

TIFA

JUNE 15, 2023

AGENDA

TIFA LLC MEETING AGENDA
June 15, 2023
11:00 a.m.
MEETING LOCATION
CITY OF TITUSVILLE
CITY HALL, COUNCIL CHAMBER, SECOND FLOOR
555 S. WASHINGTON AVENUE – TITUSVILLE, FLORIDA
Call in Number:
(US) 1-877-304-9269 (PIN: 480560)

Roll Call

Action Items

- I. Approval of the Minutes of the TIFA LLC Meeting May 18, 2023 (Presenter: Jeremy Lebrun)
- II. Scoring and Consideration of Action on RFP Submissions

Financial Items and Reports

- III. Ratification of Expenses Paid from Operating Account and Request for Reimbursement (Presenter: Jeremy Lebrun)
- IV. Presentation of Financial Statements
- V. Consideration of Capital Distribution Notice

Staff Reports / Informational Items

Other Business

Public Comment

Next Scheduled Meeting

Open Items

Adjournment

Any person who decides to appeal any decision of the TIFA Members with respect to any matter considered at this meeting will need a record of the proceedings, and for such purpose, may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

TIFA desires to accommodate persons with disabilities. Accordingly, any physically handicapped person, pursuant to Chapter 286.26 Florida Statutes, should, at least 48 hours prior to the meeting, submit a written request to the chairperson that the physically

handicapped person desires to attend the meeting.

FIRST ORDER OF BUSINESS

Date: June 15, 2023

To: TIFA LLC Management Committee

From: Sarah Sweeting, GMS, LLC

Subject: Approval of Minutes – May 18, 2023 TIFA LLC Meeting

Summary Explanation & Background: The draft minutes of the May 18, 2023 TIFA LLC meeting were previously circulated for review. The minutes of the TIFA LLC meeting are presented for review and approval. Since the draft minutes were circulated, on May 23, 2023, Farmton Water Resources / Miami Corporation indicated they had no comments. No other comments have been received.

Source of Funds: This action requires no funds.

Minutes of TIFA LLC Meeting
May 18, 2023
11:00 a.m.
City Hall Council Chamber, Second Floor
555 S. Washington Avenue
Titusville, Florida

Persons in Attendance

Robbie E. Lee, Jr., Miami Corporation Mgmt., LLC, TIFA Management Committee Member
Jim Ball, City of Titusville, TIFA Management Committee Member
Richard Broome, City of Titusville, City Attorney
Gene DeMayo, City of Titusville
Kevin Cook, City of Titusville, Public Works Director
Leslie Rotherling, City of Titusville, Purchasing and Contracting
Susan Paddock, Farmton Water Resources (by telephone)
Jeremy LeBrun, GMS LLC
Geraldine Hurley, AECOM

Jeremy LeBrun conducted the meeting.

Roll Call

Action Items

I. Approval of the Minutes of the TIFA LLC Meeting of April 20, 2023 (Presenter: Jeremy LeBrun)

Member Ball moved to approve the April 20, 2023 meeting minutes as presented. Member Lee concurred and the motion passed.

Financial Items and Reports

II. Ratification of Expenses Paid from Operating Account and Request for Reimbursement (Presenter: Jeremy LeBrun)

Member Lee moved to ratify the expenses paid from the operating account and request for reimbursement in the amount of \$14,753.69. Member Ball concurred and the motion passed.

Staff Reports/Informational Items

III. FPL PowerPoint Presentation Review

A copy of the FPL PowerPoint presentation was provided to the board. The board asked staff for the following: buy-out cost, timeframe to implement, parallel path for options and more specifics.

IV. Discussion and Review of RFP Submissions

Mr. LeBrun: We had one submission.

Member Ball moved to authorize staff to continue scoring process and prepare for June action on RFP. Member Lee concurred and the motion passed.

Other Business

Public Comment

Next Scheduled Meeting

The next meeting will be June 15, 2023 at 11:00 a.m.

Open Items

Adjournment

Member Lee moved to adjourn the meeting at 11:24 a.m. Member Ball concurred and the meeting adjourned.

SECOND ORDER OF BUSINESS

COMMITTEE MEMBER SCORING AND RANKING OF SUBMITTALS

TIFA LLC Area IV Wellfield Operational Resiliency Study

Proposal # 23-P-038 LR

Committee Member Name: _____

Committee Member Signature: _____

Proposer	EVALUATION CRITERIA					
	Organization Experience	Staff Qualifications & Experience	Project Approach	Fee	Total Score Possible 100	Rank
	15 Points	30 Points	25 Points	30 Points		
AECOM						

Notes: _____

TIFA LLC

Proposal for

Area IV Wellfield Operational Resiliency Study

PROPOSAL # 23-P-038/LR

May 16, 2023

A photograph of a stream flowing through a dense forest. The water is dark and reflects the surrounding greenery. The banks are covered in lush vegetation, including tall grasses and various trees. A large, thick green circle is superimposed over the image, framing the central part of the stream and the surrounding forest.

Title Page

A. TITLE PAGE

Area IV Wellfield Operational Resiliency Study

General Company Service Background

AECOM is an industry-leading firm dedicated to making the world a better place. With more than 48,000 employees, including architects, engineers, designers, planners, scientists, management and construction service professionals, AECOM brings more resources than nearly any other firm. We provide a blend of global reach, local knowledge, innovation and technical excellence in delivering solutions that create, enhance and sustain the world's built, natural and social environments. AECOM was officially founded in 1990, although some of our predecessor firms had distinguished histories dating back to the early 1900s.

AECOM specializes in a wide range of services including the planning, design, permitting, construction, and start-up of cost-effective and environmentally sound water, wastewater, reclaimed water, and stormwater systems. We offer a comprehensive range of services, starting from planning and preliminary engineering to detailed design and preparation of construction contract documents. We also provide regulatory and permitting assistance, as well as construction observation and related activities. In addition to our design and construction services, AECOM offers start-up services to ensure a smooth transition into operation. We are equipped to troubleshoot operational issues and provide support as needed.

This extensive expertise allows us to provide comprehensive assistance to TIFA, LLC, for all potential needs outlined in the RFQ.

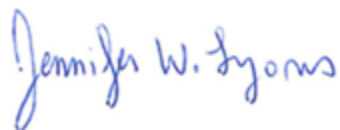
Submitted by:

AECOM Technical Services, Inc.

Main office where contract will be administered:

150 N. Orange Avenue, Suite 200
Orlando, FL 32801

Contact person:



Jennifer Woodall Lyons, PE
Project Manager / Authorized Signatory
(407) 764-8405 | jennifer.lyons@aecom.com



Table of Contents

B. TABLE OF CONTENTS

Title Page i

Table of Contents ii

Letter of Transmittal 1

Company’s Experience 3

Summary of Staff Qualifications 10

Project Approach 21

Fee/Compensations Schedule 24



Letter of Transmittal

C. Letter of Transmittal

May 16, 2023

Submitted via email:

Jeremy LeBrun, Manager
Governmental Management Services
jlebrun@gmscfl.com

Leslie Rothering, Purchasing and Contracting Administrator
City of Titusville
Leslie.rothering@titusville.com

Re: Area IV Wellfield Operational Resiliency Study, Proposal # 23-P-038/LR

Dear Selection Committee Members:

AECOM Technical Services, Inc. (AECOM) is pleased to submit our proposal to TIFA for the **Area IV Wellfield Operational Resiliency Study**. We understand the importance of the Area IV Wellfield to TIFA, its members the City of Titusville and Farmton Water Resources, and Titusville's residents. AECOM has the exceptional qualities required of a consultant to perform this work. We have assembled a local, experienced, and diverse team of professionals to serve TIFA on this important project and any additional services that may be needed under this contract.

The continual operation of this wellfield is vital to Titusville's residents as it provides nearly two thirds of the City's raw water. Any power outage, no matter how short, is of the utmost importance to analyze and understand. The above ground power system serving the wellfield is a one-way feed and is vulnerable to outages, particularly during extreme weather events. AECOM, with the City's help, will work to provide resiliency solutions to make the system as close to 100% reliable as feasible.

Our Orlando office has nearly 200 professional staff members and can provide TIFA with all the major technical services necessary for this study. While AECOM has not worked with TIFA before, we have enjoyed a very successful relationship with the City of Titusville for many years. The individuals that have served the City of Titusville in the past will serve TIFA should we be selected for this opportunity.

SINGLE SOURCE OF RESPONSIBILITY

As a full-service architectural/engineering (A/E) firm, AECOM offers clients the benefit of a full range of in-house professional and technical services. We maintain a complete staff of architects, engineers, scientists, environmental specialists, sustainability planners, landscape architects, and other specialty disciplines within our Orlando office. Our approach provides you with single-source accountability for time- and cost-efficiencies and the quality of performance on your project through one organization.

UNIQUELY QUALIFIED TO BE TIFA'S FIRST CHOICE

We have carefully reviewed the requirements of the Request for Proposals, including the insurance requirements and hold harmless agreements, and have put together the enclosed submittal to describe in detail the AECOM team members, related experience, project approach, and special qualifications for this

project.

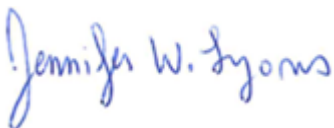
Selecting AECOM will provide the City with the following benefits:

- **Outstanding Leadership:** Jennifer Lyons, PE, has more than 29 years of experience as an environmental engineer specializing in public infrastructure. She has extensive experience in feasibility studies, master plans, and the development of capital programs for water and wastewater systems. Jennifer also offers expertise in design, project management and construction management.
- **Local Knowledgeable Staff:** The AECOM team is able to provide the full range of investigation, evaluation, design, and construction- phase support services for every aspect of this project to provide TIFA with a "single point" of responsibility for this project. We also have the ability to utilize AECOM's Technical Practice Network (TPN) if the need arises. The TPN offers nationally recognized experts in a wide variety of areas as well as other disciplines that are available to assist the City with any unique challenges that may arise in an assignment.
- **Prior Municipal Experience:** We have extensive experience working for local municipalities; including the Cities of Titusville, Orlando, DeLand, Leesburg, and Seminole, Orange and Brevard Counties.
- **Working Relationships with Regulatory Agencies:** AECOM regularly work with the SJRWMD, FDEP, FDOT, USACE and others that may be involved with projects executed under this Agreement. We take pride in obtaining difficult permits in a short time frame.
- **Quality Assurance:** AECOM is 100% committed to quality and have the company mandated process in place to confirm we will deliver the highest quality service during programming, design, and construction.
- **Unparalleled Service:** Our clients can attest to the excellent level of service from AECOM. We work diligently to earn your trust and do whatever it takes to meet your needs. Our goal is to partner with TIFA to plan, design and implement projects that are cost effective to construct and easy to operate.

