

CCNA2018 WORK ORDER 08

Central WWTF Sludge Tank Odor Control Facility

This Work Order Number 08 is entered into as of this ___ day of _____, 202_, pursuant to that certain Continuing Consulting Engineering Services Agreement for Professional Services entered into as of this 17th day of April, 2018 (collectively referred to as the "Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Atkins ("Consultant").

The COUNTY has selected the Consultant to perform the professional services set forth on Exhibit A (Scope of Work) attached to this Work Order and made part hereof by this reference. The professional services will be performed by the Consultant for the fee schedule set forth in Exhibit B (Fee Schedule), attached to this Work Order and made a part hereof by this reference. The Consultant will perform the professional services within the timeframe more particularly set forth in Exhibit C (Time Schedule), attached to this Work Order all in accordance with the terms and provisions set forth in the Agreement. Pursuant to Paragraph ¼ of the Agreement, nothing contained in any Work Order shall conflict with the terms of the Agreement and the terms of the Agreement shall be deemed to be incorporated in each individual Work Order as if fully set forth herein.

IN WITNESS WHEREOF, the parties hereto have executed this Work Order as of the date first written above.

CONSULTANT:

**BOARD OF COUNTY COMMISSIONERS
OF INDIAN RIVER COUNTY**

By: 

By: _____
Joseph H. Earman, Chairman

Print Name: Chris Rader, PE

Title: Sr. Division Manager

BCC Approved Date: _____

Attest: Jeffrey R. Smith, Clerk of Court and Comptroller

By: _____
Deputy Clerk

Approved: _____
Jason E. Brown, County Administrator

Approved as to form and legal sufficiency: _____
Dylan T. Reingold, County Attorney

**INDIAN RIVER COUNTY UTILITIES DEPARTMENT
WORK ORDER No. 8
Exhibit A: SCOPE OF SERVICES
Central WWTF Sludge Tank Odor Control Facility**

Background

In March 2022, Indian River County Utilities Department (County) requested that Atkins (Consultant) provide technical services to design an odor control system for the sludge holding tank at the Central (Gifford) WWTF. The original odor control facility at this location was demolished in 2012 as part of the *Central Wastewater Treatment Facility Sludge Handling Facility Modifications Project* and was not replaced due to budget constraints. However, the adjacent land is being developed and the County would like to ensure that any potential odor issues associated with the sludge holding tanks are addressed.

To determine the scope of services required, Atkins visited the Central WWTF on March 25 and discussed the anticipated improvements at the existing facility with County Staff. During that site visit, it was determined that the integrity of existing odor control fiberglass reinforced piping (FRP) had been compromised and would require replacement. In addition, it was determined that there was sufficient space to locate the odor control facility on either side of the sludge holding tank.

Scope of Services

This Scope of Services is for technical services associated with the design of an odor control facility for the Central WWTF Sludge Holding Tank. Upon Notice to Proceed, the Consultant will provide professional services associated with improvements. The design services will culminate in Contract Bid Documents and will include permitting and bidding services.

Task 01 Project Management

a. General Project Administration

This task consists of overall management of the Project including contract administration, budget management, invoicing, monthly status reports, project scheduling, facilitating and coordinating internal design meetings, and coordination with the Consultant's subconsultants.

b. Meetings

Consultant will facilitate three in-person submittal review workshops and up to six virtual project progress meetings with the County, including scheduling, preparing agendas and distributing meeting minutes.

Task 02 Survey

a. Survey

Surveying will be provided by the Consultant's in-house surveying crew. The survey will be utilized to verify the elevations of existing grade and elements

associated with the sludge tanks and odor control piping and pipe supports at the Central WWTF Sludge Tanks.

