



THE VIRGIN ISLANDS WATER & POWER AUTHORITY

9720 Estate Thomas A1 Cohen Plaza
St. Thomas, VI 00802

REQUEST FOR PROPOSAL RESPONSE

To Provide

Feeder Undergrounding

Project Management Services

PR-09-20

By



November 18, 2019



18 November 2019

Delores Donovan
Contract Administration Manager
Virgin Islands Water & Power Authority
9720 Estate Thomas A1 Cohen Plaza,
St Thomas, VI 00802

RE: PR-09-20 Request for Proposal for Feeder Undergrounding Project Management Services

Dear Ms. Donovan:

On behalf of FXB Engineering (FXB), we are pleased to present the Virgin Islands Water & Power Authority (VIWAPA) with our response to your Request for Proposal to provide Project Management Services for various underground feeder projects in St. Thomas, St Croix and St John.

We have assembled a team of key personnel with all the necessary skills and experience to successfully manage multiple underground feeder projects for VIWAPA. Our team members consist of professionals with specialized knowledge and experience in Underground Distribution Systems and Project Management services (Refer to our Organization Chart in section 2 of this bid and our team member qualifications in section 5 of this bid).

We thoroughly reviewed the RFP, Attachment A, Exhibit A, B and C and Addendum #1. FXB Engineering and our selected consultants meet or exceed the General Contract requirements, Legal requirements and Insurance requirements. FXB and our selected consultants maintain active USVI Business Licenses and active USVI Professional Engineering Licenses. Furthermore, we are not taking any exceptions to the Request for Proposal.

In addition to submitting the Bid Form, Qualifications of Key Personnel and the Questionnaire, we have included a section regarding our Overall Project Approach (Section 1 of our bid). We believe that our project approach will ensure that these critical construction projects are successfully implemented with expedited schedules and minimal construction change orders.

We would like to thank you for the opportunity to present our proposal and qualifications. If awarded this contract, FXB and our associated Team Members are prepared to mobilize within one week upon written notice to proceed (letter of Intent).

Respectfully Submitted,

FXB ENGINEERING
Peter J. Bonnes, P.E.
President



TABLE OF CONTENTS

Cover Letter

Section 1: Overall Project Approach

Section 2: Organizational Chart

Section 3: Bid Form

Section 4: Bidders Questionnaire

Section 5: Qualifications

- Firm Backgrounds
- Resumes of Key Personnel

Section 6: Additional Support Documents

- Payment Schedule
- Rate Sheet
- Virgin Islands Business Registration
- Virgin Islands PE Registration
- Certificate of Insurances

SECTION 1

PROJECT

APPROACH



OVERALL PROJECT APPROACH

Our project team has thoroughly reviewed Request for Proposal PR-09-20, to provide Feeder Undergrounding Project Management Services for the Virgin Islands Water & Power Authority. Below is a summary of our suggested overall project approach.

- I. Mobilization
 - A. Within one week of project award, FXB Engineering and our Project Team will mobilize. Our mobilization efforts will establish an immediate presence on the first of the underground feeder projects. That is, the Cruz Bay, Feeder 7E project.
 - B. It is our expectation that the Construction Contract for this project, as well as the Equipment Procurement Contracts for the Switchgear, Pad Mounted Transformers and Medium Voltage Cable & Accessories, will have been awarded, or will be close to award at the same time that the Project Management Contract is awarded. For this reason, it will be critical that our Project Management services begin with an immediate focus on this specific project.
 - C. In an effort to mitigate any potential delays, FXB Engineering, and our Team Members are prepared to mobilize without a signed contract. That is, we will mobilize within one (1) week of written notice to proceed.
 - D. A sample of our initial focus for the Cruz Bay Feeder 7E project is as follows:
 - Set up a construction kickoff meeting with VIWAPA and the installing Contractor if construction has not yet started at the time the Project Management Service Contract is awarded.
 - Review any open Contractor or Equipment Supplier Request for Information (RFI's).
 - Review and level the Cruz Bay transformer and cable/accessory bids if these contracts have not been awarded at the time of our mobilization.
 - Review Contractor and Equipment Supplier Submittals and Shop Drawings.
 - Schedule, plan, and attend a Construction kickoff meeting with the Feeder 7E successful bidder (if the Construction has not yet kicked off at the time of our Mobilization).
 - Setup and manage the process for document/file management for the project.
 - Review and/or setup and manage the payment schedule for the Feeder 7E Construction Contract and the Equipment Procurement.
 - Review the Contractors schedule, as well as the schedule of owner furnished equipment deliveries to make sure they align and review potential means for improving upon the schedule.
 - Review the status of permits and assist VIWAPA in obtaining any outstanding permits and develop a process/path forward to ensure that the construction schedule is not jeopardized due to unresolved permit issues.