At AECOM, we are committed to making the world a better place, as well as adding value to the communities in which we live. We are ready to meet any challenge with the understanding that TIFA is requesting a comprehensive range of services in this request, and look forward to serving TIFA. Please do not hesitate to contact me at 407-764-8405 if you have any questions or require additional information.

Sincerely,

AECOM Technical Services, Inc.



Jennifer Woodall Lyons, PE
Project Manager/Authorized Signatory/Point of Contact
Cell: (407) 764-8405
jennifer.lyons@aecom.com

A man with a beard, wearing a white AECOM hard hat and an orange long-sleeved shirt, is crouching in a shallow stream. He is smiling at the camera. The background is a lush green forest. A large, thin, light green circle is overlaid on the image, framing the man and the text.

Company Experience

C) 2.1. Company Experience

We have assembled a team to meet the specific requirements for this contract. The following pages include details of 4 recent similar projects along with the project duration and owner contact information.

AREA III WELLFIELD ELECTRICAL PROJECT

Client: City of Titusville Water Resources Department

Project Contact: Ashleigh Smith, PE

Phone: 321-567-3859

Contract Duration: 2020-present

Contract Value: \$120,000

The City of Titusville owns and operates the Area III Wellfield. This is one of three wellfields operated by the City and consists of multiple surficial aquifer wells, a raw water storage tank, stand by power generation, and a private underground power distribution system to each of the wells.

One of the transformers feeding multiple wells was damaged by a traffic accident. Due to the age of the transformer and the complexity of the repair, the City retained the services of AECOM to evaluate the power supply system and design repairs to return the wells back into service. The project included:

- Evaluation of the damaged transformer and nearby power distribution lines
- Designs to replace the existing power lines and provide for an updated set up of transformers

AECOM also performed a full evaluation of the Area III Wellfield's electrical system. The specific elements in the technical memorandum consisted of:

- Conditional assessment and rankings of all electrical components in the system
- Prioritized list of items to be replaced or upgraded to meet current building code requirements
- Planning level Opinion of Probable Cost – planning level is defined as a 30% +/- expected cost of construction for each well and well house

The project has been bid and awarded to a local electrical firm. Once replacement transforms are received, the construction on the project will begin.

MIAMI SPRINGS WELLFIELD REHABILITATION – Phase I & II



Client: Miami-Dade Water and Sewer Department

Project Contact: Virginia Walsh PhD., P.G.

Phone: (786) 552-8266

Contract Duration: 2015-present

Contract Value \$1,356,836

Miami-Dade County Water and Sewer Department (WASD) owns and operates water treatment plants in the City of Hialeah. The plants rely on the Miami Springs Wellfield as their sole source of raw groundwater prior to treatment. The wellfield consists of 23 shallow production wells drawing from the Biscayne Aquifer, including those at the Hialeah WTP and within the City of Miami Springs.

Due to the age of this wellfield and associated infrastructure, WASD retained the services of AECOM Technical Services to develop a condition assessment report. This report addressed the raw

water production wells and associated mechanical, electrical, and structural components and functional integrity with the intent to provide a strategic evaluation and recommendations based on visual observed condition to extend the useful life of the facilities. In addition, AECOM provided for backup standby generator capabilities for the lower wellfield and electrical feeder loop conceptual design for the upper and lower wellfields. Phase I included the following work components:

- Data/Literature Review
- Visual Inspection of all 23 production wells and Reporting
- Engineering Valuation
- Conceptual Design

The specific elements in the technical memorandum consisted of:

- Information review findings summary
- Production well and well house visual evaluations
- Condition rankings (in excel spreadsheet format)
- Prioritization list of rankings (in excel spreadsheet format)
- Planning level Opinion of Probable Cost – planning level is defined as a 30% +/- expected cost of construction for each well and well house
- Electrical energy cost benefit analysis for possible pump replacement
- Recommendation of the best value options to WASD (cost and technical factors) that will return the well field to production levels in line with original design capacity while providing safe reliable support equipment and structures

During Phase II, AECOM provided the final design, permitting, bid phase, and engineering services for the construction of 23 Biscayne production wells with minimum capacity of 3.5 MGD. AECOM also provided the associated mechanical, electrical and I&C systems along with structural and architectural, and civil design for 16 of the 23 wellhouses. In addition, AECOM provided hydrogeologic and well construction and testing oversight and construction management services during the installation of all 23 new and rehabilitated water supply wells.



FLOOD MITIGATION CONSULTING AND SEA LEVEL RISE AND RESILIENCY STUDY



Client: City of Miami Beach

Project Contact: Cristina Ortega Castineiras, PE

Phone: 305.673.7080

Contract Duration: 2014-2019

Contract Value \$7.6M

In 2014, to minimize the impacts of projected sea level rise, the City Commission established new elevation criteria for the stormwater drainage system. The City's system consists of 340 outfalls served by swales, inlets, storm drains, and culverts; gravity and pumped injection wells (to be eliminated in the near future); exfiltration systems (no longer allowed in the City); plus channels, canals, pump stations, and retention/detention storage systems. Over a dozen new pump stations have been installed over the past years, with a total of 58 planned new stations with associated trash-racks and water quality structures.

AECOM served as the City's Flood Mitigation and Resilience Planning Consultant, assisted the City Engineer, the Chief Resilience Officer, and the Director of Environment and Sustainability in developing the most feasible alternatives for addressing flooding issues and providing sea level rise resilience. AECOM's work included:

- Peer review of the proposed solutions from previous studies
- Identification of successful flood mitigation strategies used by other cities

- Update of the Stormwater Planning Analysis, including stormwater impact fee analysis
- Stormwater modeling, and identification of necessary infrastructure
- Identification of structural and non-structural options to provide cost savings or easier implementation
- Indian Creek seawall reconstruction and state revolving fund loan application
- Leading stakeholder, staff and consultant panel reviews of the expanded spectrum of available solutions



- Review and analysis of building and zoning codes and land development regulations
- Recommendation of ordinance revisions to facilitate consistent application and implementation of sea level resilient practices

- Development of permitting strategies
- Strategies for use in the City's hazard mitigation plan and emergency response plan
- Vulnerability assessment of the City-owned built assets to clearly understand potential sea level and flooding exposure, sensitivity, and adaptive capacity
- Economic assessment of resilience protection strategies
- Recommendations for implementation and phasing.
- Miami Beach's Resilience Planning work links and provides a foundation for the City to build upon as part of the 100 Resilient Cities grant from the Rockefeller Foundation. As strategy partner to Greater Miami and the Beaches, AECOM is providing support in the development of strategies to build resilience to the social, economic, and physical shocks and stressors facing Miami, Miami-Dade County, and Miami Beach.

Key Land Use Ordinance Updates:

- For Design and Planning purposes, utilize uniform base flood elevation (FEMA flood elevation) across the City (6.44' NAVD)
- Increase Freeboard and allow for a range (from 0' to 1' to 5' above BFE)
- Define minimum elevation for seawalls and facilitate increases with flexible footing design
- Increase minimum yard elevations to increase vertical space for stormwater runoff and infiltration

Ordinance Updates Under Discussion:

- Integrate Green Infrastructure and Resilience into all City projects
- Develop incentives for the implementation of resilience measures



HYDROGEOLOGIC INVESTIGATION AND GROUNDWATER MONITORING PROGRAM



Client: City of Miami Beach

Project Contact: Cristina Ortega Castineiras, PE

Phone: 305.673.7080

Contract Duration: 2018-2019

Contract Value \$1.5M

For this comprehensive hydrogeologic investigation and water level monitoring program, our team conducted a hydrogeologic investigation of Miami Beach to accurately depict subsurface geologic conditions for model conceptualization, calibration and verification to determine the impacts of sea level rise on this barrier island. Michael Bennett and his team reviewed and analyzed existing geologic and hydrogeologic information throughout the City to provide an initial understanding of the underlying hydrogeology. The team created a work plan and technical specifications related to drilling, testing monitor well construction, and data analysis. We subcontracted with an experienced dual-tube well drilling contractor in Miami-Dade County to provide all well construction and testing services. We managed the drilling and testing of 42 monitor wells at 14 sites to gain information of the underlying

hydrogeology throughout the City, and coordinated work with the USGS to obtain high resolution hydrogeologic data on the surficial aquifer system. Upon completion of monitor wells, water samples were obtained from each of the 42 monitor wells and 3 surface water stations. These samples were sent to the University of Waterloo's Environmental Isotope Laboratory analysis of the Deuterium – H₂, Enriched Tritium – H₃, and Oxygen - O₁₈. Stable and radioactive isotope techniques were used to determine sources and mechanisms of groundwater recharge; groundwater age and dynamics; interconnections between aquifers; interaction between surface water and groundwater.

These monitor wells were then instrumented with continuous recording conductivity, temperature and pressure sensors. The downhole sensors at each of the 14 sites were connected to a datalogger that transmitted the hourly readings to a data server ("Cloud based Monitoring"). The "HydoVu" software package was provided to the City for review and trend analysis of the groundwater data. These data are currently being used to determine long-term trends in ground water quality and levels within three distinct

hydrogeologic units. The hydrogeologic and water level data set provided high quality information for conceptualization and calibration of the 3-D Density Dependent Ground Water Flow Model developed by CMB to assess the effect of the ground water system based on various flood/stormwater/sea level rise mitigation strategies related to future infrastructure plan development.