Task 03 Preliminary Design Report

a. Draft Preliminary Design Report

The Consultant will prepare a Preliminary Design Report (PDR) containing process flow diagrams, preliminary equipment layouts and equipment cutsheets, and preliminary electrical one-line diagrams. Upon submittal, the Consultant will schedule a review meeting with County Staff. The Consultant will prepare a meeting agenda and up to three members of the Consultant's Team will attend the Workshop. Meeting notes will be taken by the Consultant and distributed within three (3) days of the review meeting.

b. Final Preliminary Design Report

Following the Workshop, the PDR will be updated to address review comments. One (1) electronic copy and two (2) hard copies of the Final PDR, along with an electronic version of a spreadsheet showing adjudication of Client review comments, will be provided to the County PM for distribution.

Task 04 Final Design

a. 90% Contract Documents

The Consultant will prepare and submit 90% construction documents. The construction documents will consist of the following:

- Up to 20 technical specification sections inclusive of Division 1 and technical specifications.
- Up to 25 design drawings including general, mechanical process, structural, electrical, and instrumentation and control disciplines. The list of drawings are provided in Exhibit A.

A draft Bid Form and Consultant's opinion of probable cost will be submitted with the construction documents.

The Consultant will provide one (1) electronic copy and four (4) draft hard copies to the County PM for distribution and review. Upon the submittal of the 90% Design Documents, the Consultant will schedule an in-person meeting to discuss review comments with the County PM and Plant Staff. Consultant will prepare a meeting agenda and up to four members of the Consultant's Team will attend the meeting. Meeting notes will be taken by the Consultant and distributed within three (3) days of the review meeting.

b. 100% Contract Documents

The Consultant shall address comments from the 90% contract documents Review Meeting and will prepare and submit 100% construction documents, consisting of the following:

- One (1) copy of a summary of the Consultant's responses to comments provided during the 90% review meeting.
- Four (4) hard copies and one (1) electronic copy in PDF format of the signed and sealed Construction Documents.
- One (1) copy of the updated Consultant's revised OPCC and Bid Form.

Task 05 Bidding Support Services

a. Pre-bid Meeting

Consultant will attend a pre-bid meeting scheduled by the County and present technical information, project details and all information prudent to bidders.

b. RFI/Addendum

Consultant will consider written questions from bidders related to the Project and prepare all addenda as required to interpret, clarify or expand the Contract Documents. Submit maximum of two (2) addenda to County Project Manager in a timely manner that allows reception of addenda by all bidders with the final addendum to be provided no later than a minimum of five (5) days prior to bid opening date.

c. Bid Recommendation

Then Consultant will review the Contractor's bid submittals and make a recommendation to the County.

Deliverables

Task	Deliverable
1	Project Management
2	Survey
3	Preliminary Design Report
4	Final Design
5	Bidding Support Services

Schedule

The anticipated schedule shown below is based on the weeks after the formal issuance of the notice to proceed by County:

Task	Duration from NTP
Project Kick-Off Meeting	2 weeks
Begin Survey Activities	6 weeks
Data Collection and Review	4 weeks
Draft Preliminary Design Report	12 weeks

Task	Duration from NTP
Review Meeting	14 weeks
Final Preliminary Design Report	17 weeks
90% Design	26 weeks
Review Meeting	28 weeks
Final Design – Bid Documents	32 weeks
Bidding Support Services	TBD

Quality Control

Consultant will be responsible for the professional quality of all deliverables. This shall include an internal Quality Assurance Plan that, as a minimum, provides review of all deliverables and significant calculations by another qualified professional that was not responsible for preparing the deliverable or calculation.

Assumptions

The following assumptions have been made in the development of this scope of work, schedule, and fee:

General

- The record drawings, “as-builts,” calculations, and information on any upgrades for the sludge holding tank and I&C system are available and will be furnished to consultant.
- The design will be based on the federal, state, and local codes and standards in effect at the start of the project. Any changes in these codes may necessitate a change in scope.
- The drawings will follow Atkins CAD standards. Atkins master specifications will be used as the basis for Division 1 and all technical specifications.
- County Staff will provide Division 0 and associated front end documents.
- Electronic seal and signatures are acceptable.
- Attendees of the review meetings are designated as decision makers.
- Data requests will be addressed within five (5) calendar days.
- Facilities or areas to be surveyed are readily accessible.
- FDEP permitting is not required for this project. No permitting support or fees are included in this scope.

