clay loam with a few light brownish gray sandy tongues of the subsurface layer in the upper 9 inches; gray sandy clay loam in the next 12

inches; dark gray sandy loam in the next 16 inches; and gray loamy sand in the lower 12 inches. The substratum, to a depth of 80 inches or more, is light gray sand.

The water table of *Winder loamy sand* is at a depth of less than 10 inches for 2 to 4 months and between depths of 10 to 40 inches for most of the rest of the year. Only for short periods in dry seasons is the water table below a depth of 40 inches.

FIELD EXPLORATION PROGRAM

The field exploration program included performing two Standard Penetration Test (SPT) borings in the vicinity of the existing culvert pipe (opposite sides of the canal) and two auger borings over the top of the existing culvert pipe (shoulders of the road) as shown on the Boring Location Plan, Figure 2. The SPT borings (B-1 and B-2 on Figure 2) were conducted to a depth of 25 feet below the existing ground surface in general accordance with the procedures recommended in ASTM D-1586 using a truck-mounted drilling rig. The auger borings (AB-1 and AB-2 on Figure 2) were conducted using a hand-held bucket auger and advanced to depths of 7 and 8 feet below the existing grade. A description of our drilling procedures is included in the Appendix. The groundwater level at each of the boring locations was measured upon completion of drilling. The borings were then backfilled with soil cuttings.

LABORATORY PROGRAM

Our drillers observed the soil recovered from the sampler, placed the recovered soil samples in moisture-proof containers, and maintained a log for each boring. The field soil boring logs and recovered soil samples were transported to our laboratory from the project site. Each soil sample was then observed by a geotechnical engineer to determine its engineering classification. The visual classification of the samples was performed in accordance with the Unified Soil Classification System, USCS.

In addition, we performed percent fines content and organic content tests on selected soil samples to aid in classification of the soils. The soil classifications and other pertinent data obtained from the explorations and laboratory observations are reported on the soil boring profiles included on Figures 2 and 3. The results of the percent fines content tests are presented adjacent to the sample depth on the boring profiles in the Appendix..

Samples of the surface water within the canal and soil samples collected at the locations of Auger Borings AB-1 and AB-2 (composited from a depth of 4 through 5 feet) were sent to Jupiter Environmental Laboratories, Inc. for corrosivity series testing. The results of the testing are summarized in the following table.

Sample	Location	На	Resistivity	Chlorides	Sulfates	Environmental Classification			
Janipie	Location	Pii	(ohms-cm)	(ppm)	(ppm)	Concrete	Steel		
Canal 16 (SW-1)	Canal Surface Water	6.75	430	720	140	Extremely Aggressive	Extremely Aggressive		
SS-1	AB-1 and AB-2 (4-5 feet)	8.42	12000	<28.6	25i	Slightly Aggressive	Slightly Aggressive		

Based on the environmental classifications provided in Table 1.3.2-1 (Criteria for Substructure Environmental Classifications) of the FDOT Structure Design Guidelines, the canal surface water would be classified as extremely aggressive for concrete and steel, while the soils surrounding the proposed culvert structure would be classified as slightly aggressive for both concrete and steel.

GENERAL SUBSURFACE CONDITIONS

General Soil Profile

The results of the field exploration and laboratory programs are graphically summarized on the soil boring profiles presented in the Appendix. The stratification of the boring profiles represents our interpretation of the field boring logs and the results of laboratory examinations of the recovered samples. The stratification lines represent the approximate boundary between soil types. The actual transitions may be more gradual than implied.

As shown on the soil boring profiles in the Appendix, the SPT borings typically encountered very loose to loose, fine sand (Unified Soil Classification SP), fine sand with silt (SP-SM), fine sand with clay (SP-SC) and clayey fine sand (SC) to the termination depth of the borings at 25 feet below the existing ground surface. The auger borings encountered similar soils to the termination depths of 7 and 8 feet below the existing ground surface as shown in the Appendix. Please refer to the Appendix for soil profile details.

Measured Groundwater Level

The groundwater level was measured in the boreholes on the day drilled. Groundwater was encountered in the borings at approximate depths ranging from 5 to 5.5 feet below the existing ground surface. Fluctuations in groundwater levels on this site should be anticipated throughout the year due to a variety of factors, the most important of which are recharge from rainfall and the water level maintained in Canal 16. We note that the groundwater table may temporarily "perch" at higher levels atop the shallow clayey soils during or following periods of prolonged or heavy rainfall.

ENGINEERING EVALUATION AND RECOMMENDATIONS

Based on the findings of our site exploration, our evaluation of subsurface conditions, and judgment based on our experience with similar projects, we conclude that the soils are generally adequate to support the proposed replacement culvert pipe and associated headwalls provided that the soils are prepared as detailed in this report.

Based on the results of our soil borings and our understanding of the project, the bottom of the replacement culvert pipes may be situated within the loose to medium dense slightly silty/clayey fine sand and/or clayey fine sand soils encountered in the upper 15 feet. Additionally, the backfill soils will likely consist primarily of fine sand mixed with varying amounts of silty and clayey soils unless imported sandy soils are specified as required.

Stripping of the Canal Banks and Bottom

The banks and bottom of the existing canal at the proposed replacement culvert pipe and headwall locations should be stripped and cleaned of all surface vegetation, stumps, debris, organic topsoil, muck, soft sediment, loose soils or other deleterious materials, as encountered. The extent of stripping and cleaning must be determined by visual observation, probing, and judgment during the earthwork operation. The means and methods should be the responsibility of the contractor but must provide complete removal of the deleterious materials and protection of the exposed areas from erosion and prevent sloughing of the canal banks.

We note that the stripping and bottom clearing operations will require removing materials, including vegetation that has historically sloughed into the canal bottom. Some of the vegetation that was formerly on the canal banks may have become entrapped within and/or beneath the sloughed soils. Additionally, soft sediment and/or muck that were present in the canal bottom before the sloughing may also be present beneath the sloughed materials. These materials must be excavated and removed in their entirety prior to placement of any fill and should be disposed of as directed in the project plans. The excavated unsuitable materials must not be used as fill or backfill material.

The contractor needs to exercise strict control during excavation and stockpiling to prevent mixing with the unsuitable materials. Sloughed soils that inadvertently become mixed with the unsuitable materials need to be stockpiled with the unsuitable materials in order to prevent them from being reused as fill. The stripping of the canal banks and canal bottom cleaning operations should be monitored continuously by a representative of the project geotechnical engineer to verify that all unsuitable materials are removed and the integrity of the banks are maintained prior to placement of fill materials. The contractor shall determine limits of all unsuitable materials and ensure that they are removed from the project limits. The control of groundwater and the water in the canal will be required to conduct these activities "in-the-dry" to the extent possible. Means and methods of dewatering and excavation, as well as slope protection and/or bracing, are the responsibility of the contractor. Additionally, all excavations should be sloped and/or braced to meet the requirements of the Occupational Health and Safety Administration (OSHA) latest Standards. Positive site drainage and other measures to protect the stripped surface of the canal banks from erosion should be established early and maintained during construction.

Over-Excavation of Clayey Soils

Fine sand with varying amounts of clay was encountered in the borings from existing grade to a depth of approximately 13 feet below the existing ground surface. Clayey soils present in the bottom of the excavation for the proposed replacement culvert pipe and headwalls may contain excess fines that will make it difficult for the contractor to moisture condition and adequately compact these soils. Therefore, we strongly recommend that the clayey fine sand (SC) soils that may lie directly beneath the replacement culvert pipe and headwalls be overexcavated, plus an outside margin of 5 feet, to a minimum depth of 2 feet below the bottom of the pipe and headwalls. The contractor should examine field conditions at the bottom of the excavation and determine if additional excavation is necessary to provide a firm and unyielding surface.

The excavated soils should be replaced with well compacted clean fine sand with less than 10 percent by dry weight of material passing the U.S. Standard No. 200 sieve size.

Foundation Support and Foundation Compaction Criteria

The bottom of the excavation should be compacted to at least 95 percent of the modified Proctor (ASTM D-1557) maximum dry density value for a depth of 1 foot below the bottom of the pipe and headwall bedding material. Alternatively, the subgrade soils at the bottom of the excavation can be over-excavated and replaced with compacted FDOT No. 57 stone wrapped in a suitable geotextile filter fabric. The thickness of the compacted stone mass that would produce a stable foundation surface will need to be determined in the field, but should be a minimum of 12 inches thick for pipes and 24 inches thick for structures (based on St. Lucie County Engineering Department preferences). The compacted stone mass should be firm and unyielding and verified by the project geotechnical engineer prior to placing the culvert pipe and/or fill materials. As described below, dewatering of the excavation will be critical to achieving the necessary compaction.

Suitable Backfill Material and the Compaction of Backfilled Soils

All backfill materials should be free of organic materials, such as roots and vegetation. We recommend using backfill with less than 12 percent by dry weight of material passing the U.S. Standard No. 200 sieve size. The fine sand (SP), fine sand with silt (SP-SM), and fine sand with clay (SP-SC) soils encountered in the borings) are generally considered suitable for use as backfill materials and compacted subgrade, and with proper moisture control, should densify using conventional compaction methods. Soils with more than 12 percent passing the No. 200 sieve) will be more difficult to compact due to their inherent nature to retain soil moisture. Also, soils removed from below the water table will need time to dry and moisture condition prior to compacting.

All backfill should be placed in level lifts not to exceed 12 inches in uncompacted thickness. Each lift should be compacted to at least 95 percent of the modified Proctor (ASTM D-1557) maximum dry density value. The filling and compaction operations should continue in lifts until the desired elevation(s) is achieved. If hand-held compaction equipment is used, the lift thickness should be reduced to 6 inches.

Dewatering

Control of groundwater will likely be required to achieve the necessary stripping, excavation, proof-rolling, filling, compaction, and any other earthwork, site work, and/or pavement construction operations required for the project. The actual method(s) of dewatering should be determined by the contractor. Dewatering should be performed to lower the groundwater level to depths that are adequately below excavations and compaction surfaces. Adequate groundwater level depths below excavations and compaction surfaces vary depending on soil type and construction method, and are usually 2 feet or more. Dewatering solely with sump pumps may not achieve the desired results.

Lateral Earth Pressures

At-Rest Earth Pressures Acting on Embedded Structures

Lateral loads acting on the embedded structure will include at-rest earth pressures as well as hydrostatic pressures and surcharge loads. The lateral earth pressure will be a function of both the soil unit weight (submerged or moist) and the depth below ground surface. The following equation can be used to determine the lateral at-rest earth pressure:

 $\sigma_h = K_o \gamma_m h$ (above groundwater table)

 $\sigma_h = K_o [\gamma_m h_w + \gamma_b (h - h_w)]$ (below groundwater table)

Where:

 σ_h = lateral earth pressure (psf)

K_o = coefficient of at rest earth pressure (0.5) (this value assumes that the backfill is lightly compacted yet not overcompacted)

 $\gamma_{\rm m}$ = moist unit weight of soil = 105 pcf for compacted moist soil above the water table

 γ_b = buoyant unit weight of soil = 60 pcf for compacted saturated soil below the water table

h = vertical depth (feet) below grade at which lateral earth pressure is determined

h_w = vertical depth (feet) below grade to groundwater table

For design, an appropriate factor of safety should be applied to the lateral earth pressure calculated using the above equation. <u>Lateral pressure distributions determined in accordance with the above do not include hydrostatic pressures or surcharge loads</u>. Where applicable, they should be incorporated in the design.