In addition, AECOM installed two radar type continuous recording instruments to measure tidal fluctuation within constructed waterways to help determine the hydraulic connection between surface water (ocean) and the underlying groundwater system to determine the effect of ground flooding due to increase ground water levels associated with sea level rise estimates. This project was completed under budget and on time.

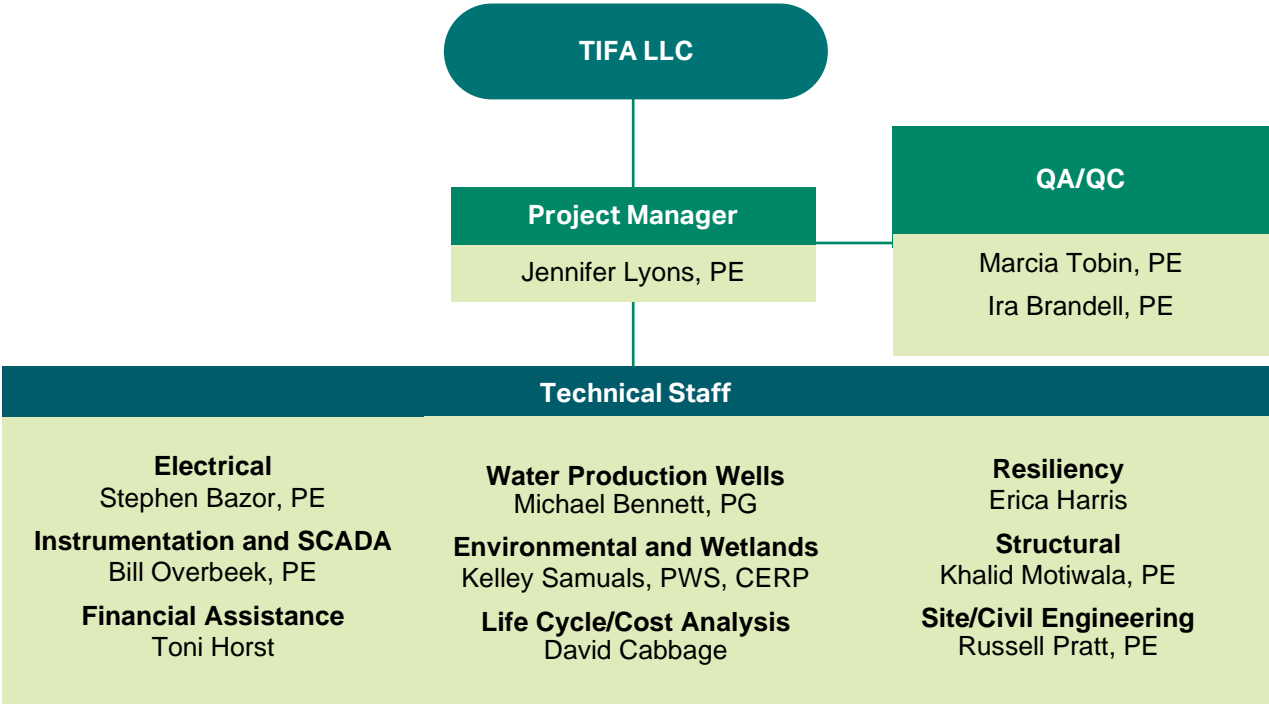




Summary of Staff Qualifications

F. Summary of Staff Qualifications

Our team organizational structure highlighting our management and technical support staff can be found below. Jennifer Lyons will serve as the project manager and the primary point of contact. She brings more than 29 years of experience, including a number of years supporting City of Titusville projects. She has access to more than 1,100 Florida-based resources to help support the needs of this project. Resumes for the project manager and technical team members follow the organizational chart.



Resume: Jennifer Woodall Lyons, PE

Senior Project Manager

Education

BS – Civil Engineering Georgia Institute of Technology, 1994
MBA – Business Administration, University of Florida, 2001

Years of Experience

With AECOM: 5
With Other Firms: 24

License/registrations

Professional Engineer: Florida, Texas and South Carolina



Ms. Lyons has over 29 years of experience as an engineer specializing in public infrastructure programs. She has expertise in planning, design, project management and construction management of projects throughout the State of Florida and the United States. She has served as program or project manager for numerous engineering planning, design and construction programs and has extensive experience in feasibility studies, master plans and the development of capital programs. She has demonstrated project and construction management skills to consistently deliver complex small and large scale multi-disciplinary projects on time and within budget using multiple technologies.

Project Experience

Senior Project Manager, Area III Wellfield Electrical Project, City of Titusville. Ms. Lyons is a senior project manager for the evaluation and repair of the private electrical transmission system at the City of Titusville's Area III Wellfield. The project includes evaluation of the existing power system, designs and equipment specifications for repairs to damaged portions, and prioritization of upgrades to the remainder of the electrical system for resiliency and to meet current building code requirements.

Senior Project Manager, Water Plant Improvements for Hydrogen Sulfide Removal, Toho Water Authority. Ms. Lyons is a senior project manager for the evaluation of hydrogen sulfide upgrades required for nine (9) water treatment facilities for the Toho Water Authority. The project includes water quality sampling, pilot testing, preliminary design and final design of upgrades to multiple water treatment facilities.

Senior Project Manager, Ozone Improvements Project, Orlando, FL. Ms. Lyons was a senior project manager for the study, design and construction services for the phased upgrading of seven operational ozone systems for groundwater treatment plants for hydrogen sulfide oxidation and disinfection by product reduction. The plants have design capacities ranging from 10 to 44 mgd. During the study phase, the ozone process at each plant was evaluated to achieve multiple water quality objectives including hydrogen sulfide oxidation, disinfection for 4-log virus inactivation and reduction in disinfection by-product formation. This project includes alternative delivery by a Construction Manager at Risk (CMAR).

Senior Project Manager, Brackish Groundwater Desalination Program, San Antonio, Texas. Ms. Lyons served as senior project manager for the design of a brackish groundwater desalination facility in for the City of San Antonio in Bexar County, Texas. The project was designed to meet the City's water needs over the next 50 years while reducing dependence on the Edwards Aquifer. The plant will have an initial capacity of 12 million gallons per day (mgd) and is easily expandable to 30 mgd. The overall site is master planned to support a 60 mgd facility.

The treatment facilities included cartridge filters, three stage reverse osmosis treatment skids, calcite contactors, degasifiers, membrane cleaning facilities, and chemical feed facilities. The treatment facility was part of the \$100M program to bring a drought resistant water supply to the region and included brackish groundwater wells, pipelines, the treatment facility and deep injection wells.

Senior Project Manager, Surface Water Treatment Plant Improvements, Lee County, FL. Ms. Lyons served as the senior project manager for upgrades to the Olga Water Treatment Facility in Lee County, Florida. The purpose of the project was to improve taste and odor in the finished water. The improvements included the addition of granular activated carbon as well as the replacement of the existing acid, sodium hypochlorite and fluoride systems.

Senior Project Manager, Booster Station for System 3A, Broward County, FL. Ms. Lyons served as the senior project manager for design of a new water booster station at the Ft. Lauderdale International Airport in Broward County. The improvements included high service pumps rated for 7,000 gpm, sodium hypochlorite and ammonium sulfate facilities. The purpose of the project was to increase pressure for fire flow at the airport as well as improve water quality on the airport property during periods of low demand.

Senior Project Manager, Water Booster Station Upgrades, Naples, FL. Ms. Lyons served as the senior project manager for design of improvements at the Solana Road and East Naples Booster Pump Stations. Improvements included replacement of the existing high service pumps and new emergency power generation facilities. The project included hydraulic modeling to support the high service pump improvements, which increased the pump capacities to 9 mgd at the East Naples facility and 13 mgd at the Solana Road site.

Senior Project Manager, Reverse Osmosis Water Treatment Facility, Punta Gorda, FL. Ms. Lyons served as a Senior Project Manager for the design of a reverse osmosis water treatment facility for the City of Punta Gorda, Florida. The 6.0 mgd facility was designed to supplement the City's

existing surface water treatment facility. The City's surface water treatment facility was not in compliance with TDS requirements during low flow times of the year. The new RO facility was utilized as blending to lower the TDS in the finished water. This project also involved abandoning the City's existing raw water ASR wells which were not in compliance with required limitations for arsenic. The existing ASR wells were converted to water supply wells for the new RO water treatment facility.

Project Manager, Design Build of Two Reverse Osmosis Water Treatment Facilities, Desoto County, FL. Ms. Lyons served as project manager for the design, permitting and construction administration of two reverse osmosis water treatment facilities for Desoto County, Florida executed as a design build contract. In partnership with Cardinal Contractors, Ms. Lyons completed the design, permitting and construction administration for the two facilities, which were rated at 0.25 mgd and 0.75 mgd. Each facility included micron filters, chemical feed, degasification and disinfection facilities. Concentrate disposal was via existing County wastewater facilities. The permitting for this concentrate disposal method was also completed as part of this contract.

Project Engineer, Reverse Osmosis Water Treatment Facility, Palm Bay, FL. Ms. Lyons served as a project engineer for a reverse osmosis water treatment facility for Palm Bay, Florida. As a project engineer, Ms. Lyons designed the well pump facilities, raw water transmission facilities, and concentrate disposal force main. Ms. Lyons also completed the permitting for the concentrate disposal via the City's existing wastewater treatment facility.

Project Engineer, Filter Improvements, North Port, FL. Ms. Lyons served as project engineer for the permitting, design and construction administration of filter improvements at the Myakkahatchee Creek Water Treatment Facility. The project included replacement of the media, underdrains and backwash system for the filtration system at this surface water treatment facility.

Project Engineer; High Service Pump Improvements, Flagler Beach, FL. Ms. Lyons served as the project engineer for upgrades to the City of Flagler Beach water treatment facility including new high service pumps and telemetry system upgrades.

Project Engineer, Water Treatment Facility, Orange City, FL. Ms. Lyons served as project engineer for the design, permitting and construction administration of the Saxon Water Treatment Facility in Orange City, Florida. The facility includes aeration, chlorination, storage and high service pumping facilities.