- Review the status of potential “Rite of Ways” and develop a process/path forward to ensure that the construction schedule is not jeopardized where approvals are not granted. In some cases, this may require our team to suggest/find alternate suitable locations for pad mounted switchgear and transformers.
- Schedule a meeting with the Feeder 7E Contractor(s), and VIWAPA personnel (if appropriate) to walk the entire proposed duct bank routing to establish precise equipment, manhole, handhole locations.
- Schedule a meeting with the Feeder 7E Contractor(s), and VIWAPA personnel (LINE Department) to establish the exact locations where new duct banks will tie into existing manholes (Tobacco Road).
- Schedule a meeting with VIWAPA personnel to develop a clear path forward for handling primary tie into existing equipment, secondary refeeds, shutdowns, feeder outages, etc. Although this work will occur at the back end of the Feeder 7E project, it will be extremely important to develop a clear and concise written plan that can be presented to VIWAPA, modified as required and later presented to the Contractors. This is a critical part of this project. As such FXB Engineering is prepared to assume the responsibility to manage this effort as part of our Project Management Services.

E. The initial mobilization approach described above will be necessary to ensure success on the Cruz Bay Feeder 7E project. For this reason, these efforts will begin immediately.

II. Create and Maintain Project Management Documents for the Cruz Bay Underground Feeder Project and all other upcoming Underground Feeder Projects

A. Immediately after we mobilize on the Cruz Bay feeder 7E Underground Duct Bank Project, we will begin to prepare the necessary documents that will be utilized for the Feeder 7E Project Management process. Similar documents will also serve as key components on all of the Underground Feeder Projects. These documents are specifically described in the RFP, on pages 24 thru 26. These key documents are repeated below as well:

1. Project Definition Report: Provide a definition report to document the project objective, contracting strategy, schedule, duration, budget and recommended construction advertisement date
2. Project Management Plan (PMP): Develop a project management plan to capture the entire project end-to-end, covering all project phases from initiation through planning, execution and closure.
3. Project Schedule: Develop project baseline schedules that explicitly represents planned construction and resource utilization, identifies resource challenges and highlight project milestones.
4. Sub-Contractor Plan: Provide a report that identifies the contractor’s compliance with Minority-Owned Business Enterprise (MBE). List proposed Sub-contractors;

describe their experience, and their qualification as well as specific involvement in this Program.

5. Earned Value Analysis (EVA): Provide a monthly project-specific Earned Value Analysis (EVA) chart that depicts actual versus planned construction spending.
 6. Dashboard: Provide a weekly project-specific dashboard that summarizes schedule, budget, change orders, and issues.
 7. Progress Report: Prepare monthly project status reports to include a narrative description of the progress of work and major tasks completed, budget status, schedule overview, change order summary, open and closed deficiencies, key progress photos and significant project issues with recommendations on any unresolved matters.
 8. Risk Management Report: Provide a monthly claims mitigation report that identifies issues, risks, impacts to budget and schedule, recommendations and resolutions.
 9. Safety Plan: The safety management plan defines methods and processes for the identification and management of inherent safety risks. The Plan includes safety, security, handling of hazardous materials, waste management, illness and injury prevention program (IIPP), compliance with territory, OSHA and WAPA regulations, training, monitoring, recording, emergency management, fire/life safety and safety performance metrics.
 10. Close-Out Report: Prepare and provide a close-out report to WAPA attesting to the project(s) final completion including all open punch list items, deficiencies, labor compliance, final payment, change orders, claims, record and as-built drawings, financial summary, final schedule, warranties and guaranties.
 11. Lessons Learned Report: Provide a lessons learned report highlighting success and challenges, processes per construction project that worked and those that need improvements and recommending improvements strategies to the implementation process.
- B. As mentioned, these documents will initially be prepared at the early stage of the feeder 7E project. However, they will be updated throughout the entire project as necessary. Furthermore, these documents will be developed and modified as needed for each individual Underground Feeder Project such that each project will have its own set of Project Management Documents specifically tailored to that project.