Earth Pressure on Shoring and Bracing

If shoring and bracing are required for any excavations, the system should be designed to resist lateral earth pressure. The design earth pressure will be a function of the flexibility of the shoring and bracing system. For a flexible system restrained laterally by braces placed as the excavation proceeds, the design earth pressure for shoring and bracing can be computed using a uniform earth pressure distribution with depth. It is recommended that soils be dewatered around the excavations. For such dewatered excavations, we recommended using the following uniform pressure distribution over the full braced height as follows:

Uniform Soil Pressure Distribution, p = 0.65 $K_a \gamma_s H$

Where:

p = uniform pressure distribution for design of braced excavation

K_a = coefficient of active earth pressure = 0.33

 γ_s = unit weight of saturated soils = 115 pcf

H = depth of excavation (feet)

An appropriate factor of safety should be applied for the design of the braced excavations. Lateral pressure distributions determined in accordance with the above do not take hydrostatic pressures or surcharge loads into account. To the extent that such pressures and forces may act on the walls, they should be included in the design.

QUALITY ASSURANCE

We recommend establishing a comprehensive quality assurance program to verify that all site preparation and foundation and pavement reconstruction is conducted in accordance with the appropriate plans and specifications. Materials testing and inspection services should be provided by Ardaman & Associates.

As a minimum, an on-site engineering technician should monitor the excavation to verify that all deleterious materials have been removed and should observe the proof-rolling and proof-compacting operations to verify that the foundation soils are prepared as recommended in this report. In-situ density tests should be conducted during backfilling activities and below all pipe subgrade and pavement areas to verify that the required densities have been achieved. In-situ density values should be compared to laboratory Proctor moisture-density results for each of the different natural and backfill soils encountered.

Finally, we recommend inspecting and testing the construction materials for the culvert pipe and headwalls.

IN-PLACE DENSITY TESTING FREQUENCY

In Southeast Florida, earthwork testing is typically performed on an on-call basis when the contractor has completed a portion of the work. The test result from a specific location is only representative of a larger area if the contractor has used consistent means and methods (compactive effort, i.e., number of passes, compaction equipment, and lift thickness) and the soils are practically uniform throughout. The frequency of testing can be increased, and full-time construction inspection can be provided to account for variations. We recommend that the following minimum testing frequencies be utilized.

In-situ density tests should be conducted during bedding and backfilling to verify that the required densities have been achieved. In-situ density values should be compared to laboratory Proctor moisture-density results for each of the different natural and fill soils encountered. Backfill for the proposed culverts should be tested at a minimum frequency of one in-place density test for each 12-inch lift adjacent to and on both sides of the pipe.

Representative samples of the various natural ground and fill soils should be obtained and transported to our laboratory for Proctor compaction tests. These tests will determine the maximum dry density and optimum moisture content for the materials tested and will be used in conjunction with the results of the in-place density tests to determine the degree of compaction achieved.

CLOSURE

The analyses and recommendations submitted herein are based on the data obtained from the soil borings presented on Figure 2 and in the Appendix. This report does not reflect any

variations which may occur adjacent to or between the borings or in unexplored areas of the construction site. The nature and extent of the variations between the borings may not become evident until during construction. If variations then appear evident, it will be necessary to reevaluate the recommendations presented in this report after performing on-site observations during the construction period and noting the characteristics of the variations.

This report has been prepared for the exclusive use of Stephen Cooper, P.E. & Associates, Inc. in accordance with generally accepted geotechnical engineering practices. In the event any changes occur in the design, nature or location of the proposed culvert structure, we should review the applicability of conclusions and recommendations in this report. We recommend a general review of final design and specifications by our office to verify that earthwork and foundation recommendations are properly interpreted and implemented in the design specifications. Ardaman & Associates should attend the pre-bid and preconstruction meetings to verify that the bidders/contractor understand the recommendations contained in this report.

We are pleased to be of assistance to you on this phase of the project. When we may be of further service to you or should you have any questions, please contact us.

ARDAMAN & ASSOCIATES, INC.

Florida Certificate of Authorization No. 5950

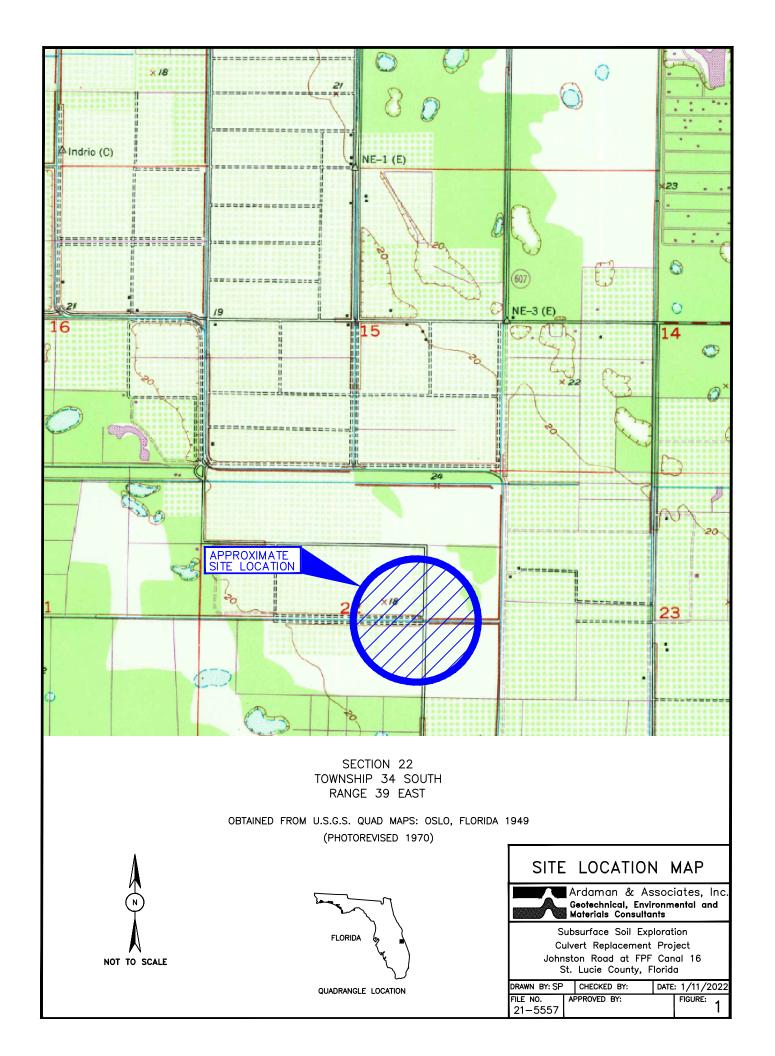
Sharmila Pant

Assistant Project Engineer

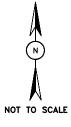
Jason P Manning, P.E

Branch Manager

Florida License No. 53265







STANDARD PENETRATION TEST (SPT) BORING LOCATION

AUGER BORING LOCATION

BORING LOCATION MAP



👅 Ardaman & Associates, Inc. Geotechnical, Environmental and Materials Consultants

Subsurface Soil Exploration Culvert Replacement Project Johnston Road at FPF Canal 16 St. Lucie County, Florida

DRAWN BY: SP		CHECKED BY:	DATE	ATE: 1/11/2022				
FILE NO.	A	PPROVED BY:		FIGURE:				

21-5557

APPENDIX

Boring Profiles

Lab Report

Drilling Procedures

STANDARD PENETRATION TEST BORING LOG BORING B-1

PROJECT: Proposed Culvert Replacement Project

Johnston Road at FPF Canal 16, St. Lucie County, Florida

BORING LOCATION: As per Boring Location Plan.

DRILL CREW: Centerline

WATER OBSERVED AT DEPTH 5 feet

DATE DRILLED: 12/15/21

FILE No.: 21-5557

DEPTH	SYMBOLS	SOIL DESCRIPTION	SAMPLE	N	N VALUE		
(FEET)	FIELD TEST DATA	SOIL DESCRIPTION	No.	VALUE	\$1000000000000000000000000000000000000		
	3/6 5/6 10/6 14/6	Brown fine sand [SP], few shell and limestone fragments, trace clay	. 1	15			
	13/6 18/6 18/6 16/6	Gray slightly clayey fine sand [SP-SC], few shell fragments	2	36			
5 —	10/6 7/6 7/6 9/6		3	14			
+ +	8/6 8/6 6/6 5/6 3/6	Gray fine sand [SP], few shell fragments, trace wood/roots	4	14	Ö		
10 —	5/6 6/6 4/6	Gray clayey fine sand [SC] [-200:14.3%, NM:18.5%]	. 5	11	3		
15 —	6/6 5/6 5/6 6/6	Gray fine sand [SP], few shell fragments	6	10	0		
20 —	5/6 15/6 15/6 15/6 15/6 15/6 15/6	Dark brown slightly silty fine sand [SP-SM]	7	10			
+	71 12 12 12 12 12 12 12 12 12 12 12 12 12	Gray fine sand [SP], some small shell fragments	8	35			
25 — — — — — — — — — — — — — — — — — — —	<u> </u>	Boring terminated at 25-feet.					

NOTES:

FIELD TEST DATA ARE "BLOWS"/"INCHES DRIVEN" 140-LB HAMMER, 30-INCH FALL. (ASTM D-1586)

_____ Ardaman & Associates, Inc. ___

STANDARD PENETRATION TEST BORING LOG BORING B-2

PROJECT: Proposed Culvert Replacement Project

Johnston Road at FPF Canal 16, St. Lucie County, Florida

BORING LOCATION: As per Boring Location Plan.

DRILL CREW: Centerline

WATER OBSERVED AT DEPTH 5.5 feet

DATE DRILLED: 12/15/21

FILE No.: 21-5557

DEPTH	SYMBOLS	SOIL DESCRIPTION	SAMPLE	N	N VALUE			
(FEET)	FIELD TEST DATA	SOIL DESCRIPTION	No.	VALUE	\$ 100 100 100 100 100 100 100 100 100 100			
0	8/6 8/6 9/6 11/6	Brown fine sand [SP], few shell fragments, roots, & trace clay	1	17	٥			
	10/6 10/6 9/6 11/6		2	39				
5 —	8/6 11/6 12/6 10/6	Gray slightly clayey fine sand [SP-SC], few shell fragments	3	23				
	9/6 13 1 1 1 1 8/6 13 1 1 1 1 1 8/6 9/6 15 1 1 1 1 1 8/6 17/6	Yellowish brown fine sand [SP] to slightly silty fine sand [SP-SM]	4	17				
10 —	7/6 7/6 7/6 7/6	Gray clayey fine sand [SC], some small shell fragments	5	14				
15	6/6 8/6 6/6 9/6	Gray fine sand [SP], few shell fragments	6	14	74			
20 —	4/6 3/6 5/6 3/6	Dark brownish fine sand [SP] to slightly clayey fine sand [SP-SC]	7	8				
-	10/6 13/6 17/6 17/6	Gray fine sand [SP], few to some small shell fragments	8	30				
25 + + + + + + + + + + + + + + + + + + +		Boring terminated at 25-feet.						

NOTES:

FIELD TEST DATA ARE "BLOWS"/"INCHES DRIVEN" 140-LB HAMMER, 30-INCH FALL. (ASTM D-1586)

_____ Ardaman & Associates, Inc. ___

HAND AUGER BORING LOG

BORING AB-1

FILE No.: 21-5557

DATE DRILLED: 12/17/21

PROJECT: Proposed Culvert Replacement Project

Johnston Road at FPF Canal 16, St. Lucie County, Florida

BORING LOCATION: As per Boring Location Plan.