City of Titusville, Biosolids Improvements at Water Reclamation Facilities, Titusville, FL. Senior project manager for design and construction of biosolids

improvements for the City of Titusville. The first phase of the project included design and procurement of a trailer mounted screw press. The press was trailer mounted so that it could be utilized at the Blue Heron WRF and also at the Osprey WRF as a backup to existing dewatering equipment. The project also included preliminary design for additional dewatering improvements at the Blue Heron WRF including additional screw presses and canopy structure for the new equipment.

Senior Project Manager, Eastern Water Reclamation Facility Phase V Improvements, Orange County, FL. Ms. Lyons was a senior project manager for the construction of the Phase V expansion to the Eastern WRF from 19 mgd to 24 mgd. This project included a new pretreatment structure with band screens and stacked vortex Headcell grit removal system; upgrades to the existing treatment trains including new fine bubble diffusers, blowers, mixing equipment and supplemental carbon system; a new spiral blade clarifier; four flow diversion structures; new disk filters; new chlorine contact chamber; new sludge thickening equipment; new effluent pumps as well as electrical and SCADA improvements.

Senior Project Manager, Conserv I Water Reclamation Facility Treatment Optimization and Upgrades Evaluation, City of Orlando. Ms. Lyons was a senior project manager for this facility evaluation which recommended the addition of new stacked vortex Headcell grit removal system, rehabilitation of the existing flow equalization basin, upgrading the existing aeration basin for biological nutrient removal, addition of a second biological nutrient removal train, conversion of the existing final clarifiers to secondary clarifiers, rehabilitation and expansion of the existing filters, expansion of the chlorine contact chamber and the replacement of the existing effluent pumps.

Senior Project Manager, South Water Reclamation Facility Phase V Improvements, Orange County, FL. Ms. Lyons is a senior project manager for the construction of the Phase V expansion to the South WRF from 43 mgd to 56 mgd.

Senior Project Manager, South Water Reclamation Facility Influent Pump Station Improvements, Orange County, FL. Ms. Lyons is a senior project manager for the construction of a new influent pump station at the South WRF.

Senior Project Manager, Barefoot Bay WRF Blower and Air Piping Improvements, Brevard County, FL. Ms. Lyons served as the senior project manager for the design of air piping and blower improvements at the Barefoot Bay WRF. The improvements included relocating the existing blowers to an outdoor space, addition of a canopy to provide protection from the weather and new stainless steel air piping.

Resume: Stephen Bazor, PE, CDT

Electrical Engineer

Education

BSEE, Electrical Engineering
University of South Alabama
2001

Years of Experience

With AECOM: 2
With Other Firms: 23

License/Registrations

Alabama – P.E. 26968
Florida – P.E. 80112
Mississippi – P.E. 26852
NCEES Record ID 19-314-98

Areas of Expertise

Design and
Construction of Water
and Wastewater
Improvements



Stephen Bazor – Has over 22 years of experience as an electrical and control systems engineer in consulting and integrator roles. His project experience includes commercial and industrial design associated with municipal, county, state, coal mining, pulp & paper, and steel industries.

Stephen has been responsible for developing proposals, preliminary design & feasibility studies, public contract documents & drawings, technical specifications, and construction cost estimates. Designs include power distribution, power system analyses, protective device coordination, lighting, control & instrumentation systems, and SCADA & communications. Roles have included engineer of record, project manager, design lead, and owner's construction representative.

Stephen is proficient in AutoCAD (Standard and Electrical), ETAP Electrical Power System Analysis, SKM PowerTools Power System and Arc Flash Analysis Software, and Microsoft Word & Excel.

Project Experience

Electrical Engineer, Area III Wellfield Electrical Project, City of Titusville. Mr. Bazor is the electrical engineer for the evaluation and repair of the private electrical transmission system at the City of Titusville's Area III Wellfield. The project includes evaluation of the existing power system, designs and equipment specifications for repairs to damaged portions, and prioritization of upgrades to the remainder of the electrical system for resiliency and to meet current building code requirements.

Collier County, Florida–NCWTF Headworks Design. The project consists of the design of a new 85 MGD pretreatment facility that includes four (4) coarse screens, four (4) degritters, four (4) fine screens, screenings and grit collection/disposal, odor control, electrical distribution, lighting, PLC-based control systems, an electrical & controls building, fire alarms, and permitting.

City of Titusville, Biosolids Improvements at Water Reclamation Facilities, Titusville, FL. Electrical Engineer for design and construction of biosolids improvements for the City of Titusville. The first phase of the project included design and procurement of a trailer mounted screw press. The press was trailer mounted so that it could be utilized at the Blue Heron WRF and also at the Osprey WRF as a backup to existing dewatering equipment. The project also included designs for additional dewatering improvements at the Blue Heron WRF including additional screw presses and canopy structure for the new equipment.

City of Fort Myers (FL)– Master Pump Station 100. Electrical and instrumentation design of a new 5 MGD main sanitary sewer pumping station. The MPS consists of three (3) 150 hp submersible pumps, 600 kW generator, VFDs, an odor control system, instrumentation, SCADA, and building including HVAC.

Stephen designed the electrical and instrumentation/ control systems including drawings and specifications, administered

the electrical service with Florida Power & Light Company, performed conductor and raceway sizing calculations, design for service, feeders, and branch-circuits, and assisted in the application for the Florida DEP application.

Seminole County (FL) – Lift Station SE 291. Electrical and instrumentation design of a new residential sanitary sewer lift station. The lift station consists of two (2) 7.5 hp submersible pumps, 25 kW generator, motor starters, instrumentation, and SCADA.

Stephen designed the electrical and instrumentation/ control systems including drawings and specifications, administered the electrical service with Duke Energy, performed conductor and raceway sizing calculations, design for service, feeders, and branch-circuits, and assisted in the application for the Florida DEP application.

City of Panama City (FL) – Tarpon Dock Draw Bridge Upgrade. Design to upgrade outdated electrical service & distribution and controls. Existing equipment has been in service for 60 years with minor upgrades throughout the years. Stephen designed the new electrical service, automatic transfer switch, emergency generator, motor starter enclosure, conversion of existing relay-logic controls with a PLC-based control system, and interfacing with existing bridge and water safety instrumentation and traffic control. The design included load calculations, conduit and cable sizing, emergency power sizing, control system layout and control narratives. Deliverables included drawings, specifications, and Coast Guard required paperwork.

Destin Water Users (Destin, FL) – George French Water Reclamation Facility Incoming Utility Upgrade. Upgraded and increased existing plant electrical utility service. The design included refurbishing the existing 1500kW generator, a new second 1500kW generator, new paralleling switchgear & building, temporary generator plans for operational continuity, and a new electrical building and MCC.

City of Panama City Beach (FL) – Nautilus MPS & Joan Ave. MPS. Design and construction of new master pump

stations. The MPS's included three (3) 100hp submerged wastewater pumps, electrical building including MCC's, ATS, & VFD's, a 450kW backup generator, and PLC-based control system.

Wakulla County (FL) Otter Creek WWTP – Wastewater treatment plant expansion. Expanded the plant's effluent permit from 0.6 to 1.2 MGD. Design, bid, and construction services. The design included a new administration building, upgraded incoming electrical service, new electrical room (Main, ATS, MCC, VFDs), backup generator, new treatment basin, secondary filters, and post-treatment chlorine contact chamber. PLC-based control system with centralized monitoring, connection to vendor-specific control systems, and custom local control stations and panels.

Mobile Area Water and Sewer System (Mobile, AL) – Williams WWTP Upgrade. Upgrade of an existing 25 MGD wastewater treatment plant with four new influent headworks screens, four new primary clarifiers, new high service pump station, new in-plant pump station, new electrical building including Main, ATS, MCCs, & VFDs, backup 1500kW generator, and plant SCADA.

Resume: Erica Harris, ENV SP, WEDG

Electrical Engineer

Education

Masters, Oceanography,
Oregon State University, 2011
BS, GIS and Spatial Analysis,
The Ohio State University, 2004

Years of Experience

13 years

Professional Certifications

American Shore and Beach
Preservation Association
American Society of Civil
Engineers

Affiliations

Envision Sustainability
Professional Waterfront
Edge Design Guidelines
Associate



Erica is a coastal and climate scientist specializing in incorporating climate considerations into infrastructure planning and design. She has worked on risk assessment and resilience-building projects for a range of asset types across the country. Her skillset reflects a blend of science, engineering, policy, and spatial analysis through involvement on collaborative projects focused on understanding and adapting to existing and future conditions.

She has worked on numerous multi-agency projects focused on providing managers, planners, and engineers with locally relevant information and tools to enhance resilience while maximizing co-benefits in the environmental, economic, and social sectors where possible.

Project Experience

Lake Tarpon Crossing Water Main Replacement Project, St. Petersburg, FL.

Climate scientist assisting with the understanding of potential climate hazard impacts to project site and water main infrastructure. Erica facilitated a workshop with the design team to collaboratively discuss potential climate hazards and ways to address them in the project through an Envision criteria framework to support the long-term resilience of the project and surrounding community.

Climate Change Vulnerability Assessment, Naples, FL.

Project manager and technical lead conducting a city-wide vulnerability assessment of public assets at risk to a suite of climate stressors (sea level rise, coastal storms, extreme heat, and precipitation). Key vulnerabilities identified will be used to inform the development of an adaptation plan to increase the long-term resilience of the city's built and natural infrastructure. As a part of this effort, Erica also leads a climate change working group, composed of representatives from all city departments, to promote a plan that reflects the City's priorities and maintains City ownership.

Sea Level Rise Vulnerability Assessment and Adaptation Plan, City of Miami Beach, FL.

Project manager and technical lead conducting a city-wide vulnerability assessment and plan to address sea level rise risks posed to public/community assets. The project also includes public engagement to inform the plan and visual tools to assist the City with communicating sea level rise risk and potential solutions.

MacDill Military Installation Resilience Review, Tampa, FL.