Existing Conditions/ Scope of Work

- The existing electrical feed to the facility will be sufficient for any increase in power required for the new odor control equipment. This will be verified during preliminary engineering to allow adequate time for external coordination, if required.
- Landscaping will not be included in this project.

- Existing concrete pads, driveways, stairways, and housekeeping pads will remain as is and are sufficient for use in supporting the odor control system. New housekeeping pads for the Odor Control system will be provided.
- The location of subsurface improvements such as underground utilities are not included in this proposal.

Technical

- An overall hydraulic profile will not be included in the drawings.
- No site civil work beyond odorous air pipe routing will be required as part of this project.
- No SCADA updates are required beyond I/O re-routing associated with odor control.
- The existing survey controls points are located on-site or no farther than a quarter mile away from the facilities.

Exclusions

The following items are excluded from this scope of work:

- Destructive inspection.
- Material testing or sampling.
- Inspections of enclosed areas.

Compensation

Consultant proposes to perform the work described in Tasks 1 – 5 on a Fixed Fee basis with budgets between the sub-tasks and expenses being interchangeable as needed. The estimated total engineering fee including labor and expenses associated with the scope of work is not to exceed \$129,149 as summarized in the table below and presented in detail in Exhibits B and D.

Task No.	Task	Fee
1	Project Management	\$18,282
2	Survey	\$14,688
3	Preliminary Design Report	\$32,590
4	Final Design	\$55,025
5	Bidding Support Services	\$7,134
	Expenses	\$1,430
	Total Fee	\$129,149

Exhibit B

Atkins Cost Detail



Member of the SNC-Lavalin Group

Cost Proposal - Detail

Central WWTF Sludge Tank Odor Control Facility
Indian River County

Submittal Date:

Task#	Resource Category	Description	O/H Pool	Rate	Unit	Qty	Extended Price
01	Project Management						

Labor

		Sr Project Manager	Home	220.00	Hr	48.0	10,560.00
		Sr Engineer I	Home	136.00	Hr	42.0	5,712.00
		Engineer II	Home	110.00	Hr	6.0	660.00

Labor Total						96	16,932.00
--------------------	--	--	--	--	--	-----------	------------------

Subcontract & Consultants

		Bailey Electrical		1.0	LS	1,350.0	1,350.00
--	--	-------------------	--	-----	----	---------	----------

Subcontract and Expenses Total						1,350.00	1,350.00
---------------------------------------	--	--	--	--	--	-----------------	-----------------

01	Project Management Total						18,282.00
-----------	---------------------------------	--	--	--	--	--	------------------

02	Data Collection/Survey						
-----------	-------------------------------	--	--	--	--	--	--

Labor

		Sr Project Manager	Home	220.00	Hr	2.0	440.00
		Sr Engineer I	Home	136.00	Hr	2.0	272.00
		Sr Designer II	Home	154.00	Hr	8.0	1,232.00
		Sr Surveyor I	Home	136.00	Hr	24.0	3,264.00
		Surveyor II	Home	110.00	Hr	48.0	5,280.00
		Surveyor I	Home	105.00	Hr	40.0	4,200.00

Labor Total						124	14,688.00
--------------------	--	--	--	--	--	------------	------------------

02	Data Collection/Survey Total						14,688.00
-----------	-------------------------------------	--	--	--	--	--	------------------

03	Preliminary Design Report						
-----------	----------------------------------	--	--	--	--	--	--

Labor

		Sr Project Manager	Home	220.00	Hr	24.0	5,280.00
		Sr Engineer IV	Home	240.00	Hr	16.0	3,840.00
		Sr Engineer I	Home	136.00	Hr	76.0	10,336.00
		Engineer II	Home	110.00	Hr	28.0	3,080.00
		Sr Designer II	Home	154.00	Hr	26.0	4,004.00