DRILL CREW: Centerline

WATER OBSERVED AT DEPTH 5 feet

DEPTH	SYMBOL	SOIL DESCRIPTION	SAMPLE No.
0 —		Brown fine sand [SP], few shell fragments & trace clay	1
5—	<u>—</u>	Gray fine sand [SP] to slightly clayey fine sand [SP-SC], trace shell fragments	2
			3
_		Boring terminated at 7-feet.	
10—			
+			
_			
15—			

NOTES:

Ardaman & Associates, Inc.

HAND AUGER BORING LOG

BORING AB-2

FILE No.: 21-5557

DATE DRILLED: 12/17/21

PROJECT: Proposed Culvert Replacement Project

Johnston Road at FPF Canal 16, St. Lucie County, Florida

BORING LOCATION: As per Boring Location Plan.

DRILL CREW: Centerline

WATER OBSERVED AT DEPTH 5 feet

SAMPLE DEPTH SYMBOL SOIL DESCRIPTION No. Brown fine sand [SP], & trace clay Gray fine sand [SP] to slightly clayey fine sand [SP-SC], trace shell fragments & gravel Brown fine sand [SP] Boring terminated at 8-feet. 10

NOTES:

Ardaman & Associates, Inc.



> Phone: (561)575-0030 Fax: (561)575-4118 www.jupiterlabs.com clientservices@jupiterlabs.com

January 6, 2022

Sharmila Pant 460 NW Concourse PI Port Saint Lucie, FL 34986

RE: LOG# 2177556

Project ID: Johnston Rd Culvert

Dear Sharmila Pant:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, December 20, 2021. Results reported herein conform to the most current NELAC standards, where applicable, unless indicated by * in the body of the report. The enclosed Chain of Custody is a component of this package and should be retained with the package and incorporated therein.

Results for all solid matrices are reported in dry weight unless otherwise noted. Results for all liquid matrices are reported as received in the laboratory unless otherwise noted. Results relate only to the samples received. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

Samples are disposed of after 30 days of their receipt by the laboratory unless extended storage is requested in writing. The laboratory maintains the right to charge storage fees for archived samples. This report will be archived for 5 years after which time it will be destroyed without further notice, unless prior arrangements have been made.

Certain analyses are subcontracted to outside NELAC certified laboratories, please see the Project Summary section of this report for NELAC certification numbers of laboratories used. A Statement of Qualifiers is available upon request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Taylor Tripodi for Kacia Baldwin

kaciab@jupiterlabs.com

Jaylor Tripodi

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited FDOH# E86546 CERTIFICATE OF ANALYSIS

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Page 1 of 13



Jupiter, FL 33458

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SAMPLE ANALYTE COUNT

Workorder: 2177556

Project ID: Johnston Rd Culvert

Lab ID	Sample ID	Method	Analytes Reported
2177556001	SS-1	EPA 120.1	1
		EPA 9038	1
		EPA 9045	1
		SM 2540G	1
		SM 4500-CI E	1
2177556002	SW-1	ASTM D516-90	1
		EPA 120.1	1
		EPA 150.1	1
		SM 4500-CL E	1

Report ID: 2177556 - 3302834 1/6/2022

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SAMPLE SUMMARY

Workorder: 2177556

Project ID: Johnston Rd Culvert

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2177556001	SS-1	Soil/Solid	12/17/2021 00:00	12/20/2021 09:10
2177556002	SW-1	Aqueous Liquid	12/17/2021 00:00	12/20/2021 09:10

Report ID: 2177556 - 3302834 1/6/2022

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ANALYTICAL RESULTS

Workorder: 2177556

Project ID: Johnston Rd Culvert

Lab ID: 2177556001 Date Received: 12/20/2021 09:10 Matrix: Soil/Solid

Sample ID: **SS-1** Date Collected: 12/17/2021 00:00

Parameters Results Units PQL MDL DF Prepared By Analyzed By Qual

Analysis Desc: Resistivity by EPA 120.1 (W) [REF] (W) Analytical Method: EPA 120.1

Resistivity 12000 ohm-cm 1 12/27/2021 12:25 LI

Analysis Desc: Corrosivity (pH) by EPA 9045 Analytical Method: EPA 9045

Corrosivity (pH) 8.42 -log[H+] 1 12/20/2021 11:20 LI

Analysis Desc: Chloride in Solids Preparation Method: Wet Chem Prep

Analytical Method: SM 4500-CI E

Analytical Method: EPA 9038

Chloride U mg/Kg 57 28.6 1 1/4/2022 17:30 BFM 1/4/2022 18:23 BFM

Analysis Desc: Sulfate in Solids Preparation Method: Wet Chem Prep

Sulfate 25i mg/Kg 34 11.4 1 1/4/2022 17:31 BFM 1/4/2022 18:24 BFM

Wet Chemistry

Analysis Desc: 2540G Percent Solids (Dryweight)

Analytical Method: SM 2540G

Percent Solids (Dryweight)

87.5 %

0.1

1 12/21/2021 15:13 EVA

Report ID: 2177556 - 3302834 1/6/2022

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ANALYTICAL RESULTS

Workorder: 2177556

Project ID: Johnston Rd Culvert

Lab ID: 2177556002 Date Received: 12/20/2021 09:10 Matrix: Aqueous Liquid

Sample ID: **SW-1** Date Collected: 12/17/2021 00:00

Parameters	Results Units	PQL	MDL	DF Prepared	Ву	Analyzed	Ву	Qual
Analysis Desc: Resistivity	by EPA 120.1 [REF] (W)		Α	nalytical Method: EPA	120.1			
Resistivity	430 ohm-cm			1		12/27/2021 1	2:25 LI	
Analysis Desc: pH by EPA	A 150.1		А	nalytical Method: EPA	150.1			
рН	6.75 su	0.01		1		12/20/2021 1	1:05 LI	Q1
Analysis Desc: Chloride b	y 4500-CL E (W)		Р	reparation Method: W	et Chem	Prep		
			А	nalytical Method: SM	4500-CL	E		
Chloride	720 mg/L	91	30.4	20 12/27/2021 1	7:06 DB	12/27/2021 1	8:23 BFN	И

Chloride 720 mg/L 91 30.4 20 12/27/2021 17:06 DB 12/27/2021 18:23 BFM

Analysis Desc: ASTM D516-90 Sulfate (W)

Preparation Method: Wet Chem Prep

Analytical Method: ASTM D516-90

Sulfate 140 mg/L 30 10.0 10 12/23/2021 11:14 DB 12/23/2021 11:58 DB

Report ID: 2177556 - 3302834

1/6/2022

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 2177556

Project ID: Johnston Rd Culvert

PARAMETER QUALIFIERS

Q1 Sample received past/too close to the accepted holding time.

PROJECT COMMENTS

2177556

A reported value of U indicates that the compound was analyzed for but not detected above the MDL. A value flagged with an "i" flag indicates that the reported value is between the laboratory method detection limit and the practical quantitation limit.

Report ID: 2177556 - 3302834

1/6/2022

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QUALITY CONTROL DATA

EPA 150.1

Workorder: 2177556

Project ID: Johnston Rd Culvert

QC Batch: WPH/2468 Analysis Method:

QC Batch Method: EPA 150.1

Associated Lab Samples: 2177556002 2177559001 2177559002

SAMPLE DUPLICATE: 243535 Original: 2177559002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
nH	SII	7 04	7.03	0.14	5	

Report ID: 2177556 - 3302834

1/6/2022

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Phone: (561)575-0030 Fax: (561)575-4118

QUALITY CONTROL DATA

Workorder: 2177556

Project ID: Johnston Rd Culvert

QC Batch: WXX/8175 Analysis Method: ASTM D516-90

QC Batch Method: Wet Chem Prep

Associated Lab Samples: 2177530001 2177530002 2177530003 2177530004 2177530005 2177556002

2177588001 2177588002 2177588003 2177588004 2177588005

METHOD BLANK: 243868

Parameter Units Result Limit Qualifiers

Sulfate mg/L U 1.0

LABORATORY CONTROL SAMPLE & LCSD: 243869 243870

Spike LCS **LCSD** LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limit **RPD RPD** Qualifiers Sulfate mg/L 15 15 15 101 99.2 85-115 0 20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 243894 243895 Original: 2177530001

Spike MS MSD MS MSD Original % Rec Max Parameter Units Result Conc. Result Result % Rec % Rec Limit RPD RPD Qualifiers Sulfate 0.28 85-115 mg/L 15 16 17 108 109 6.1 20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 243896 243897 Original: 2177588001

Original Spike MS MSD MS MSD % Rec Max Limit RPD RPD Parameter Units Result Conc. Result Result % Rec % Rec Qualifiers Sulfate mg/L 0.14 15 15 15 102 102 85-115 0 20

SAMPLE DUPLICATE: 243871 Original: 2177530001

Original DUP Max Parameter Units Result **RPD RPD** Qualifiers Result Sulfate mg/L U U 0 20

Report ID: 2177556 - 3302834

1/6/2022

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FDOH# E86546
CERTIFICATE OF ANALYSIS





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QUALITY CONTROL DATA

Workorder: 2177556

Project ID: Johnston Rd Culvert

QC Batch: WXX/8179 Analysis Method: SM 4500-CL E

QC Batch Method: Wet Chem Prep

Associated Lab Samples: 2177556002 2177588001 2177588002 2177588003 2177588004 2177588005

METHOD BLANK: 244054

Parameter Units Result Limit Qualifiers

Chloride mg/L U 1.5

LABORATORY CONTROL SAMPLE & LCSD: 244055 244056

Spike LCS LCSD LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limit **RPD** RPD Qualifiers Chloride 25 27 mg/L 26 107 106 85-115 3.8 20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 244058 244059 Original: 2177588001

Spike MS MSD MS MSD % Rec Original Max Limit RPD RPD Parameter Result Conc. Result % Rec % Rec Qualifiers Units Result mg/L Chloride 0.37 25 25 99.6 97.7 85-115 0 20

SAMPLE DUPLICATE: 244057 Original: 2177556002

DUP Original Max Parameter Units Result Result RPD **RPD** Qualifiers Chloride 0 mg/L 720 720 20

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited
FDOH# E86546
CERTIFICATE OF ANALYSIS





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QUALITY CONTROL DATA

SM 4500-CI E

Workorder: 2177556

Project ID: Johnston Rd Culvert

QC Batch: WXX/8189 Analysis Method:

QC Batch Method: Wet Chem Prep
Associated Lab Samples: 2177556001

METHOD BLANK: 244517

Blank Reporting

Parameter Units Result Limit Qualifiers

Chloride mg/Kg U 25

LABORATORY CONTROL SAMPLE & LCSD: 244518 244519

LCS Spike LCSD LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limit **RPD** RPD Qualifiers Chloride 0 20 mg/Kg 250 250 250 100 99.4 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 244521 244522 Original: 2177556001

Original Spike MS MSD MS MSD % Rec Max Limit RPD RPD Parameter Units Result Conc. % Rec % Rec Qualifiers Result Result Chloride mg/Kg 14 250 260 99.5 90.1 80-120 8 20

SAMPLE DUPLICATE: 244520 Original: 2177556001

DUP Original Max Parameter Units Result Result RPD **RPD** Qualifiers Chloride U U 0 20 mg/Kg

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited
FDOH# E86546
CERTIFICATE OF ANALYSIS





EPA 9038

Phone: (561)575-0030 Fax: (561)575-4118

Jupiter, FL 33458



QUALITY CONTROL DATA

Analysis Method:

Workorder: 2177556

QC Batch Method:

Project ID: Johnston Rd Culvert

QC Batch: WXX/8190

Wet Chem Prep 2177556001 Associated Lab Samples:

METHOD BLANK: 244525

Blank Reporting

Parameter Units Result Limit Qualifiers

Sulfate U 10 mg/Kg

LABORATORY CONTROL SAMPLE & LCSD: 244526 244527

LCS Spike LCSD LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limit **RPD** RPD Qualifiers 0 20 Sulfate mg/Kg 150 150 150 97.9 97.2 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 244529 244530 Original: 2177556001

Original Spike MS MSD MS MSD % Rec Max Parameter Result Conc. % Rec % Rec Limit RPD RPD Qualifiers Units Result Result Sulfate mg/Kg 22 150 200 190 80-120 5.1 118 115 20

Original: 2177556001 SAMPLE DUPLICATE: 244528

DUP Original Max Parameter Units Result Result RPD **RPD** Qualifiers P1 Sulfate mg/Kg 22 40 45.6 20

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited FDOH# E86546





> Phone: (561)575-0030 Fax: (561)575-4118

QUALITY CONTROL DATA QUALIFIERS

Workorder: 2177556

Project ID: Johnston Rd Culvert

QUALITY CONTROL PARAMETER QUALIFIERS

P1 RPD value not applicable for sample concentrations less than 5 times the PQL.