Technical lead and project manager for a resilience review to identify climate risks, hazards, and vulnerabilities at the installation and within adjacent communities that may impact the ability of the military to carry out missions at the MacDill Air Force Base. As a part of this work, Ms. Harris also leads the development of potential solutions and targeted investments to mitigate potential hazard impacts. This project involves a strong technical and policy stakeholder engagement process to

promote actions that are driven by regional priorities.

Sea Level Rise Assessment for Lift Station Rehabilitation, St. Petersburg, FL.

Coastal scientist responsible for performing a preliminary Envision assessment to evaluate potential for achieving targeted rating. A supporting sea level rise hazard assessment was also completed to revise minimum design criteria of the lift station's electrical equipment to increase preparedness for future storm surge events.

Promoting Nature-Based Hazard Mitigation Through FEMA Mitigation Grants, The Nature Conservancy, Various Cities.

Key contributor to the content of a guidebook for The Nature Conservancy (TNC) and partnering communities to assist in pursuing funding through FEMA's Hazard Mitigation Assistance (HMA) program. The guidebook focuses on projects aimed at reducing hazards (coastal flooding, inland flooding, and wildfires) and enhancing community resilience using nature-based solutions. Ms. Harris also served as a facilitator at two workshops for how to apply the guidebook for over 50 TNC staff.

San Diego International Airport Climate Resilience Plan, San Diego, CA.

Climate adaptation specialist performing a climate vulnerability assessment and developing adaptation strategies for existing and future airport assets, including runways/taxiways, airport and tenant facilities, transportation network, and natural habitats. Climate stressors considered were coastal flooding, precipitation flooding, extreme heat, wildfires, and drought. The results of the study will be summarized in the airport's public-facing Climate Resilience Plan.

Business Case for Resilience in Southeast Florida and Tampa Bay, Florida.

Coastal and climate scientist contributing to the economic evaluation of potential flood risk and exposure versus the cost of potential adaptation for Southeast Florida and Tampa Bay communities. Ms. Harris served as the technical lead for selection of sea level rise and water level scenarios and development of high-level adaptation strategies that provide regional flood protection against future conditions.

NASA Shoreline Study, Kennedy Space Center, Brevard County, FL. Climate and coastal scientist performing shoreline change and dune erosion modeling due to sea level rise and coastal storms along the Kennedy Space Center's Atlantic and estuarine shorelines. Results were used to inform resilience solutions to protect critical infrastructure in the area.

PortMiami Sea Level Rise Vulnerability Assessment and Adaptation Plan, Miami, FL. Technical lead developing a sea level rise vulnerability assessment and adaptation plan to increase flood resilience of port assets and operations. The project will identify key vulnerabilities of port infrastructure through the coming century and culminate with an adaptation plan and design guidance to incorporate sea level rise and coastal storm considerations into the design of individual projects.

Texas Department of Transportation Statewide Resiliency Plan, TX. Project technical advisor evaluating the vulnerability and risk of the statewide multimodal transportation system to extreme weather events and cyber security threats. The plan also includes the prioritization of projects to reduce risk of the transportation network and developing a foundational framework for stakeholders to consistently incorporate resilience into transportation planning.

Climate Change Assessment of South Corridor Bus Rapid Transit Project (BRT), Miami-Dade County, FL. Climate adaptation specialist performing a high-level climate vulnerability assessment for the BRT system. The project includes upgrades to the 20-mile busway by constructing 14 BRT stations and rehabilitation of two terminal stations. To ensure long-term viability of the busway, climate change impacts (e.g., extreme flooding and heat) and sustainability considerations are being implemented in the project design. The Envision infrastructure rating system is being used as a guiding framework to evaluate and rate the project on its long-term resilience and community, environmental, and economic benefits to the region.

Massachusetts Bay Transportation Authority Climate Change Vulnerability Assessment, Boston, MA. Climate adaptation specialist contributing to a climate change vulnerability assessment of the MBTA Red Line rapid transit line. Tasks included review of a multi-hazard vulnerability analysis based on the Federal Highway Administration's VAST tool and developing a menu of adaptation measures to provide asset-specific and area-scale protection of rail assets from the evaluated climate stressors. As a follow-up to the project, Erica is also leading the development of adaptation projects to provide targeted protection of a major Red Line maintenance and facility yard.

Port of Los Angeles Sea Level Rise Adaptation Study, Los Angeles, CA. Key contributor to the preparation of the Port's sea level rise vulnerability and adaptation study. This work will assist the Port in identifying local sea level rise vulnerabilities, risks, and identification of projects to mitigate the potential impacts of an evolving climate on port operations. Port asset categories included in the analysis included: maritime terminals,

transportation (road and rail), natural habitats, and community assets.

Texas Department of Transportation, Coastal Chapter Hydraulic Design Manual, TX. Key contributor developing updated content for the Texas Department of Transportation (TxDOT) Hydraulic Design Manual (HDM) Coastal Chapter. This new chapter of the HDM provides procedures recommended for analyzing and designing resilient roadway infrastructure in the coastal environment. As a follow-up task to the project, Erica also led the content development of a train-the-trainer workshop to provide guidance for TxDOT district offices on how to use the updated HDM Coastal Chapter.

Waterfront Shoreline Enhancement Plan, City of Miami, FL. Coastal scientist and technical lead developing a set of prioritized set of nature-based shoreline enhancement projects that can be applied to Miami's different shoreline typologies. Tasks include coordinating with the City, The Nature Conservancy, and key stakeholders to identify prototype locations, developing a menu of shoreline strategy options, prioritizing strategies based on evaluation criteria, and developing design alternatives to be considered for each site.

Highway 37 Design Alternatives Assessment, San Francisco Bay, CA. Coastal scientist supporting the evaluation of potential impacts of sea level rise on design alternatives considered to address recurrent flooding along the Highway 37 corridor. Minimum pavement elevations were calculated for highway alternatives based on the latest sea level rise projections and wave runup calculations.

Islais Creek Bridge Rehabilitation Project, San Francisco, CA. Climate change adaptation specialist analyzing existing floodplains within the project limits and evaluating the possibility of sea level rise impacts to the existing bascule bridge design. As a part of the project site evaluation, a local hydraulics study and sea level rise assessment was performed to evaluate potential impacts to or encroachments upon floodplains with considerations for possible sea level rise and to recommend any mitigation that may be required.

Sea Level Rise Response Plan, City of Olympia, WA. Supported a cross-sector (City, Port, and Water Alliance) sea level rise response plan to analyze options for protecting downtown and port and develop recommendations, implementation schedules, decision making thresholds, funding needs, and emergency response approaches to address SLR vulnerabilities and risks. Development of the plan included a climate science review, SLR planning framework, vulnerability and risk assessment, and strategy development and evaluation.

Sea Level Rise Impact Assessment and Mitigation Report, Naval Support Facility, Diego Garcia. Coastal scientist supporting an assessment of how existing mission-critical facilities, operations and infrastructure systems will be impacted by sea level rise. Tasks also include identification of site-specific sea level rise mitigation recommendations to support the Diego Garcia mission over the next 50 years.

Military Installation Resilience Review, Northern Virginia Regional Planning Council, Northern VA. Supporting a resilience review to identify climate risks, hazards, and vulnerabilities at three military installations and adjacent host communities that may impact the ability of military to carry out missions. Ms. Harris leads the development of potential solutions and targeted investments to mitigate potential hazard impacts.

Resume: Michael W. Bennett, PG

Injection/ASR and Water Supply Well Systems

Education

MS, Hydrogeology
BS, Geology

Years of Experience

With AECOM: 15
With Other Firms: 18

License/registrations

Professional Geologist,
FL No. PG1558
Professional Geologist,
TX No. PG307
Professional Geologist,
LA No. PG27

Professional Affiliations

xFlorida Association of
Professional Geologist
National Ground Water
Association
American Waterworks
Association
American Institute of
Professional Geologists



Mr. Bennett is a licensed professional geologist with over 29 years of experience in hydrogeology, ground water modeling, geochemistry, and geophysics. He provides technical consultation on the design, permitting, groundwater hydrology, aquifer storage and recovery and deep-water injection projects. He offers expertise in hydrogeologic and geochemical characterization of ground water systems, groundwater flow modeling, borehole and surface geophysics investigations and the permitting and design of Class I, II and V Water Injection Well systems. He also brings his expertise with project and construction management of multi-million-dollar Water Injection and Water Supply Well projects. Mr. Bennett is a Principal Hydrogeologist for the firm.

Project Experience

City of Miami Beach Hydrogeologic Investigation and Ground Water Monitoring Program: Project Manager; AECOM is working with the City of Miami Beach (CMB) to obtain and interpret high resolution data on the geologic conditions underlying the CMB. These data will be used by the CMB to develop a density dependent ground water flow model using a combination of public domain model codes to develop, evaluate and test potential engineering scenarios related to stormwater management issues and mitigation strategies for sea-level rise. Based on limited existing data, AECOM is conducting a hydrogeologic investigation in an effort to provide sufficient information to accurately depict subsurface hydrogeologic conditions for model conceptualization and to provide high resolution data for model calibration and verification. Phase I consisted of a review and assessment of existing geologic and hydrogeologic data and an initial testing program on existing Class V stormwater drainage wells. Phase II consisted of drilling and testing of 42 ground water monitor wells completed in various hydrogeologic units within the Surficial aquifer system to a total depth of 330 feet at 14 locations. The natural gamma-ray log in combination with the sediment/rock descriptions, the water quality data and hydraulic profile data was used to select the monitoring intervals. Phase III consisted of set-up a ground water and surface water monitoring program. This monitoring program is automated and records on an hourly basis and transmits to a Web-based portal. These data will be used in the development of the ground water model, used to determine surface/ground water interactions and to determine short and long-term trends in ground and surface levels.