ATKINS

Member of the SNC-Lavalin Group

Cost Proposal - Detail

Central WWTF Sludge Tank Odor Control Facility
Indian River County

Submittal Date: Nov-30-2022

Task#	Resource Category	Description	O/H Pool	Rate	Unit	Qty	Extended Price	
Labor Total							170	26,540.00
Subcontract & Consultants								6,050.00
		Bailey Electrical		1.0	LS	6,050.0	6,050.00	
Subcontract and Expenses Total								6,050.00
03	Preliminary Design Report Total							32,590.00
04	Final Design							
	Labor							
		Sr Project Manager	Home	220.00	Hr	36.0	7,920.00	
		Sr Engineer IV	Home	240.00	Hr	42.0	10,080.00	
		Sr Engineer I	Home	136.00	Hr	88.0	11,968.00	
		Engineer II	Home	110.00	Hr	32.0	3,520.00	
		Sr Designer II	Home	154.00	Hr	68.0	10,472.00	
Labor Total							266	43,960.00
Subcontract & Consultants								11,065.00
		Bailey Electrical		1.0	LS	11,065.0	11,065.00	
Subcontract and Expenses Total								11,065.00
04	Final Design Total							55,025.00
05	Bidding Support Services							
	Labor							
		Sr Project Manager	Home	220.00	Hr	12.0	2,640.00	
		Sr Engineer I	Home	136.00	Hr	18.0	2,448.00	
		Sr Designer II	Home	154.00	Hr	4.0	616.00	
Labor Total							34	5,704.00



Member of the SNC-Lavalin Group

Cost Proposal - Detail

Central WWTF Sludge Tank Odor Control Facility
Indian River County

Submittal Date:

Task#	Resource Category	Description	O/H Pool	Rate	Unit	Qty	Extended Price	
	Subcontract & Consultants						1,430.00	
		Bailey Electrical		1.0	LS	1,430.0	1,430.00	
Subcontract and Expenses Total							1,430.00	
05	Bidding Support Services Total						7,134.00	
06	Expenses							
	ODCs						1,180.00	
		Mileage		0.58	MI	1,000.0	580.00	
		Shipping & Postage		1.0	LS	100.0	100.00	
		Copies & Prints		1.0	-	500.0	500.00	
	ODCs						250.0	250.00
		Survey Expenses		1.0	LS	250.0	250.00	
Subcontract and Expenses Total							1,430.00	
06	Expenses Total						1,430.00	
Sub Total						129,149.00		
Proposed Profit						0.00%	-	
Success Fee							-	
Total Extended Price						129,149.00		

Exhibit C

Schedule

Schedule

The anticipated schedule shown below is based on the weeks after the formal issuance of the notice to proceed by County:

Task	Duration from NTP
Project Kick-Off Meeting	2 weeks
Begin Survey Activities	6 weeks
Data Collection and Review	4 weeks
Draft Preliminary Design Report	12 weeks
Review Meeting	14 weeks
Final Preliminary Design Report	17 weeks
90% Design	26 weeks
Review Meeting	28 weeks
Final Design – Bid Documents	32 weeks
Bidding Support Services	TBD

Exhibit D

Bailey Electrical Proposal

May 13th, 2021



Ms. Yvonne Picard, PE
ATKINS North America, Inc.
482 South Keller Road
Orlando, FL 32810-6101

Re: Indian River Central WWTF Sludge Tank Odor Control Facility
Vero Beach, Florida

Dear Ms. Picard:

We are pleased to submit our proposal for electrical and instrumentation engineering services for the above project. The following serves to provide an overview of the engineering services Bailey Engineering Consultants, Inc. (BEC) intends to furnish on the above referenced project to Atkins. Your signature on this agreement will serve as your letter of intent. Our services shall include completed drawings for the work, specifications, opinion of probable construction cost estimate covering all phases of our design in accordance with a format determined by you. Our work scope shall include the following:

Task 01 – Project Management & Progress Meetings

1. BEC shall attend the kick-off meeting for the project to discuss the detailed project approach, the project schedule, and the budget.