Q1 Sample received past/too close to the accepted holding time.

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited FDOH# E86546 **CERTIFICATE OF ANALYSIS**





Phone: (561)575-0030 Fax: (561)575-4118

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 2177556

Project ID: Johnston Rd Culvert

Lab ID Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2177556002 SW-1	EPA 150.1	WPH/2468		
2177556001 SS-1	EPA 9045	WPH/2469		
2177556001 SS-1	SM 2540G	WGR/5295		
2177556002 SW-1	Wet Chem Prep	WXX/8175	ASTM D516-90	WET/8952
2177556001 SS-1	EPA 120.1	WPH/2471		
2177556002 SW-1	EPA 120.1	WPH/2471		
2177556002 SW-1	Wet Chem Prep	WXX/8179	SM 4500-CL E	WET/8973
2177556001 SS-1	Wet Chem Prep	WXX/8189	SM 4500-CI E	WET/8968
2177556001 SS-1	Wet Chem Prep	WXX/8190	EPA 9038	WET/8969

Report ID: 2177556 - 3302834

1/6/2022





Jupiter Environmental Laboratories, Inc.

www.jupiterlabs.com 150 S. Old Dixie Highway, Jupiter, FL 33458 (561) 575-0030 • (888) 287-3218 • clientservices@jupiterlabs.com

J.E.L. Log # 2177554 P.O. # _____ Quote # _____

Company Name Ardaman & Asuciates.						L	ABA	NALY	SIS			Requested Turnaround Time
Address 460 NW Concer			Proc	Codes								Note: Rush requests subject to acceptance by the laboratory
City Port St. Luice State	PL zip 34986										Z	Standard
	Sampling Site Address Johnston Rd Attn: Sharmila Pant Email Spant-Qarduman . Col Project Johnston Rd Culvert. Bampler Name/Signature William Cornelius!!				1) p	Expedited
Attn: Sharmila Pant	Email SPant	Cardun	van .Com								Filtered (Y/N)	Expedited
Project Johnston Rd Culver-	i# / //	// /			14/10						崖	Due//
Sampler Name/Signature William Corne	100000	1 OID		Corner	3						Field	
# Sample Label (Client ID)	Collected Collected Date Time	245	# of Cont	3								Comments
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_25W-1	12-17-21	GW	2	V								
_3												m 1 2 2 2
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6												
_7												
_8												
9												
_0												
Matrix Codes*	Pres Code	S Relinqu	ished by	^		Da	ate	Time	Received by			Date Time
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QA/QC level with report None1_2_3 See price	guide for applicable fees		7	we)eC		12001	7.	14			12/20/21 9/0
FDEP Dry Cleaning FDEP UST Pre-Ap	Temp Control:											

SAMPLE RECEIPT CONFIRMATION SHEET

Cooler Check

		# of	Arrived	Security	y Tape		
ID	Temp (C)		on Ice	Present	Intact	Comments	Temp Gun ID
	4.5	2	~				Temp Gun 2

Checked By: LI

Sample Verification								
Loose Caps?	No	All Samples on COC accounted For?	Yes					
Broken Containers?	No	All Samples on COC?	Yes					
pH Verified?	No	Written on Internal COC?	No					
pH Strip Lot #		Sample Vol. Suff. For Analysis?	Yes					
Acid Preserved Samples Lot#		Samples Rec'd W/I Hold Time?	Yes					
Base Preserved Samples Lot #		Are All Samples to be Analyzed?	Yes					
Samples Received From	courier	Correct Sample Containers?	Yes					
Soil Origin (Domestic/Foreign	Domestic	COC Comments written on COC?	No					
Site Location/Project on COC?	Yes	Samplers Initials on COC?	Yes					
Client Project # on COC?	Yes	Sample Date/Time Indicated?	Yes					
Project Mgr. Indicated on COC	Yes	TAT Requested:	STD					
COC relinquished/Dated by Client?	Yes	Client Requests Verbal Results?	No					
COC Received/Dated by JEL	Yes	Client Notified of discrepancies?	No					
JEL to Conduct ALL Analyses?	Yes	Do VOC vials have headspace or a bubble <6mm (1/4")?	N/A					
Number of Encores	0	Number of Lab Filtered Metals	0					

Subcontract Analysis

Parameter Via Lab Name Comments

			R	HA	est est	Form	#	2			
Jupiter	PH: 56		150 S. O	VIRONM LD DIXII	HWY J	UPITER	FL 33458	3			
12/11/21	I An	PH: 561-575-0030 FX: 561-575-4118 E: CLIENTSERVICES@JUPITERLABS.COM						1			
Date		Client			Project						
Sharmila		17287	KON	12	(SPU	n+ 10	Dac	daw	which	
Contact		PH/Fx			Email		116	ou	1.00	word 5017	
12/18/21	HEN	MTWI	h)F	AM PM	- 2	Dro	p) UPS;	FXgrnd;	8am; 10	Oam; other	
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Client or Clie	nt PM complete t	nis section					ps this pag		with COC	or chemilian could be considered to the could be	
dissolved (FF or LF)	or wells: Trip Blank	Water Soil	Pre- preserved	# bottles per station	total # bottles for kit	Volume	Plastic Glass	# Low Level Soil Kits	Total # Encores	Preservation (circle)	
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ircle fill in: Filters: dro	pppers Bubble wrap	COC	Coolers:	sm	med	lg				Custody seals/ other	
Frip Blank: Date Prepared		Initials	PF	AS - Blank	ID#_	Bott	le Lot#		Preserva	tive Lot#	
Equipment Rental:									Anna de Maria		
Acid #: HCI: HNO _{3:} NOTES:	H ₂ SO _{4:} HCl dr	oppers: N	NaOH:	Na ₂ S ₂ O ₃ :							
chle	oride, si	Ifate	, re	sisti	ivity	l, plt					
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ID: 1083											

ID: 1083 Revision: 2 Legacy DCN:

Issued By: Effective:

STANDARD PENETRATION TEST

The standard penetration test is a widely accepted test method of *in situ* testing of foundation soils (ASTM D 1586). A 2-foot long, 2-inch O.D. split-barrel sampler attached to the end of a string of drilling rods is driven 18 inches into the ground by successive blows of a 140-pound hammer freely dropping 30 inches. The number of blows needed for each 6 inches of penetration is recorded. The sum of the blows required for penetration of the second and third 6-inch increments of penetration constitutes the test result or N-value. After the test, the sampler is extracted from the ground and opened to allow visual examination and classification of the retained soil sample. The N-value has been empirically correlated with various soil properties allowing a conservative estimate of the behavior of soils under load.

The tests are usually performed at 5-foot intervals. However, more frequent or continuous testing is done by our firm through depths where a more accurate definition of the soils is required. The test holes are advanced to the test elevations by rotary drilling with a cutting bit, using circulating fluid to remove the cuttings and hold the fine grains in suspension. The circulating fluid, which is a bentonitic drilling mud, is also used to keep the hole open below the water table by maintaining an excess hydrostatic pressure inside the hole. In some soil deposits, particularly highly pervious ones, NX-size flush-coupled casing must be driven to just above the testing depth to keep the hole open and/or prevent the loss of circulating fluid.

Representative split-spoon samples from the soils at every 5 feet of drilled depth and from every different stratum are brought to our laboratory in air-tight jars for further evaluation and testing, if necessary. Samples not used in testing are stored for 30 days prior to being discarded. After completion of a test boring, the hole is kept open until a steady state groundwater level is recorded. The hole is then sealed, if necessary, and backfilled.

HAND AUGER BORING

Hand auger borings are used, if soil conditions are favorable, when the soil strata are to be determined within a shallow (approximately 5 foot) depth, or when access is not available for our truck-mounted drilling equipment. A 3-inch diameter hand bucket auger with a cutting head is simultaneously turned and pressed into the ground. The bucket auger is retrieved at approximately 6-inch increments and its content emptied for inspection. Sometimes post-hole diggers are used, especially in the upper 3 feet or so. The soil samples obtained are described and representative samples put in jars or bags and transported to the laboratory for further classification and testing, if necessary.

Subsurface Soil Exploration Culvert Replacement Project Johnston Road at FPF Canal 16 St. Lucie County, Florida



CORPORATE HEADQUARTERS

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Branch Office Locations

Florida: Bartow, Cocoa, Fort Myers, Miami, Orlando, Port St. Lucie, Sarasota, Tallahassee, Tampa, West Palm Beach Louisiana: Baton Rouge, Monroe, New Orleans, Shreveport

MEMBERS:

ASTM International
American Concrete Institute
Geoprofessional Business Association
Society of American Military Engineers
American Council of Engineering Companies



Stephen Cooper, P.E. & Associates, Inc. 7450 South Federal Highway Port St. Lucie, Florida 34982

Attention: Mr. Stephen Cooper, P.E.

Subject: Subsurface Soil Exploration and

Geotechnical Engineering Evaluation

Culvert Replacement Project Johnston Road at FPF Canal 16 St. Lucie County, Florida

Mr. Cooper:

As requested, we have completed a subsurface soil exploration for the subject project. The purposes of performing this exploration were to evaluate the general subsurface conditions at the proposed culvert replacement location and to provide recommendations for site preparation and foundation support. Our work included soil borings, laboratory testing, and engineering analysis. This report documents the exploration and presents our findings and engineering recommendations.

SITE LOCATION AND DESCRIPTION

The subject site is located on Johnston Road at the crossing of the Fort Pierce Farms Water Control District (FPFWCD) Canal No. 16 in St. Lucie County, Florida (Section 22, Township 34 South, Range 39 East). The site location is shown superimposed on the Oslo, Florida USGS quadrangle map presented as Figure 1.

Canal No. 16 currently crosses beneath Johnston Road by means of a corrugated metal pipe. Johnston Road in the project area consists of a two-lane asphalt paved roadway.

REVIEW OF SOIL SURVEY MAPS

The Soil Survey of St. Lucie County, Florida, which was issued by the U.S. Department of Agriculture, Soil Conservation Service in 1980, states that the predominant surficial soil type in the area where the site is located is *Winder loamy sand*. Following is a brief description of this soil type as taken from the Soil Survey.

Winder loamy sand is poorly drained, nearly level soil found in hammocks and along drainageways. Slopes are smooth to convex and range from 0 to 2 percent. Typically, the surface layer is 6 inches thick. It is black loamy sand in the upper 3 inches and very dark gray loamy sand in the lower 3 inches. The subsurface layer is sand 6 inches thick. It is grayish brown in the upper 3 inches and light brownish gray in the lower 3 inches. The subsoil extends to a depth of 61 inches. In sequence, it is dark grayish brown sandy clay loam with a few light brownish gray sandy tongues of the subsurface layer in the upper 9 inches; gray sandy clay loam in the next 12

inches; dark gray sandy loam in the next 16 inches; and gray loamy sand in the lower 12 inches. The substratum, to a depth of 80 inches or more, is light gray sand.