Miami Springs Wellfield Assessment and Rehabilitation – Miami Dade Water & Sewer Dept. (Phase I & Phase II): Wellfield Technical Lead: This wellfield consist of 23 shallow production wells drawing from the Biscayne Aquifer including

those at the Hialeah WTP and within the City of Miami Springs. Due to the age of this wellfield and associated infrastructure WASD retained the services of AECOM Technical Services to develop a condition assessment report. This report addressed the raw water production wells and associated mechanical, electrical, and structural components and functional integrity with the intent to provide a strategic evaluation and recommendations based on visual observed condition to extend the useful life of the facilities. Phase I (TO#25) included data/literature review, downhole video inspection all 23 production wells and reporting, engineering valuation, development of a list of recommendation and associated conceptual design/repair/eliminate for individual production wells. Phase II (TO#28) included the preliminary and final design of the typical rehabilitation of the existing production wells, new production well construction, and plug and abandonment of poor production or deteriorated production well. Technical specifications and drawings were developed covering well rehabilitation, new well construction and plug & abandonment along with Engineer's Estimate of Probable Cost depending on the individual well site. Mike will attend pre-bid meeting and address contractor questions and evaluated submitted bids. In addition, Mike will provide construction observation inspections at key points during project construction necessary to certify specifics of the production well work.

Town of Davie – Floridan Aquifer Well Field, Project Manager. Responsibilities included the design and permitting of a 20 MGD Floridan aquifer well field with the South Florida Water Management District. Initial phase of work included the development of technical specifications to complete a test-production well into the Floridan aquifer to determine water quality to optimize the reverse-osmosis plant design and to gain site specific Hydrogeologic information for use in the preliminary ground water modeling efforts related to the Consumptive Use Permitting process. The test-production

well was designed, bid and built under Mr. Bennett's direction using a qualified Florida-licensed water well contractor. The 20 MGD well field was successfully permitted through the SFWMD and five 2.67 MGD capacity brackish water supply wells were successfully constructed and tested and placed into services. In addition, a well completion and long-term well rehabilitation plan was developed as part of the Operation and Maintenance Protocol.

Fort Pierce Utilities Authority, Fort Pierce, Florida.

Served as project manager for the design and permitting of two new Floridan Aquifer production wells and the deepening and acidization of three existing Floridan Aquifer production wells. The specific deepening and acidization plan was developed using field data to increase water production capacity by an average of five times. The original well design was modified to increase the casing size and setting depths, which increased the well's capacity and decreased well development time. Oversaw well drilling, testing and well construction activities. Completed engineering report that documented the well construction and testing activities on the well field expansion effort. Engineered and oversaw the construction of the wellhead surface facilities and the instrumentation and controls to operate these Floridan Aquifer production wells. I worked with the SFWMD to obtain Alternative Grant Funding which provided financial support for this project.

Hampton Roads Managed Aquifer Recharge Project.

Current. This project entailed design of a 100 million a day Managed Aquifer Recharge Project using treated wastewater to offset declining ground water levels in the Potomac Aquifer in the Hampton Roads Area of southeast Virginia. A total of 3 to 5 MAR wells will be designed and constructed at each of 8 wastewater treatment facilities with well have a capacity of 3 MGD. AECOM will provide design, permitting, technical specifications for the MAR's wells and surface facilities for each site.

Oil Exploration/Production Fracking Impacts - Phase I – Collier County Pollution Control Department, Naples Florida.

This project entailed the description of the local typical historical drilling practices and how it compares to directional drilling & hydraulic fracturing operations primarily related to the Collier-Hogan 20-3H well. Mike provided a summary on disposal of wastewater generated by Oil and Gas operations via Class II wells in central Collier County and detailed the geology/stratigraphy/hydrogeology in the Golden Gate Area. In addition a high level risk assessment related to oil exploration/production industry impacts to the groundwater, surface waters, and natural resources in Collier County and summarized of the responsibilities of the different regulatory agencies, based on current delegated authority under Federal and State Oil & Gas regulations. Mike then identify the potential responsibility/liability of Collier County for oil wells that are on Collier County property but owned and/or operated by others, and evaluated existing regulations and identified, at a high level, the gap in regulations and practices and what improvements to the existing regulations could be recommended. A technical summary report was completed and a presentation made before the Collier County Board of Commissioners.

Project Manager, Northern California Power Authority – Impact Analysis of PG&E CAES System, Lodi, California.

Responsibilities included a technical and permitting review of Pacific Gas and Electric's (PG&E) planned CAES feasibility project to determine its potential impact to the Northern California Power Authority's current Class I injection well system completed into the Domengine Formation. This work entailed a review of existing geologic and hydrogeologic data and report completed as part of NCPA's Class I Injection Well System; gather and review existing geologic and hydrogeologic data and report completed as part of PG&E's Class V Injection Well CAES feasibility project. AECOM completed a Technical Memorandum summarizing PG&E's proposed CAES injection well feasibility project and its potential impact to NCPA's current Class I injection well system located in Lodi California along with a set of recommendations for further analysis to quantify the effects using analytical or groundwater models.

Resume: Kelley Samuels, PWS, CERP

Associate Vice President

Southeast Region-Environment Impact Assessment and Permitting

Education

Bachelor of Arts, Environmental Studies, Cum Laude, Rollins College, Winter Park, Florida, 1997
Graduate, Environmental Technology Center, Tampa, Florida, Statewide and US Army Corps of Engineers Wetland Delineation Methodology Course (1997, 1996)

Years of Experience

With AECOM: 14
With Other Firms: 14

Registration

Society for Ecological Restoration Certified Ecological Restoration Practitioner (CERP, 0345)
Society of Wetland Scientists Professional Wetland Scientist (PWS, 2083)
Florida Fish and Wildlife Conservation Commission (FFWCC) Gopher Tortoise Authorized Agent (#33)

Areas of Expertise

Stormwater
Drainage Systems



Kelley Samuels is a Senior Ecologist and an AECOM Certified Project Manager, based in the Orlando, Florida office. Kelley has over 20 years of experience as an environmental impact assessment and permitting specialist. Her expertise includes ecological assessments of flora and fauna (primarily in the southeast), with a specific focus on wetlands and wildlife as they relate to linear corridor analyses, environmental permitting, due diligence evaluation, and environmental monitoring. This work includes wetland assessment, wetland delineation, and functional assessment of wetland impacts and proposed mitigation utilizing the Uniform Mitigation Assessment Method (UMAM), protected species analyses, and environmental permitting with local, state and federal agencies. She is an authorized agent by the Florida Fish and Wildlife Conservation Commission (FFWCC) to excavate, transport, and handle the state threatened gopher tortoise (*Gopherus polyphemus*). Kelley has assisted in the delivery of federally funded projects that meet all aspects of the National Environmental Policy Act (NEPA) requirements including managing interdisciplinary teams from project development through the permitting, implementation and post permit compliance phases. She has prepared environmental documents that meet the Federal Aviation Authority (FAA), National Park Service (NPS), Department of Energy (DOE), Federal Energy Regulatory Commission (FERC), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Florida Department of Transportation (FDOT) Project Development and Environment (PD&E) Study and federal Environmental Impact Statements (EIS)/Environmental Assessments (EA) requirements for millions of dollars of public investment.

Project Experience

Gulfstream Natural Gas, Project Manager/Scientist for various operations and maintenance projects in Florida.

(2010 – ongoing) Manage off-shore monitoring operations to demonstrate permit compliance for hard bottom mitigation in the Gulf of Mexico including analytic data analysis and interpretation summary for annual reports. Manage all aspects of exposed pipe remedial cover projects including the management and deployment of our scientific diving team and follow-up reporting. Manage and oversee seismic monitoring report production necessary to ensure pipeline integrity during blast events onshore at adjacent mine facilities.

Gulfstream pipeline Phase II, Various central Florida Counties (2015). Kelley was one of two biologists that conducted the pedestrian survey of post-construction right-of-way to determine success of revegetation efforts as part of the annual wetland monitoring for Phase II of the Gulfstream pipeline spanning through portions of Manatee, Polk, Highlands, Okeechobee, Osceola, Martin, Palm Beach, and St. Lucie counties in Florida. She identified all flora and fauna present and noted the presence of invasive/exotic species within or immediately adjacent to the ROW, made land management recommendations, contributed to the final report and conducted site inspections with Florida Department of Environmental Protection regulatory staff. Recently, Kelley hosted a roundtable with state and federal

agency representatives to review documents that demonstrate permit compliance for portions of the pipeline on-shore (Hillsborough and Pinellas Counties) and off-shore (Gulf of Mexico) resulting in release of the \$5M performance bond requirement.

Client Manager, Florida Municipal Power Agency, Project Manager/Scientist for various projects (2019-ongoing).

Manages annual projects at the Cane Island Power Park and the Treasure Coast Energy Center that demonstrate compliance with the Conditions of Certification in accordance with the Power Plant Siting Act. These projects include refresher training, water-use audits, updates to the stormwater pollution prevention plan (SWPPP), land management, natural resource assessments, and agency coordination.

Eldorado Ivanpah Transmission Project (EITP), Ivanpah Valley, California (2012-2013).

Kelley was approved by the United States Fish and Wildlife Service (FWS) to conduct surveys for the federally listed desert tortoise (*Gopherus agassizii*) and to work as a biological monitor during construction of improvements contemplated as a part of the EITP project. In addition to being a biological monitor, she became one of four biologists assigned to train and implement standardized reporting methods using the Southern California Edison (SCE) FRED reporting system to ensure compliance with the United States Fish and Wildlife

Service (USFWS) Biological Opinion (BO) related to avian and reptilian species during construction.

Client Manager, Florida Power & Light Company, Miscellaneous Activities, Various Counties, Florida (2018-2019)

Responsible for client management, cost estimating and contracting as well as the client primary contact to assist Florida Power & Light with electric transmission, distribution, and electric power delivery projects. Kelley has staffed and provided oversight and management of the production of environmental assessments and environmental permit applications for a diverse array of projects including pole replacements, installation (above and underground), reguying, wiring, and/or instrumentation.