Task 02 – Survey

1. By Others.

Task 03 – Preliminary Design Report

1. Data Collection, Review, and Conceptual Design
 - a. Conduct site visit as required to identify site-conditions for the associated electrical and instrumentation improvements.
 - b. Evaluate options for the proposed improvements.
 - c. Attend one (1) meeting with CITY to present and review the findings and results of the preliminary engineering.
2. Deliverables:
 - a. Draft Preliminary Design Report. BEC shall submit electronic copies in PDF. Additional reproduction by others.

- b. Final Preliminary Design Report. BEC shall submit electronic copies in PDF. Additional reproduction by others.

Task 04 – Final Design

1. Design of electrical system and I&C as required for Odor Control facility.
2. Design of the interface with existing WWTF electrical and I&C system.
3. Miscellaneous Odor Control building electrical and I&C design.
4. Review and coordination of the Odor Control specifications.
5. Attend one (1) meeting as requested to review status and design requirements.
6. Deliverables:
 - a. 90% Submittal. BEC shall submit electronic copies of the plans (in AutoCAD format and PDF), specifications (in MS Word and PDF) and cost opinion (in PDF) to Atkins. Additional reproduction by others.
 - b. 100% Submittal. BEC shall submit electronic copies of the plans (in AutoCAD format and PDF), specifications (in MS Word and PDF) and cost opinion (in PDF) to Atkins. Additional reproduction by others.

Task 05 – Bidding Support Services

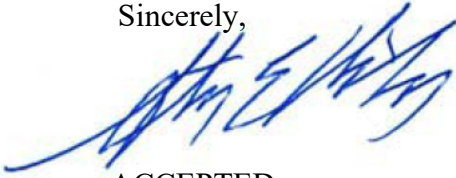
1. Pre-Bid meeting by others.
2. BEC will review the bid submittals and make a recommendation as related to electrical and I&C.

SUPPLEMENTAL SERVICES - Any work requested by the City that is not included in one of the items listed in any other phase will be classified as supplemental services.

The attached spreadsheet provides an estimate of our anticipated work effort. Travel to and from the site and other direct costs are included in the overhead rate and will not be billed as a separate line item. Our fee for this work shall be lump sum and shall be billed monthly based on percentage of completion. Our fee shall be payable as follows:

Task 01 – Project Management	\$	1,350.00
Task 02 – Survey	\$	00.00
Task 03 – Preliminary Design Report	\$	6,050.00
Task 04 – Final Design	\$	11,065.00
Task 05 – Bidding Support Services	\$	<u>1,430.00</u>
Total:	\$	19,895.00

Sincerely,



ACCEPTED _____ DATE _____

ATK-22-002D

Exhibit E

Drawings List

IRC Central WWTF Sludge Tank Odor Control SHEET LIST

Sheet Title	Sheet Number
General	
Cover	G-100
Vicinity/Location Map	G-101
General Notes & Civil Legend	G-102
Mechanical Legend	G-103
Demolition	
Structural/Mechanical Demo Plan	SMD-100
Structural/Mechanical Demo Sections	SMD-101
Civil	
Site Plan	C-100
Odor Control Piping Plan	C-101
Odor Control Piping Sections and Details	C-102
Structural-Mechanical	
Odor Control Plan	SM-101
Odor Control Sections	SM-102
Odor Control Sections and Details	SM-103
Odor Control Sections and Details	SM-104
Electrical	
Electrical Legend	E-100
Electrical Site Plan	E-101
Single Line Diagram	E-102
Electrical Plan View	E-103
Electrical Standard Details	E-104
Electrical Standard Details	E-105
Instrumentation & Control	
I&C Legend	N-100
Odor Control P&ID	N-101
Instrumentation Details	N-102
Details	
Structural Standard Details	D-100
Mechanical Standard Details	D-101