The water table of *Winder loamy sand* is at a depth of less than 10 inches for 2 to 4 months and between depths of 10 to 40 inches for most of the rest of the year. Only for short periods in dry seasons is the water table below a depth of 40 inches.

FIELD EXPLORATION PROGRAM

The field exploration program included performing two Standard Penetration Test (SPT) borings in the vicinity of the existing culvert pipe (opposite sides of the canal) and two auger borings over the top of the existing culvert pipe (shoulders of the road) as shown on the Boring Location Plan, Figure 2. The SPT borings (B-1 and B-2 on Figure 2) were conducted to a depth of 25 feet below the existing ground surface in general accordance with the procedures recommended in ASTM D-1586 using a truck-mounted drilling rig. The auger borings (AB-1 and AB-2 on Figure 2) were conducted using a hand-held bucket auger and advanced to depths of 7 and 8 feet below the existing grade. A description of our drilling procedures is included in the Appendix. The groundwater level at each of the boring locations was measured upon completion of drilling. The borings were then backfilled with soil cuttings.

LABORATORY PROGRAM

Our drillers observed the soil recovered from the sampler, placed the recovered soil samples in moisture-proof containers, and maintained a log for each boring. The field soil boring logs and recovered soil samples were transported to our laboratory from the project site. Each soil sample was then observed by a geotechnical engineer to determine its engineering classification. The visual classification of the samples was performed in accordance with the Unified Soil Classification System, USCS.

In addition, we performed percent fines content and organic content tests on selected soil samples to aid in classification of the soils. The soil classifications and other pertinent data obtained from the explorations and laboratory observations are reported on the soil boring profiles included on Figures 2 and 3. The results of the percent fines content tests are presented adjacent to the sample depth on the boring profiles in the Appendix..

Samples of the surface water within the canal and soil samples collected at the locations of Auger Borings AB-1 and AB-2 (composited from a depth of 4 through 5 feet) were sent to Jupiter Environmental Laboratories, Inc. for corrosivity series testing. The results of the testing are summarized in the following table.

Sample	Location	На	Resistivity	Chlorides	Sulfates	Environmental Classification			
Janipie	Location	Pii	(ohms-cm)	(ppm)	(ppm)	Concrete	Steel		
Canal 16 (SW-1)	Canal Surface Water	6.75	430	720	140	Extremely Aggressive	Extremely Aggressive		
SS-1	AB-1 and AB-2 (4-5 feet)	8.42	12000	<28.6	25i	Slightly Aggressive	Slightly Aggressive		

Based on the environmental classifications provided in Table 1.3.2-1 (Criteria for Substructure Environmental Classifications) of the FDOT Structure Design Guidelines, the canal surface water would be classified as extremely aggressive for concrete and steel, while the soils surrounding the proposed culvert structure would be classified as slightly aggressive for both concrete and steel.

GENERAL SUBSURFACE CONDITIONS

General Soil Profile

The results of the field exploration and laboratory programs are graphically summarized on the soil boring profiles presented in the Appendix. The stratification of the boring profiles represents our interpretation of the field boring logs and the results of laboratory examinations of the recovered samples. The stratification lines represent the approximate boundary between soil types. The actual transitions may be more gradual than implied.

As shown on the soil boring profiles in the Appendix, the SPT borings typically encountered very loose to loose, fine sand (Unified Soil Classification SP), fine sand with silt (SP-SM), fine sand with clay (SP-SC) and clayey fine sand (SC) to the termination depth of the borings at 25 feet below the existing ground surface. The auger borings encountered similar soils to the termination depths of 7 and 8 feet below the existing ground surface as shown in the Appendix. Please refer to the Appendix for soil profile details.

Measured Groundwater Level

The groundwater level was measured in the boreholes on the day drilled. Groundwater was encountered in the borings at approximate depths ranging from 5 to 5.5 feet below the existing ground surface. Fluctuations in groundwater levels on this site should be anticipated throughout the year due to a variety of factors, the most important of which are recharge from rainfall and the water level maintained in Canal 16. We note that the groundwater table may temporarily "perch" at higher levels atop the shallow clayey soils during or following periods of prolonged or heavy rainfall.

ENGINEERING EVALUATION AND RECOMMENDATIONS

Based on the findings of our site exploration, our evaluation of subsurface conditions, and judgment based on our experience with similar projects, we conclude that the soils are generally adequate to support the proposed replacement culvert pipe and associated headwalls provided that the soils are prepared as detailed in this report.

Based on the results of our soil borings and our understanding of the project, the bottom of the replacement culvert pipes may be situated within the loose to medium dense slightly silty/clayey fine sand and/or clayey fine sand soils encountered in the upper 15 feet. Additionally, the backfill soils will likely consist primarily of fine sand mixed with varying amounts of silty and clayey soils unless imported sandy soils are specified as required.

Stripping of the Canal Banks and Bottom

The banks and bottom of the existing canal at the proposed replacement culvert pipe and headwall locations should be stripped and cleaned of all surface vegetation, stumps, debris, organic topsoil, muck, soft sediment, loose soils or other deleterious materials, as encountered. The extent of stripping and cleaning must be determined by visual observation, probing, and judgment during the earthwork operation. The means and methods should be the responsibility of the contractor but must provide complete removal of the deleterious materials and protection of the exposed areas from erosion and prevent sloughing of the canal banks.

We note that the stripping and bottom clearing operations will require removing materials, including vegetation that has historically sloughed into the canal bottom. Some of the vegetation that was formerly on the canal banks may have become entrapped within and/or beneath the sloughed soils. Additionally, soft sediment and/or muck that were present in the canal bottom before the sloughing may also be present beneath the sloughed materials. These materials must be excavated and removed in their entirety prior to placement of any fill and should be disposed of as directed in the project plans. The excavated unsuitable materials must not be used as fill or backfill material.

The contractor needs to exercise strict control during excavation and stockpiling to prevent mixing with the unsuitable materials. Sloughed soils that inadvertently become mixed with the unsuitable materials need to be stockpiled with the unsuitable materials in order to prevent them from being reused as fill. The stripping of the canal banks and canal bottom cleaning operations should be monitored continuously by a representative of the project geotechnical engineer to verify that all unsuitable materials are removed and the integrity of the banks are maintained prior to placement of fill materials. The contractor shall determine limits of all unsuitable materials and ensure that they are removed from the project limits. The control of groundwater and the water in the canal will be required to conduct these activities "in-the-dry" to the extent possible. Means and methods of dewatering and excavation, as well as slope protection and/or bracing, are the responsibility of the contractor. Additionally, all excavations should be sloped and/or braced to meet the requirements of the Occupational Health and Safety Administration (OSHA) latest Standards. Positive site drainage and other measures to protect the stripped surface of the canal banks from erosion should be established early and maintained during construction.

Over-Excavation of Clayey Soils

Fine sand with varying amounts of clay was encountered in the borings from existing grade to a depth of approximately 13 feet below the existing ground surface. Clayey soils present in the bottom of the excavation for the proposed replacement culvert pipe and headwalls may contain excess fines that will make it difficult for the contractor to moisture condition and adequately compact these soils. Therefore, we strongly recommend that the clayey fine sand (SC) soils that may lie directly beneath the replacement culvert pipe and headwalls be overexcavated, plus an outside margin of 5 feet, to a minimum depth of 2 feet below the bottom of the pipe and headwalls. The contractor should examine field conditions at the bottom of the excavation and determine if additional excavation is necessary to provide a firm and unyielding surface.

The excavated soils should be replaced with well compacted clean fine sand with less than 10 percent by dry weight of material passing the U.S. Standard No. 200 sieve size.

Foundation Support and Foundation Compaction Criteria

The bottom of the excavation should be compacted to at least 95 percent of the modified Proctor (ASTM D-1557) maximum dry density value for a depth of 1 foot below the bottom of the pipe and headwall bedding material. Alternatively, the subgrade soils at the bottom of the excavation can be over-excavated and replaced with compacted FDOT No. 57 stone wrapped in a suitable geotextile filter fabric. The thickness of the compacted stone mass that would produce a stable foundation surface will need to be determined in the field, but should be a minimum of 12 inches thick for pipes and 24 inches thick for structures (based on St. Lucie County Engineering Department preferences). The compacted stone mass should be firm and unyielding and verified by the project geotechnical engineer prior to placing the culvert pipe and/or fill materials. As described below, dewatering of the excavation will be critical to achieving the necessary compaction.

Suitable Backfill Material and the Compaction of Backfilled Soils

All backfill materials should be free of organic materials, such as roots and vegetation. We recommend using backfill with less than 12 percent by dry weight of material passing the U.S. Standard No. 200 sieve size. The fine sand (SP), fine sand with silt (SP-SM), and fine sand with clay (SP-SC) soils encountered in the borings) are generally considered suitable for use as backfill materials and compacted subgrade, and with proper moisture control, should densify using conventional compaction methods. Soils with more than 12 percent passing the No. 200 sieve) will be more difficult to compact due to their inherent nature to retain soil moisture. Also, soils removed from below the water table will need time to dry and moisture condition prior to compacting.

All backfill should be placed in level lifts not to exceed 12 inches in uncompacted thickness. Each lift should be compacted to at least 95 percent of the modified Proctor (ASTM D-1557) maximum dry density value. The filling and compaction operations should continue in lifts until the desired elevation(s) is achieved. If hand-held compaction equipment is used, the lift thickness should be reduced to 6 inches.

Dewatering

Control of groundwater will likely be required to achieve the necessary stripping, excavation, proof-rolling, filling, compaction, and any other earthwork, site work, and/or pavement construction operations required for the project. The actual method(s) of dewatering should be determined by the contractor. Dewatering should be performed to lower the groundwater level to depths that are adequately below excavations and compaction surfaces. Adequate groundwater level depths below excavations and compaction surfaces vary depending on soil type and construction method, and are usually 2 feet or more. Dewatering solely with sump pumps may not achieve the desired results.

Lateral Earth Pressures

At-Rest Earth Pressures Acting on Embedded Structures

Lateral loads acting on the embedded structure will include at-rest earth pressures as well as hydrostatic pressures and surcharge loads. The lateral earth pressure will be a function of both the soil unit weight (submerged or moist) and the depth below ground surface. The following equation can be used to determine the lateral at-rest earth pressure:

 $\sigma_h = K_o \gamma_m h$ (above groundwater table)

 $\sigma_h = K_o [\gamma_m h_w + \gamma_b (h - h_w)]$ (below groundwater table)

Where:

 σ_h = lateral earth pressure (psf)

K_o = coefficient of at rest earth pressure (0.5) (this value assumes that the backfill is lightly compacted yet not overcompacted)

 $\gamma_{\rm m}$ = moist unit weight of soil = 105 pcf for compacted moist soil above the water table

 γ_b = buoyant unit weight of soil = 60 pcf for compacted saturated soil below the water table

h = vertical depth (feet) below grade at which lateral earth pressure is determined

h_w = vertical depth (feet) below grade to groundwater table

For design, an appropriate factor of safety should be applied to the lateral earth pressure calculated using the above equation. <u>Lateral pressure distributions determined in accordance with the above do not include hydrostatic pressures or surcharge loads</u>. Where applicable, they should be incorporated in the design.