Client Manager, Orlando Utilities Commission, Miscellaneous Activities, Orange County, Florida (2019 – ongoing) (2019-ongoing)

Responsible for various task orders issued per AECOM's master service agreement to perform ecological and environmental work on OUC assets. This often includes securing the environmental permits needed for undergrounding and/or upgrades of existing assets. Permits routinely obtained include FDEP 404, WMD ERP, and dewatering permits. Our team also prepares SWPPP and oversees construction to ensure permit compliance including ESC monitoring. AECOM also oversees soil disposal at substations which requires testing and proper disposal if found to be contaminated.

Kinder Morgan, Central Florida Pipeline Permitting, Hillsborough, Polk, Osceola and Orange Counties, FL. (2018-2019)

Project manager responsible for the field assessment of ecological conditions and permitting needed for the Central Florida Pipeline system between Tampa and Orlando. Tasks included delineating the landward extent of jurisdictional wetlands and other surface waters, evaluating the potential to encounter state and/or federally listed species, coordinating with applicable regulatory agencies, preparing permit applications and negotiating permit issuance.



Project Approach

G. Project Approach

AECOM is committed to helping TIFA complete this project on time and on budget. To ensure that all work is completed on time, a dynamic schedule will be established, and deliverables will be identified at the beginning of each project. All major project activities, as well as the deliverables, are shown on the schedule. These items, along with action lists, are monitored and updated in conjunction with the schedule as tangible means of tracking the progress of individual tasks/ phases and identifying/reacting to problem areas.

Schedule tracking is accomplished by comparing project status to planned milestones. Various scheduling tools are available, but we find that simple bar charts are adequate for schedule control of most projects. The vast majority of our projects are completed on schedule and within budget. When projects are delayed, it is typically due to unforeseen circumstances.

AECOM understands that the basis for successful project management begins with quality. Our commitment is demonstrated by our implementation of a **Quality Management System (QMS)** that is certified to the internationally recognized ISO 9001:2008 standard. Our process involves the development of a Project Work Plan (PWP) that will guide the work of the AECOM team and outline any important procedures or protocols. The PWP is initiated once a notice to proceed is received.

In advance of the start of the project, we have included the following Initial Project Plan. This provides TIFA with an overview of some of the steps that will be taken to complete this project.

Initial Project Plan

Task 1 - Kick Off Meeting

Schedule a Kick-Off Meeting with the operators of the wellfield to understand the history of operation

and reasons for power failures in the past. Discuss operational plans for extreme weather events and steps TIFA has already taken to limit power failures in the wellfield. Understand the existing access issues experienced during flooding events.

Task 2 – Data Collection

Collect all pertinent operational data from the City and FPL. Conduct an onsite inspection of the FPL above ground power transmissions system, wellfield power connections and cabinets, auxiliary power connections, and existing mobile stand by generators.

Task 3 – Commercial Power Resiliency

Meet with FPL to review their data related to the power outages at the wellfield and general service area. Analyze power outage data from FPL, looking for root causes and patterns. Determine FPL planned upgrades or owner funded options to improve resiliency and reliability.

Task 4 – Operational Efficiency

Review the existing operations for each of the wells including pump, VFD, and current power consumption history. Using this information, provide recommendations for lowering power consumption and operating costs for the wellfield.

Task 5 – Stand By Power Generation

Evaluate 3 options to provide stand by power generation for the wellfield. The goal will be to maximize flow from the wellfield while distributing the pumping across multiple wells so as to not cause over pumping. The options will pay special attention to location, accessibility, environmental sensitivity, and flooding conditions in the area. Life cycle cost estimates will be provided for each option

Task 6 – Funding Assistance

Review existing grant programs available to water suppliers. Special attention will be paid to the significance of the wellfield to the City of Titusville, and that TIFA is a Public Private Partnership serving the public.

Task 7 - Final Report

Each of the deliverables associated with Tasks 3, 4, 5, and 6 above will undergo an independent technical review to verify the quality and integrity of the project tasks and written work products, to verify that the deliverables are in accordance with the scope of work. Once complete, a draft copy of the final report shall be submitted to TIFA for review and comment.

The project approach above contains multiple steps. To provide a quick turn around and meet TIFA's schedule needs, AECOM will use its large talent pool to conduct many of these tasks in parallel. Below you will find a bar chart illustrating the proposed schedule and timing for the project.

OPERATIONAL RESILIENCY STUDY SCHEDULE					
	July 2023	August 2023	September 2023	October 2023	November 2023
Task 1					
Task 2					
Task 3					
Task 4					
Task 5					
Task 6					
Task 7					



Fee/Compensation Schedule

H. Fee/Compensation Schedule

AECOM proposes to provide the professional consulting engineering services to perform all work listed in the Scope of Services as, required by the TIFA LLC Area IV Wellfield Operation Resiliency Study Request for Proposals, for the lump sum fees as listed below. AECOM proposes to itemize the invoicing by this same breakdown; with monthly invoices presenting the percent complete for each task.

<u>Task</u>	<u>Lump Sum Fee</u>
Kick Off Meeting	\$ 2,290.00
Data Collection	\$ 3,190.00
Commercial Power Resilience	\$ 6,720.00
Well Operation Efficiency	\$ 5,320.00
Stand-by Power Generation	\$ 8,320.00
Funding Assistance	\$ 7,200.00
<u>Final Report</u>	<u>\$16,960.00</u>
Total	\$50,000.00

If TIFA LLC desires to change, expand or add to the services described above, an additional scope will be negotiated. The fee for any change or expansion of services will be based on hourly rates as set forth in the proposed billing rates below.

**PROPOSED BILLABLE RATES FOR CONTRACT CO23Q006/TB
CONTINUING CONSULTING UTILITY SERVICES & PUBLIC WORKS PROJECTS**

FIRM NAME: AECOM Technical Services, Inc.

DATE SUBMITTED: 5/16/2023

PUBLIC WORKS PROJECTS	
JOB CLASSIFICATION TITLE	BILLABLE RATE (ALL INCLUSIVE)
Sr. Project Engineer	\$180
Project Engineer	\$150
Sr. Design Engineer	\$210
Project Design Engineer	\$140
Instrumentation Engineer	\$180
Lead Process Engineer	\$245
Structural Engineer	\$180
Electrical Engineer	\$180
HVAC Engineer	\$170
Sr. Civil Engineer	\$210
Civil Engineer	\$140
Sr. Traffic Engineer	\$260
Traffic Engineer	\$200
Sr. Traffic Analyst	\$200
Traffic Analyst	\$130
Sr. Architect	\$180
Architect	\$145
Sr. Architect Chief Designer	\$250
Architect Chief Designer	\$200
Architect Coordinator	\$185
Construction Engineer	\$180
Construction Manager	\$210
Sr. Construction Field Personnel	\$150
Construction Field Personnel	\$125
Sr. Landscape Architect	\$180
Landscape Architect	\$130
Sr. Landscape Designer	\$145
Landscape Designer	\$85
Sr. Environmental Specialist	\$150
Environmental Engineer	\$190
Ecologist	\$95
Geotechnical Engineer	**
Geologist	\$100
Sr. Hydrologist	\$195
Sr. Hydrogeologist	\$250
Sr. Arborist	\$185
Sr. Planner	\$180
Planner	\$130
Professional Surveyor	**
Survey Project Manager	**

**PROPOSED BILLABLE RATES FOR CONTRACT CO23Q006/TB
CONTINUING CONSULTING UTILITY SERVICES & PUBLIC WORKS PROJECTS**

FIRM NAME: AECOM Technical Services, Inc.

DATE SUBMITTED: 5/16/23

PUBLIC WORKS PROJECTS	
JOB CLASSIFICATION TITLE	BILLABLE RATE (ALL INCLUSIVE)
Three-man Field Survey Crew	**
Two-man Field Survey Crew	**
Surveying CAD/Computer Technician	**
Survey Technician	**
Bridge Inspector	**
CEI Inspector	\$125
<u>Additional/Supporting</u>	
Expert Witness - Engineering*	\$350
Engineering Intern	\$110
Engineering Technician	\$95
CADD/Computer Technician	\$110
Sr. CADD Designer	\$165
CAD Designer	\$140
Architectural Intern	\$90
QA/QC Officer	\$250
GIS Specialist	\$175
GIS Analyst	\$110
GIS Technician	\$75
<u>Project Administration</u>	
Principal	\$260
Senior Technical Professional	\$225
Sr. Project Manager	\$220
Project Manager	\$210
Permitting Coordinator/Manager	\$150
Sr. Administrative/Clerical	\$110
Staff Administrative/Clerical	\$95

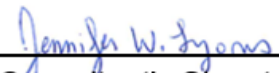
* Expert Witness rate shall apply only to actual in-court testimony.

** Will be provided by a subconsultant.

The above rates include salary cost, fringe benefits, overhead, operating margin and profit. They do not include direct expenses. Sub-Contractors are considered direct expense and shall be approved/disapproved during the Task Order approval procedure.

Jennifer W. Lyons, PE

Consultant's Authorized Signor (print print)


Consultant's Signature

5/16/2023

Date:

About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivalled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a *Fortune 500* firm and its Professional Services business had revenue of \$13.3 billion in fiscal year 2022. See how we are delivering sustainable legacies for generations to come at aecom.com and [@AECOM](https://twitter.com/AECOM).



THIRD ORDER OF BUSINESS

TIFA LLC
INVOICE APPROVAL BY MANAGERS

WHEREAS, the undersigned are the duly appointed and acting Managers of TIFA LLC, which operates pursuant to that certain Limited Liability Company Operating Agreement of TIFA LLC dated May 24, 2010 ("Operating Agreement"); and,

WHEREAS, at a duly called and noticed public meeting of the Managers as indicated below, the undersigned approved the contract and/or authorized the expenditure as indicated below, and further authorized the managers to execute the Invoice Approval by Managers form reflecting such authorized expenditures in order to process payments.

Previous Authorizations		
TIFA Meeting Date	Approved	Total Contract or Expenditure Authorized
6/15/2023	Imprest Account Reimbursement from Depository Account	See Attached

NOW, THEREFORE, the Managers of TIFA LLC, based upon the previous TIFA authorizations, approve the following payments:

Invoice Description	Total Amount	Pursuant to Previous TIFA Authorization Date	Invoice Payment
Transfer to imprest account at Northern Trust ending *8866	\$17,444.88	6/15/2023	To be Paid by TIFA upon this approval

Except as otherwise set forth herein, defined terms shall have the meaning set forth in the Operating Agreement. This Action may be executed in several counterparts, and all counterparts so executed shall constitute one Approval binding on all parties.