Earth Pressure on Shoring and Bracing

If shoring and bracing are required for any excavations, the system should be designed to resist lateral earth pressure. The design earth pressure will be a function of the flexibility of the shoring and bracing system. For a flexible system restrained laterally by braces placed as the excavation proceeds, the design earth pressure for shoring and bracing can be computed using a uniform earth pressure distribution with depth. It is recommended that soils be dewatered around the excavations. For such dewatered excavations, we recommended using the following uniform pressure distribution over the full braced height as follows:

Uniform Soil Pressure Distribution, p = 0.65 $K_a \gamma_s H$

Where:

p = uniform pressure distribution for design of braced excavation

K_a = coefficient of active earth pressure = 0.33

 γ_s = unit weight of saturated soils = 115 pcf

H = depth of excavation (feet)

An appropriate factor of safety should be applied for the design of the braced excavations. Lateral pressure distributions determined in accordance with the above do not take hydrostatic pressures or surcharge loads into account. To the extent that such pressures and forces may act on the walls, they should be included in the design.

QUALITY ASSURANCE

We recommend establishing a comprehensive quality assurance program to verify that all site preparation and foundation and pavement reconstruction is conducted in accordance with the appropriate plans and specifications. Materials testing and inspection services should be provided by Ardaman & Associates.

As a minimum, an on-site engineering technician should monitor the excavation to verify that all deleterious materials have been removed and should observe the proof-rolling and proof-compacting operations to verify that the foundation soils are prepared as recommended in this report. In-situ density tests should be conducted during backfilling activities and below all pipe subgrade and pavement areas to verify that the required densities have been achieved. In-situ density values should be compared to laboratory Proctor moisture-density results for each of the different natural and backfill soils encountered.

Finally, we recommend inspecting and testing the construction materials for the culvert pipe and headwalls.

IN-PLACE DENSITY TESTING FREQUENCY

In Southeast Florida, earthwork testing is typically performed on an on-call basis when the contractor has completed a portion of the work. The test result from a specific location is only representative of a larger area if the contractor has used consistent means and methods (compactive effort, i.e., number of passes, compaction equipment, and lift thickness) and the soils are practically uniform throughout. The frequency of testing can be increased, and full-time construction inspection can be provided to account for variations. We recommend that the following minimum testing frequencies be utilized.

In-situ density tests should be conducted during bedding and backfilling to verify that the required densities have been achieved. In-situ density values should be compared to laboratory Proctor moisture-density results for each of the different natural and fill soils encountered. Backfill for the proposed culverts should be tested at a minimum frequency of one in-place density test for each 12-inch lift adjacent to and on both sides of the pipe.

Representative samples of the various natural ground and fill soils should be obtained and transported to our laboratory for Proctor compaction tests. These tests will determine the maximum dry density and optimum moisture content for the materials tested and will be used in conjunction with the results of the in-place density tests to determine the degree of compaction achieved.

CLOSURE

The analyses and recommendations submitted herein are based on the data obtained from the soil borings presented on Figure 2 and in the Appendix. This report does not reflect any

variations which may occur adjacent to or between the borings or in unexplored areas of the construction site. The nature and extent of the variations between the borings may not become evident until during construction. If variations then appear evident, it will be necessary to reevaluate the recommendations presented in this report after performing on-site observations during the construction period and noting the characteristics of the variations.

This report has been prepared for the exclusive use of Stephen Cooper, P.E. & Associates, Inc. in accordance with generally accepted geotechnical engineering practices. In the event any changes occur in the design, nature or location of the proposed culvert structure, we should review the applicability of conclusions and recommendations in this report. We recommend a general review of final design and specifications by our office to verify that earthwork and foundation recommendations are properly interpreted and implemented in the design specifications. Ardaman & Associates should attend the pre-bid and preconstruction meetings to verify that the bidders/contractor understand the recommendations contained in this report.

We are pleased to be of assistance to you on this phase of the project. When we may be of further service to you or should you have any questions, please contact us.

ARDAMAN & ASSOCIATES, INC.

Florida Certificate of Authorization No. 5950

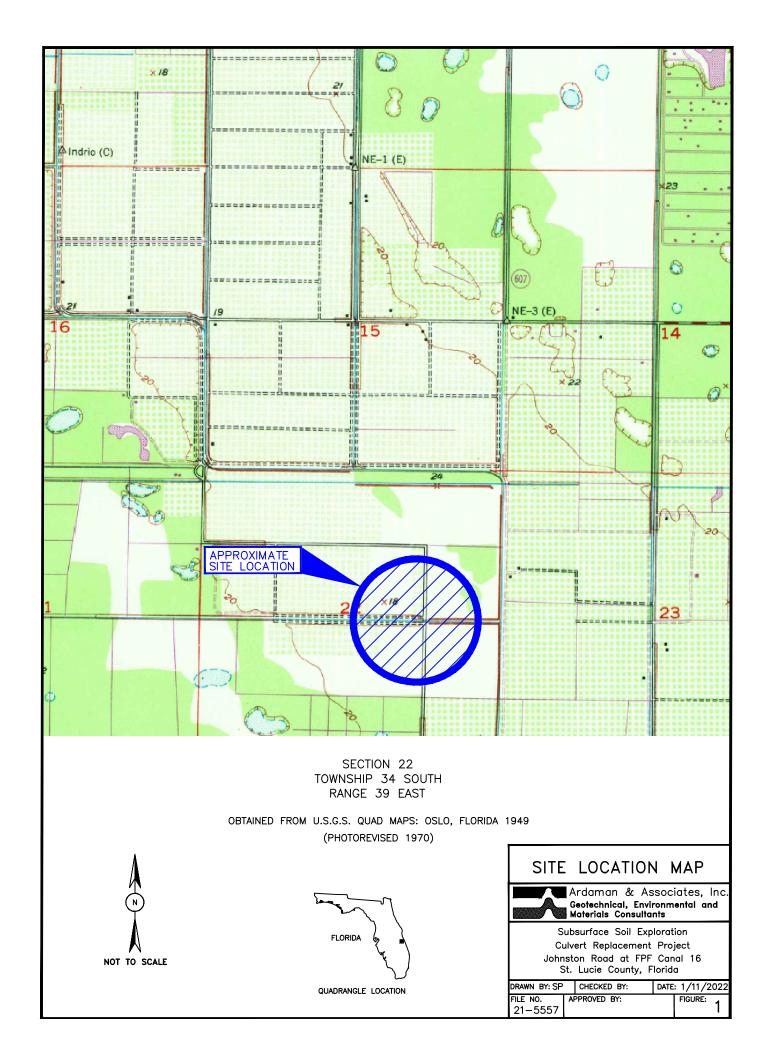
Sharmila Pant

Assistant Project Engineer

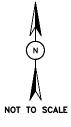
Jason P Manning, P.E

Branch Manager

Florida License No. 53265







STANDARD PENETRATION TEST (SPT) BORING LOCATION

AUGER BORING LOCATION

BORING LOCATION MAP



👅 Ardaman & Associates, Inc. Geotechnical, Environmental and Materials Consultants

Subsurface Soil Exploration Culvert Replacement Project Johnston Road at FPF Canal 16 St. Lucie County, Florida

DRAWN BY: SP		CHECKED BY:	DATE	ATE: 1/11/2022				
FILE NO.	A	PPROVED BY:		FIGURE:				

21-5557

APPENDIX

Boring Profiles

Lab Report

Drilling Procedures

STANDARD PENETRATION TEST BORING LOG BORING B-1

PROJECT: Proposed Culvert Replacement Project

Johnston Road at FPF Canal 16, St. Lucie County, Florida

BORING LOCATION: As per Boring Location Plan.

DRILL CREW: Centerline

WATER OBSERVED AT DEPTH 5 feet

DATE DRILLED: 12/15/21

FILE No.: 21-5557

DEPTH	SYMBOLS	SOIL DESCRIPTION	SAMPLE	N	N VALUE		
(FEET)	FIELD TEST DATA	SOIL DESCRIPTION	No.	VALUE	\$1000000000000000000000000000000000000		
	3/6 5/6 10/6 14/6	Brown fine sand [SP], few shell and limestone fragments, trace clay	. 1	15			
	13/6 18/6 18/6 16/6	Gray slightly clayey fine sand [SP-SC], few shell fragments	2	36			
5 —	10/6 7/6 7/6 9/6		3	14			
+ +	8/6 8/6 6/6 5/6 3/6	Gray fine sand [SP], few shell fragments, trace wood/roots	4	14	Ö		
10 —	5/6 6/6 4/6	Gray clayey fine sand [SC] [-200:14.3%, NM:18.5%]	. 5	11	3		
15 —	6/6 5/6 5/6 6/6	Gray fine sand [SP], few shell fragments	6	10	0		
20 —	5/6 15/6 15/6 15/6 15/6 15/6 15/6	Dark brown slightly silty fine sand [SP-SM]	7	10			
+	71 12 12 12 12 12 12 12 12 12 12 12 12 12	Gray fine sand [SP], some small shell fragments	8	35			
25 — — — — — — — — — — — — — — — — — — —	<u> </u>	Boring terminated at 25-feet.					

NOTES:

FIELD TEST DATA ARE "BLOWS"/"INCHES DRIVEN" 140-LB HAMMER, 30-INCH FALL. (ASTM D-1586)

_____ Ardaman & Associates, Inc. ___

STANDARD PENETRATION TEST BORING LOG BORING B-2

PROJECT: Proposed Culvert Replacement Project

Johnston Road at FPF Canal 16, St. Lucie County, Florida

BORING LOCATION: As per Boring Location Plan.

DRILL CREW: Centerline

WATER OBSERVED AT DEPTH 5.5 feet

DATE DRILLED: 12/15/21

FILE No.: 21-5557

DEPTH	SYMBOLS	SOIL DESCRIPTION	SAMPLE	N	N VALUE			
(FEET)	FIELD TEST DATA	SOIL DESCRIPTION	No.	VALUE	\$ 100 100 100 100 100 100 100 100 100 100			
0	8/6 8/6 9/6 11/6	Brown fine sand [SP], few shell fragments, roots, & trace clay	1	17	٥			
	10/6 10/6 9/6 11/6		2	39				
5 —	8/6 11/6 12/6 10/6	Gray slightly clayey fine sand [SP-SC], few shell fragments	3	23				
	9/6 13 1 1 1 1 8/6 13 1 1 1 1 1 8/6 9/6 15 1 1 1 1 1 8/6 17/6	Yellowish brown fine sand [SP] to slightly silty fine sand [SP-SM]	4	17				
10 —	7/6 7/6 7/6 7/6	Gray clayey fine sand [SC], some small shell fragments	5	14				
15	6/6 8/6 6/6 9/6	Gray fine sand [SP], few shell fragments	6	14	74			
20 —	4/6 3/6 5/6 3/6	Dark brownish fine sand [SP] to slightly clayey fine sand [SP-SC]	7	8				
-	10/6 13/6 17/6 17/6	Gray fine sand [SP], few to some small shell fragments	8	30				
25 + + + + + + + + + + + + + + + + + + +		Boring terminated at 25-feet.						

NOTES:

FIELD TEST DATA ARE "BLOWS"/"INCHES DRIVEN" 140-LB HAMMER, 30-INCH FALL. (ASTM D-1586)

_____ Ardaman & Associates, Inc. ___

HAND AUGER BORING LOG

BORING AB-1

FILE No.: 21-5557

DATE DRILLED: 12/17/21

PROJECT: Proposed Culvert Replacement Project

Johnston Road at FPF Canal 16, St. Lucie County, Florida

BORING LOCATION: As per Boring Location Plan.

DRILL CREW: Centerline

WATER OBSERVED AT DEPTH 5 feet

DEPTH	SYMBOL	SOIL DESCRIPTION	SAMPLE No.
0 —		Brown fine sand [SP], few shell fragments & trace clay	1
5—	<u>—</u>	Gray fine sand [SP] to slightly clayey fine sand [SP-SC], trace shell fragments	2
			3
_		Boring terminated at 7-feet.	
10—			
+			
_			
15—			

NOTES:

Ardaman & Associates, Inc.