IN WITNESS WHEREOF, the undersigned represent and warrant that each is the duly authorized and appointed agent of TIFA LLC.

Robert E. Lee, Manager

Date: _____, 2023

Tom Abbate, Alternate Manager

Date: _____, 2023

TIFA LLC
Check Detail
May 12 through June 12, 2023

Type	Num	Date	Name	Account	Paid Amount	Original Amount
Bill Pmt -Check	ACH06072023	06/07/2023	Florida Power & Light	103.00 · Cash- Nort...		-8,712.44
Bill	83665-19117Jun23	06/01/2023		511.00 · Utilities	-429.75	429.75
Bill	09060-50505Jun23	06/01/2023		511.00 · Utilities	-398.76	398.76
Bill	24869-01248Jun23	06/01/2023		511.00 · Utilities	-414.33	414.33
Bill	40983-63494Jun23	06/01/2023		511.00 · Utilities	-379.56	379.56
Bill	62400-69564Jun23	06/01/2023		511.00 · Utilities	-429.16	429.16
Bill	73681-17557Jun23	06/01/2023		511.00 · Utilities	-385.05	385.05
Bill	76646-91016Jun23	06/01/2023		511.00 · Utilities	-730.02	730.02
Bill	11526-54016Jun23	06/01/2023		511.00 · Utilities	-386.72	386.72
Bill	47893-42013Jun23	06/01/2023		511.00 · Utilities	-720.25	720.25
Bill	54213-71161Jun23	06/01/2023		511.00 · Utilities	-462.44	462.44
Bill	75317-43016Jun23	06/01/2023		511.00 · Utilities	-728.65	728.65
Bill	18790-42503Jun23	06/01/2023		511.00 · Utilities	-917.45	917.45
Bill	32610-23505Jun23	06/01/2023		511.00 · Utilities	-889.52	889.52
Bill	54996-25506Jun23	06/01/2023		511.00 · Utilities	-652.92	652.92
Bill	74008-14500Jun23	06/01/2023		511.00 · Utilities	-787.86	787.86
TOTAL					-8,712.44	8,712.44
Bill Pmt -Check	1381	06/09/2023	DRMP, Inc.	103.00 · Cash- Nort...		-2,705.00
Bill	0171800	04/20/2023		508.00 · Wetland M...	-2,705.00	2,705.00
TOTAL					-2,705.00	2,705.00
Bill Pmt -Check	1382	06/09/2023	Marsh USA	103.00 · Cash- Nort...		-334.46
Bill	695847030329	04/01/2023		105.00 · Prepaid Ins...	-334.46	334.46
TOTAL					-334.46	334.46
Bill Pmt -Check	1383	06/09/2023	Pace Analytical, LLC	103.00 · Cash- Nort...		-3,422.80
Bill	2335551203	06/02/2023		501.50 · O&M Parts ...	-240.80	240.80
Bill	2335551201	06/02/2023		501.50 · O&M Parts ...	-1,587.00	1,587.00
Bill	2335551202	06/02/2023		501.50 · O&M Parts ...	-1,121.40	1,121.40
Bill	2335551837	06/06/2023		501.50 · O&M Parts ...	-473.60	473.60
TOTAL					-3,422.80	3,422.80

TIFA LLC
Check Detail
May 12 through June 12, 2023

Type	Num	Date	Name	Account	Paid Amount	Original Amount
Bill Pmt -Check	1384	06/12/2023	The City of Titusville	103.00 - Cash- Nort...		-2,270.18
Bill	COT05312023	05/31/2023		501.00 - O&M Oper...	-2,270.18	2,270.18
TOTAL					-2,270.18	2,270.18

FOURTH ORDER OF BUSINESS

TIFA LLC
Balance Sheet
As of May 31, 2023

	May 31, 23
ASSETS	
Current Assets	
Checking/Savings	
102.00 · Cash-Northern Trust Company	726,262.80
103.00 · Cash- Northern Trust Operating	25,000.00
Total Checking/Savings	751,262.80
Accounts Receivable	
104.00 · Accounts Receivable	106,319.80
Total Accounts Receivable	106,319.80
Other Current Assets	
105.00 · Prepaid Insurance	42,074.38
Total Other Current Assets	42,074.38
Total Current Assets	899,656.98
Other Assets	
110.00 · Consumptive Use Permit	1,981,386.49
110.50 · CUP Accumulated Amortization	-1,060,867.48
115.00 · FPL Fee	871,451.54
115.50 · FPL Fee Accumulated Amort.	-268,704.00
120.00 · Easements	333,883.45
125.00 · Mitigation Credit	139,200.00
130.00 · Monitoring Wells	488,188.61
130.50 · A/D Monitoring Wells	-161,110.26
135.00 · Area IV Wellfield Phase 1	1,814,563.28
135.50 · A/D - Wellfield Phase 1	-638,127.92
140.00 · Area IV Wellfield Phase 2	5,069,052.98
140.50 · A/D - Wellfield Phase 2	-1,277,501.95
145.00 · Area IV Equipment	6,162.34
145.50 · A/D - Area IV Equipment	-4,108.40
150.00 · Wellfield Assets-Inactive	164,932.50
Total Other Assets	7,458,401.18
TOTAL ASSETS	8,358,058.16
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
201.01 · A/P Trade	5,309.64
Total Accounts Payable	5,309.64
Total Current Liabilities	5,309.64
Total Liabilities	5,309.64
Equity	
301.00 · Contributed Capital - City	2,192,405.54
302.00 · Contributed Capital - Farmton	2,192,405.55
303.00 · Member's Equity	3,734,984.36
Net Income	232,953.07
Total Equity	8,352,748.52
TOTAL LIABILITIES & EQUITY	8,358,058.16

TIFA LLC
Profit & Loss Budget vs. Actual
January through May 2023

	Jan - May 23	Budget	\$ Over Budget
Income			
401.00 · Water Sales	487,897.16	483,297.94	4,599.22
402.00 · Interest / Dividends	14.56	12.50	2.06
Total Income	487,911.72	483,310.44	4,601.28
Gross Profit	487,911.72	483,310.44	4,601.28
Expense			
501.00 · O&M Operating Agreement	11,350.90	12,583.31	-1,232.41
501.50 · O&M Parts & Labor	1,579.97	9,583.31	-8,003.34
502.01 · Consulting	0.00	21,250.00	-21,250.00
502.02 · Accounting	10,570.00	7,291.69	3,278.31
502.03 · Legal	0.00	2,083.31	-2,083.31
502.04 · Hydrogeological Services	0.00	3,125.00	-3,125.00
503.00 · Managing Agent Fees	10,833.35	10,833.31	0.04
504.00 · Insurance (P&C / Liability)	19,129.52	19,573.31	-443.79
505.00 · Miscellaneous Expense	260.86	208.31	52.55
506.00 · Depreciation Wellfield	102,386.15	102,386.25	-0.10
506.10 · Depreciation Equipment	513.55	513.31	0.24
507.00 · CUP Amortization	41,278.90	41,278.75	0.15
507.10 · FPL Amortization	12,103.50	12,103.31	0.19
508.00 · Wetland Monitoring Expense	5,000.00	2,083.35	2,916.65
511.00 · Utilities	39,951.95	39,250.00	701.95
550.03 · Tangible Personal Property	0.00	4,958.35	-4,958.35
Total Expense	254,958.65	289,104.87	-34,146.22
Net Income	232,953.07	194,205.57	38,747.50

FIFTH ORDER OF BUSINESS

**TIFA LLC
2836 GARDEN STREET
TITUSVILLE, FLORIDA 32796**

June 15, 2023

Mr. Kevin Cook
Public Works Director
City of Titusville
2836 Garden Street
Titusville, Florida 32796

Mr. David Fuechtman
Vice President & Secretary
Farmton Water Resources, LLC
410 N. Michigan Avenue Suite
590
Chicago, Illinois 60611

CAPITAL DISTRIBUTION NOTICE

Pursuant to the TIFA LLC Operating Agreement Section 4.1 Distribution of Distributable Cash, a cash distribution from TIFA LLC is requested today in the amount of \$270,000.00 (\$135,000.00 to the City of Titusville and \$135,000.00 to Farmton Water Resources, LLC). Payment is to be made from the TIFA LLC Northern Trust main checking account within 30 days of receipt of this capital distribution notice.

Sincerely,

TIFA LLC

Tom Abbate
Alternate Manager

Robert E Lee
Manager

TIFA LLC
Member Distributions

	<u>5/31/23</u>
Cash Balance	\$ 726,262.80
Expected Cash Needs	
No unbudgeted items	-
Maintenance Cash Balance	<u>(450,000.00)</u>
Distributable Cash	<u>\$ 276,262.80</u>
Recommended Distribution	\$ 270,000.00
To City of Titusville	\$ 135,000.00
To Farmton Water Resources LLC	\$ 135,000.00

2023 Distributions

	FWR	City	Total
Budgeted	\$ 420,000	\$ 420,000	\$ 840,000
1/31/23	150,000	150,000	300,000
5/31/23	135,000	135,000	270,000
Total	\$ 285,000	\$ 285,000	\$ 570,000

2022 Distributions

	FWR	City	Total
Budgeted	\$ 420,000	\$ 420,000	\$ 840,000
9/30/22	127,500	127,500	255,000
6/30/22	72,500	72,500	\$ 145,000
3/31/22	\$ 140,000	\$ 140,000	\$ 280,000
Total	\$ 340,000	\$ 340,000	\$ 680,000

2021 Distributions

	FWR	City	Total
Budgeted	\$ 420,000	\$ 420,000	\$ 840,000
11/30/21	\$ 315,000	\$ 315,000	\$ 630,000
Total	\$ 315,000	\$ 315,000	\$ 630,000