HAND AUGER BORING LOG

BORING AB-2

FILE No.: 21-5557

DATE DRILLED: 12/17/21

PROJECT: Proposed Culvert Replacement Project

Johnston Road at FPF Canal 16, St. Lucie County, Florida

BORING LOCATION: As per Boring Location Plan.

DRILL CREW: Centerline

WATER OBSERVED AT DEPTH 5 feet

SAMPLE DEPTH SYMBOL SOIL DESCRIPTION No. Brown fine sand [SP], & trace clay Gray fine sand [SP] to slightly clayey fine sand [SP-SC], trace shell fragments & gravel Brown fine sand [SP] Boring terminated at 8-feet. 10

NOTES:

Ardaman & Associates, Inc.



> Phone: (561)575-0030 Fax: (561)575-4118 www.jupiterlabs.com clientservices@jupiterlabs.com

January 6, 2022

Sharmila Pant 460 NW Concourse PI Port Saint Lucie, FL 34986

RE: LOG# 2177556

Project ID: Johnston Rd Culvert

Dear Sharmila Pant:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, December 20, 2021. Results reported herein conform to the most current NELAC standards, where applicable, unless indicated by * in the body of the report. The enclosed Chain of Custody is a component of this package and should be retained with the package and incorporated therein.

Results for all solid matrices are reported in dry weight unless otherwise noted. Results for all liquid matrices are reported as received in the laboratory unless otherwise noted. Results relate only to the samples received. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

Samples are disposed of after 30 days of their receipt by the laboratory unless extended storage is requested in writing. The laboratory maintains the right to charge storage fees for archived samples. This report will be archived for 5 years after which time it will be destroyed without further notice, unless prior arrangements have been made.

Certain analyses are subcontracted to outside NELAC certified laboratories, please see the Project Summary section of this report for NELAC certification numbers of laboratories used. A Statement of Qualifiers is available upon request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Taylor Tripodi for Kacia Baldwin

kaciab@jupiterlabs.com

Jaylor Tripodi

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited FDOH# E86546 CERTIFICATE OF ANALYSIS

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Page 1 of 13



Jupiter, FL 33458

Phone: (561)575-0030 Fax: (561)575-4118

SAMPLE ANALYTE COUNT

Workorder: 2177556

Project ID: Johnston Rd Culvert

Lab ID	Sample ID	Method	Analytes Reported
2177556001	SS-1	EPA 120.1	1
		EPA 9038	1
		EPA 9045	1
		SM 2540G	1
		SM 4500-CI E	1
2177556002	SW-1	ASTM D516-90	1
		EPA 120.1	1
		EPA 150.1	1
		SM 4500-CL E	1

Report ID: 2177556 - 3302834 1/6/2022

NELAP Accredited FDOH# E86546 CERTIFICATE OF ANALYSIS





> Phone: (561)575-0030 Fax: (561)575-4118

SAMPLE SUMMARY

Workorder: 2177556

Project ID: Johnston Rd Culvert

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2177556001	SS-1	Soil/Solid	12/17/2021 00:00	12/20/2021 09:10
2177556002	SW-1	Aqueous Liquid	12/17/2021 00:00	12/20/2021 09:10

Report ID: 2177556 - 3302834 1/6/2022

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ANALYTICAL RESULTS

Workorder: 2177556

Project ID: Johnston Rd Culvert

Lab ID: 2177556001 Date Received: 12/20/2021 09:10 Matrix: Soil/Solid

Sample ID: **SS-1** Date Collected: 12/17/2021 00:00

Parameters Results Units PQL MDL DF Prepared By Analyzed By Qual

Analysis Desc: Resistivity by EPA 120.1 (W) [REF] (W) Analytical Method: EPA 120.1

Resistivity 12000 ohm-cm 1 12/27/2021 12:25 LI

Analysis Desc: Corrosivity (pH) by EPA 9045 Analytical Method: EPA 9045

Corrosivity (pH) 8.42 -log[H+] 1 12/20/2021 11:20 LI

Analysis Desc: Chloride in Solids Preparation Method: Wet Chem Prep

Analytical Method: SM 4500-CI E

Analytical Method: EPA 9038

Chloride U mg/Kg 57 28.6 1 1/4/2022 17:30 BFM 1/4/2022 18:23 BFM

Analysis Desc: Sulfate in Solids Preparation Method: Wet Chem Prep

Sulfate 25i mg/Kg 34 11.4 1 1/4/2022 17:31 BFM 1/4/2022 18:24 BFM

Wet Chemistry

Analysis Desc: 2540G Percent Solids (Dryweight)

Analytical Method: SM 2540G

Percent Solids (Dryweight)

87.5 %

0.1

1 12/21/2021 15:13 EVA

Report ID: 2177556 - 3302834 1/6/2022

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FDOH# E86546
CERTIFICATE OF ANALYSIS





> Phone: (561)575-0030 Fax: (561)575-4118

ANALYTICAL RESULTS

Workorder: 2177556

Project ID: Johnston Rd Culvert

Lab ID: 2177556002 Date Received: 12/20/2021 09:10 Matrix: Aqueous Liquid

Sample ID: **SW-1** Date Collected: 12/17/2021 00:00

Parameters	Results Units	PQL	MDL	DF Prepared	Ву	Analyzed	Ву	Qual
Analysis Desc: Resistivity	by EPA 120.1 [REF] (W)		Α	nalytical Method: EPA	120.1			
Resistivity	430 ohm-cm			1		12/27/2021 1	2:25 LI	
Analysis Desc: pH by EPA	A 150.1		А	nalytical Method: EPA	150.1			
рН	6.75 su	0.01		1		12/20/2021 1	1:05 LI	Q1
Analysis Desc: Chloride b	y 4500-CL E (W)		Р	reparation Method: W	et Chem	Prep		
			А	nalytical Method: SM	4500-CL	E		
Chloride	720 mg/L	91	30.4	20 12/27/2021 1	7:06 DB	12/27/2021 1	8:23 BFN	И

Chloride 720 mg/L 91 30.4 20 12/27/2021 17:06 DB 12/27/2021 18:23 BFM

Analysis Desc: ASTM D516-90 Sulfate (W)

Preparation Method: Wet Chem Prep

Analytical Method: ASTM D516-90

Sulfate 140 mg/L 30 10.0 10 12/23/2021 11:14 DB 12/23/2021 11:58 DB

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited FDOH# E86546 CERTIFICATE OF ANALYSIS





> Phone: (561)575-0030 Fax: (561)575-4118

ANALYTICAL RESULTS QUALIFIERS

Workorder: 2177556

Project ID: Johnston Rd Culvert

PARAMETER QUALIFIERS

Q1 Sample received past/too close to the accepted holding time.

PROJECT COMMENTS

2177556

A reported value of U indicates that the compound was analyzed for but not detected above the MDL. A value flagged with an "i" flag indicates that the reported value is between the laboratory method detection limit and the practical quantitation limit.

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited FDOH# E86546 CERTIFICATE OF ANALYSIS





> Phone: (561)575-0030 Fax: (561)575-4118

QUALITY CONTROL DATA

EPA 150.1

Workorder: 2177556

Project ID: Johnston Rd Culvert

QC Batch: WPH/2468 Analysis Method:

QC Batch Method: EPA 150.1

Associated Lab Samples: 2177556002 2177559001 2177559002

SAMPLE DUPLICATE: 243535 Original: 2177559002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
nH	SII	7 04	7.03	0.14	5	

Report ID: 2177556 - 3302834

1/6/2022

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Phone: (561)575-0030 Fax: (561)575-4118

QUALITY CONTROL DATA

Workorder: 2177556

Project ID: Johnston Rd Culvert

QC Batch: WXX/8175 Analysis Method: ASTM D516-90

QC Batch Method: Wet Chem Prep

Associated Lab Samples: 2177530001 2177530002 2177530003 2177530004 2177530005 2177556002

2177588001 2177588002 2177588003 2177588004 2177588005

METHOD BLANK: 243868

Parameter Units Result Limit Qualifiers

Sulfate mg/L U 1.0

LABORATORY CONTROL SAMPLE & LCSD: 243869 243870

Spike LCS **LCSD** LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limit **RPD RPD** Qualifiers Sulfate mg/L 15 15 15 101 99.2 85-115 0 20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 243894 243895 Original: 2177530001

Spike MS MSD MS MSD Original % Rec Max Parameter Units Result Conc. Result Result % Rec % Rec Limit RPD RPD Qualifiers Sulfate 0.28 85-115 mg/L 15 16 17 108 109 6.1 20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 243896 243897 Original: 2177588001

Original Spike MS MSD MS MSD % Rec Max Limit RPD RPD Parameter Units Result Conc. Result Result % Rec % Rec Qualifiers Sulfate mg/L 0.14 15 15 15 102 102 85-115 0 20

SAMPLE DUPLICATE: 243871 Original: 2177530001

Original DUP Max Parameter Units Result **RPD RPD** Qualifiers Result Sulfate mg/L U U 0 20

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited FDOH# E86546 CERTIFICATE OF ANALYSIS





Phone: (561)575-0030

Fax: (561)575-4118

QUALITY CONTROL DATA

Workorder: 2177556

Project ID: Johnston Rd Culvert

QC Batch: WXX/8179 Analysis Method: SM 4500-CL E

QC Batch Method: Wet Chem Prep

Associated Lab Samples: 2177556002 2177588001 2177588002 2177588003 2177588004 2177588005

METHOD BLANK: 244054

Parameter Units Result Limit Qualifiers

Chloride mg/L U 1.5

LABORATORY CONTROL SAMPLE & LCSD: 244055 244056

Spike LCS LCSD LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limit **RPD** RPD Qualifiers Chloride 25 27 mg/L 26 107 106 85-115 3.8 20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 244058 244059 Original: 2177588001

Spike MS MSD MS MSD % Rec Original Max Limit RPD RPD Parameter Result Conc. Result % Rec % Rec Qualifiers Units Result mg/L Chloride 0.37 25 25 99.6 97.7 85-115 0 20

SAMPLE DUPLICATE: 244057 Original: 2177556002

DUP Original Max Parameter Units Result Result RPD **RPD** Qualifiers Chloride 0 mg/L 720 720 20

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited FDOH# E86546 CERTIFICATE OF ANALYSIS





> Phone: (561)575-0030 Fax: (561)575-4118

QUALITY CONTROL DATA

SM 4500-CI E

Workorder: 2177556

Project ID: Johnston Rd Culvert

QC Batch: WXX/8189 Analysis Method:

QC Batch Method: Wet Chem Prep
Associated Lab Samples: 2177556001

METHOD BLANK: 244517

Blank Reporting

Parameter Units Result Limit Qualifiers

Chloride mg/Kg U 25

LABORATORY CONTROL SAMPLE & LCSD: 244518 244519

LCS Spike LCSD LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limit **RPD** RPD Qualifiers Chloride 0 20 mg/Kg 250 250 250 100 99.4 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 244521 244522 Original: 2177556001

Original Spike MS MSD MS MSD % Rec Max Limit RPD RPD Parameter Units Result Conc. % Rec % Rec Qualifiers Result Result Chloride mg/Kg 14 250 260 99.5 90.1 80-120 8 20

SAMPLE DUPLICATE: 244520 Original: 2177556001

DUP Original Max Parameter Units Result Result RPD **RPD** Qualifiers Chloride U U 0 20 mg/Kg

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited
FDOH# E86546
CERTIFICATE OF ANALYSIS





EPA 9038

Phone: (561)575-0030 Fax: (561)575-4118

Jupiter, FL 33458



QUALITY CONTROL DATA

Analysis Method:

Workorder: 2177556

QC Batch Method:

Project ID: Johnston Rd Culvert

QC Batch: WXX/8190

Wet Chem Prep 2177556001 Associated Lab Samples:

METHOD BLANK: 244525

Blank Reporting

Parameter Units Result Limit Qualifiers

Sulfate U 10 mg/Kg

LABORATORY CONTROL SAMPLE & LCSD: 244526 244527

LCS Spike LCSD LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limit **RPD** RPD Qualifiers 0 20 Sulfate mg/Kg 150 150 150 97.9 97.2 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 244529 244530 Original: 2177556001

Original Spike MS MSD MS MSD % Rec Max Parameter Result Conc. % Rec % Rec Limit RPD RPD Qualifiers Units Result Result Sulfate mg/Kg 22 150 200 190 80-120 5.1 118 115 20

Original: 2177556001 SAMPLE DUPLICATE: 244528

DUP Original Max Parameter Units Result Result RPD **RPD** Qualifiers P1 Sulfate mg/Kg 22 40 45.6 20

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited FDOH# E86546





> Phone: (561)575-0030 Fax: (561)575-4118

QUALITY CONTROL DATA QUALIFIERS

Workorder: 2177556

Project ID: Johnston Rd Culvert

QUALITY CONTROL PARAMETER QUALIFIERS

P1 RPD value not applicable for sample concentrations less than 5 times the PQL.

Q1 Sample received past/too close to the accepted holding time.

Report ID: 2177556 - 3302834

1/6/2022

NELAP Accredited FDOH# E86546 **CERTIFICATE OF ANALYSIS**





Phone: (561)575-0030 Fax: (561)575-4118

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 2177556

Project ID: Johnston Rd Culvert

Lab ID Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2177556002 SW-1	EPA 150.1	WPH/2468		
2177556001 SS-1	EPA 9045	WPH/2469		
2177556001 SS-1	SM 2540G	WGR/5295		
2177556002 SW-1	Wet Chem Prep	WXX/8175	ASTM D516-90	WET/8952
2177556001 SS-1	EPA 120.1	WPH/2471		
2177556002 SW-1	EPA 120.1	WPH/2471		
2177556002 SW-1	Wet Chem Prep	WXX/8179	SM 4500-CL E	WET/8973
2177556001 SS-1	Wet Chem Prep	WXX/8189	SM 4500-CI E	WET/8968
2177556001 SS-1	Wet Chem Prep	WXX/8190	EPA 9038	WET/8969

Report ID: 2177556 - 3302834

1/6/2022





Jupiter Environmental Laboratories, Inc.

www.jupiterlabs.com 150 S. Old Dixie Highway, Jupiter, FL 33458 (561) 575-0030 • (888) 287-3218 • clientservices@jupiterlabs.com

J.E.L. Log # 2177554 P.O. # _____ Quote # _____

Company Name Ardaman & Asuciates.						L	ABA	NALY	SIS			Requested Turnaround Time
Address 460 NW Concer			Proc	Codes								Note: Rush requests subject to acceptance by the laboratory
City Port St. Luice State	PL zip 34986										Z	Standard
	Sampling Site Address Johnston Rd Attn: Sharmila Pant Email Spant-Qarduman . Col Project Johnston Rd Culvert. Bampler Name/Signature William Cornelius!!				1) p	Expedited
Attn: Sharmila Pant	Email SPant	Cardun	van .Com								Filtered (Y/N)	Expedited
Project Johnston Rd Culver-	i# / //	// /			14/10						崖	Due//
Sampler Name/Signature William Corne	100000	1 OID		Corner	3						Field	
# Sample Label (Client ID)	Collected Collected Date Time	245	# of Cont	3								Comments
1 5/5-1	12-17-21	5	1	V								
_25W-1	12-17-21	GW	2	V								
_3												m 1 2 2 2
4												
5												
6												
_7												
_8												
9												
_0												
Matrix Codes*	Pres Code	S Relinqu	ished by	^		Da	ate	Time	Received by			Date Time
S Soil/Solid Sediment SW Surface Water Ground Water SL Sludge WW Waste Water O Other (Please DW Drinking Water	B- HNO, O- Othe	OH S.O. \	Chi	1	al (loo looks	9:10	5	2	2	M 12/24/21 8:65
QA/QC level with report None1_2_3 See price	guide for applicable fees		7	we)eC		12001	7.	14			12/20/21 9/0
FDEP Dry Cleaning FDEP UST Pre-Ap	Temp Control:											

SAMPLE RECEIPT CONFIRMATION SHEET

Cooler Check

		# of	Arrived	Security	y Tape		
ID	Temp (C)		on Ice	Present	Intact	Comments	Temp Gun ID
	4.5	2	~				Temp Gun 2

Checked By: LI

Sample Verification								
Loose Caps?	No	All Samples on COC accounted For?	Yes					
Broken Containers?	No	All Samples on COC?	Yes					
pH Verified?	No	Written on Internal COC?	No					
pH Strip Lot #		Sample Vol. Suff. For Analysis?	Yes					
Acid Preserved Samples Lot#		Samples Rec'd W/I Hold Time?	Yes					
Base Preserved Samples Lot #		Are All Samples to be Analyzed?	Yes					
Samples Received From	courier	Correct Sample Containers?	Yes					
Soil Origin (Domestic/Foreign	Domestic	COC Comments written on COC?	No					
Site Location/Project on COC?	Yes	Samplers Initials on COC?	Yes					
Client Project # on COC?	Yes	Sample Date/Time Indicated?	Yes					
Project Mgr. Indicated on COC	Yes	TAT Requested:	STD					
COC relinquished/Dated by Client?	Yes	Client Requests Verbal Results?	No					
COC Received/Dated by JEL	Yes	Client Notified of discrepancies?	No					
JEL to Conduct ALL Analyses?	Yes	Do VOC vials have headspace or a bubble <6mm (1/4")?	N/A					
Number of Encores	0	Number of Lab Filtered Metals	0					

Subcontract Analysis

Parameter Via Lab Name Comments

			R	HA	est est	Form	#	2			
Jupiter	PH: 56		150 S. O	VIRONM LD DIXII	HWY J	UPITER	FL 33458	3			
12/11/21	I An	PH: 561-575-0030 FX: 561-575-4118 E: CLIENTSERVICES@JUPITERLABS.COM						1			
Date		Client			Project						
Sharmila		17287	KON	12	(SPU	n+ 10	Dac	daw	which	
Contact		PH/Fx			Email		116	ou	1.00	word 5017	
12/18/21	HEN	MTWI	h)F	AM PM	- 2	Dro	p) UPS;	FXgrnd;	8am; 10	Oam; other	
Date required Shipping address		\									
MUST have client PHONE		1	T	1		-					
Client or Clie	nt PM complete t	nis section					ps this pag		with COC	or chemilian could be considered to the could be	
dissolved (FF or LF)	or wells: Trip Blank	Water Soil	Pre- preserved	# bottles per station	total # bottles for kit	Volume	Plastic Glass	# Low Level Soil Kits	Total # Encores	Preservation (circle)	
CUYTOSIVIM	1	(w) s	Y (N)	2	2.	125	ρ			C S N H B Z Na T	
		w (s)	Y (N	1		402	jar			C S N H B Z Na T	
		W S	YN				0			C S N H B Z Na T	
		W S	Y N							C S N H B Z Na T	
		W S	Y N							C S N H B Z Na T	
		W S	Y N							C S N H B Z Na T	
		W S	Y N							C S N H B Z Na T	
		W S	Y N							C S N H B Z Na T	
		W S	Y N							C S N H B Z Na T	
		W S	Y N							C S N H B Z Na T	
		W S	Y N							C S N H B Z Na T	
		W S	Y N		,					C S N H B Z Na T	
		W S	Y N							C S N H B Z Na T	
		W S	Y N							C S N H B Z Na T	
CIRCLE	TYPE of PROJE	CT:	YN		H . 4	1 1924	an in the same			C S N H B Z Na T	
Foreign Soil FDEP			DoD	B sodi	um hydroxic	le(NaOH)	Z zinc ace	tate + NaOH	Na = Sodn	d (HNO3) H-hydrochloric acid (HC1) um Thiosulfate (Na2S2O3) T-Trizma Filtered (LF) provide unpreserved bottles	
ircle fill in: Filters: dro	pppers Bubble wrap	COC	Coolers:	sm	med	lg				Custody seals/ other	
Frip Blank: Date Prepared		Initials	PF	AS - Blank	ID#_	Bott	le Lot#		Preserva	tive Lot#	
Equipment Rental:									Anna de Maria		
Acid #: HCI: HNO _{3:} NOTES:	H ₂ SO _{4:} HCl dr	oppers: N	NaOH:	Na ₂ S ₂ O ₃ :							
chle	oride, si	Ifate	, re	sisti	ivity	l, plt					
If Foreign Soil	kit - Check here tl		5 2 00			/		e to be sub	mitted and	a copy of the soil permit enclosed for	
Shippment back Order prepared By:	to lab.					- 11		nc			
recor prepared by:		<u>CLIENT</u> :	o comply w	th NELAC F	Kit prepar DOH regula	tions please	adhere to the	e following		Kit # (if applicable)	
		MUST be retur Re est kits and dow	eturn a copy	of this doci	ument with	your samp	oles and CO	C			
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ID: 1083 Revision: 2 Legacy DCN:

Issued By: Effective:

STANDARD PENETRATION TEST

The standard penetration test is a widely accepted test method of *in situ* testing of foundation soils (ASTM D 1586). A 2-foot long, 2-inch O.D. split-barrel sampler attached to the end of a string of drilling rods is driven 18 inches into the ground by successive blows of a 140-pound hammer freely dropping 30 inches. The number of blows needed for each 6 inches of penetration is recorded. The sum of the blows required for penetration of the second and third 6-inch increments of penetration constitutes the test result or N-value. After the test, the sampler is extracted from the ground and opened to allow visual examination and classification of the retained soil sample. The N-value has been empirically correlated with various soil properties allowing a conservative estimate of the behavior of soils under load.

The tests are usually performed at 5-foot intervals. However, more frequent or continuous testing is done by our firm through depths where a more accurate definition of the soils is required. The test holes are advanced to the test elevations by rotary drilling with a cutting bit, using circulating fluid to remove the cuttings and hold the fine grains in suspension. The circulating fluid, which is a bentonitic drilling mud, is also used to keep the hole open below the water table by maintaining an excess hydrostatic pressure inside the hole. In some soil deposits, particularly highly pervious ones, NX-size flush-coupled casing must be driven to just above the testing depth to keep the hole open and/or prevent the loss of circulating fluid.

Representative split-spoon samples from the soils at every 5 feet of drilled depth and from every different stratum are brought to our laboratory in air-tight jars for further evaluation and testing, if necessary. Samples not used in testing are stored for 30 days prior to being discarded. After completion of a test boring, the hole is kept open until a steady state groundwater level is recorded. The hole is then sealed, if necessary, and backfilled.

HAND AUGER BORING

Hand auger borings are used, if soil conditions are favorable, when the soil strata are to be determined within a shallow (approximately 5 foot) depth, or when access is not available for our truck-mounted drilling equipment. A 3-inch diameter hand bucket auger with a cutting head is simultaneously turned and pressed into the ground. The bucket auger is retrieved at approximately 6-inch increments and its content emptied for inspection. Sometimes post-hole diggers are used, especially in the upper 3 feet or so. The soil samples obtained are described and representative samples put in jars or bags and transported to the laboratory for further classification and testing, if necessary.