- III. Construction Supervision & Project Management Services for Cruz Bay, feeder 7E, 8E and 9E projects.



- A. In parallel with the development of the Project Management Documents, we will continue to provide onsite Construction Administration & Project Management services for feeder 7E, followed by feeder 8E and 9E, or vice versa.
 - B. The vast majority of our onsite Construction Administration & Project Management services will be handled by our local support team members as defined in our Organizational Chart. This will enable us to react quickly to on site construction challenges, obstacles, questions & concerns as well as allow us to control safety and offer consistent project supervision and quality control.
 - C. Our Organizational chart identifies a total of Six (6) team members that maintain permanent residence in the US Virgin Islands. This will put us in an excellent position to successfully manage the first three (3) underground feeder projects. However, we anticipate the potential need to add additional local support in the likely event that multiple projects are in construction at the same time. In anticipation of this, we will be searching for additional qualified local support immediately after project award.
- IV. Information gathering for the remaining Underground Feeder Projects
- A. Once the Cruz Bay Project Mobilization occurs, Management documents are developed, and day to day onsite Construction Administration & Project Management is under control, we will develop a plan of action for the remaining underground feeder projects. It is our understanding that none of these projects are in the design stage as of yet. However, because of the vulnerability of the overhead systems to hurricanes, we fully understand that time is of the essence to move these projects along as soon as possible.
 - B. Our suggested path is to secure as much information as is reasonably practical for these upcoming projects. We anticipate that this will start with a meeting between our key team members and key VIWAPA personnel. The main focus of this meeting will be to bring our team up to speed on all of the future planned projects. Our team is extremely familiar with all three Islands, with underground transmission & distribution systems, and with VIWAPA standards. Furthermore, FXB Engineering has been involved in the design of a number of the existing underground distribution systems that exist in St. Thomas and St Croix today.
 - C. After the initial meeting we will develop and maintain a Project Planning outline, followed by a Project Planning Document. This document will serve as the “road map” for all of the underground feeder projects, including the Cruz Bay Projects that have already been designed. In general, this document will include a list of each project, as well as key components. Some of the major components of this document will be as follows:
 - Name and location of each project.

- Feeders associated with each project.
- Priority status of each project based on several key factors as compared to the other projects.
- Total estimated duct bank length of each project.
- Anticipated design start date and duration of design of each project.
- Anticipated construction start date and duration of construction of each project.
- Project Phasing suggestions.
- Estimated total project cost.
- Specific challenges and/or obstacles unique to each project.

D. Once the Project Planning Document is developed, we suggest an information gathering process be initiated for each specific project, based on the project priority status. Although this has not been requested as part of the RFP, we believe that this approach will save significant time and will result in lower overall construction costs. The goal here is to try to establish as much up-front information as possible, prior to the project hitting the actual detailed design stage. A summary of items that can be accomplished by the Project Management Team, prior to detailed design is below:

- Conduct A topographical survey and a Right-of-Way survey, and associated mapping, of the proposed duct bank path. In anticipation of this, FXB has included a Professional Surveying Firm as part of our team (refer to our Organizational Chart in section 2).
- Contact and coordinate with all Utility providers to obtain existing condition utility drawings and/or relevant information regarding existing water, sanitary, storm and communication lines.
- Contact and coordinate with the Public Works Department to determine the availability of relevant and useful documents as well as to determine specific underground feeder projects that may benefit by constructing them in parallel with specific Public Works projects.
- Consider performing Subsurface Utility Engineering (SUE) – utilizing geophysical sensing technology - for areas of potential risk. In anticipation of this, FXB has included Professional Engineers that specialize in SUE (refer to our Organizational Chart in Section 2).
- Consider the use of 3D Laser scanning - for areas of potential risk. In anticipation of this, FXB has included Professional Engineers that specialize in 3d Laser Scanning (refer to our Organizational Chart in Section 2).
- Secure relevant soil information where possible and practical. Rock excavation quantities are a significant unknown for these types of projects and can lead to substantial additional costs above and beyond the contractors lump sum bid price. Mitigating the unknowns associated with rock excavation will reduce change orders and should help to maintain construction schedules.

V. Provide schematic level/preliminary design services for the remaining Underground Feeder Projects



- A. After the information gathering stage is complete for each project, we suggest that VIWAPA consider the preparation of schematic level/preliminary design services. Although this has not been requested as part of the RFP, we believe that this approach will also save significant time, will result in more competitive bids for the Engineering work and will help to establish a tighter construction estimate early in the project development stage. Furthermore, schematic level design documents will be a valuable asset to be utilized in soliciting RFP's for the engineering work for each project.
- B. The schematic level/preliminary design documents would consist of the following:
- Preliminary System One Line Diagram.
 - Preliminary duct Bank routing plan to include proposed locations of primary pad mounted switchgear, manholes and communications handholes.
 - Preliminary Major Equipment schedules.
 - Manhole and handhole details.
 - Duct bank sections.
 - Standard Pad details.
 - Standard grounding details.
- VI. Construction Supervision & Project Management Services for all remaining projects.
- A. As each of the Underground Feeder Projects enters the construction stage, we will continue to provide onsite and home office Construction Supervision and Project Management Services. These services will consist of all of the Construction Activity related services described in the RFP. Examples are as follows:
- Review Construction Bids and prepare bid leveling sheets.
 - Setup, manage and attend pre-bid meetings.
 - Setup, manage and attend construction kickoff meetings.
 - Review Contractor and Equipment Supplier Submittals and Shop Drawings.
 - Setup, manage and attend weekly construction meetings.
 - Provide construction progress inspections and prepare reports.
 - Assist VIWAPA with the preparation of contract Change Orders if necessary.
 - Review Contractor Requests for Payment.
 - Prepare Contract Addenda if necessary.
 - Provide onsite support Personnel to work out construction obstacles or challenges.
 - Provide onsite supervision to ensure that Contractors comply with Contract Drawings & Specifications, Safety Regulations, Codes and all other relevant regulations.
 - Review and respond to contractor RFI's or coordinate the response with the Engineer of Record if appropriate.
 - Provide final inspection of work and prepare punch lists.
 - Manage the process of obtaining Close Out documents.

SECTION 2

ORGANIZATIONAL
CHART

ORGANIZATIONAL CHART: PR-09-20
FEEDER UNDERGROUNDING
MANAGEMENT SERVICES

OWNER



**Virgin Islands
Water and Power Authority**

LEAD ENGINEERING FIRM



PETER J. BONNES, P.E.
SENIOR PROJECT MANAGER
& PROJECT/CONSTRUCTION
ENGINEER

CLARE M. COSENZA
DOCUMENT CONTROL/ADMIN.

BRIAN T. UMILE, P.E.
HOME OFFICE ENGINEER
SUPPORT

LEAH WISE, P.E.
HOME OFFICE ENGINEER
SUPPORT

CHRISTIAN KREMER,
HOME OFFICE ENGINEER
SUPPORT

BILLY E. MOORE
HOME OFFICE ENGINEER
SUPPORT

OPTIONAL SUPPORT SERVICES

SUBSURFACE UTILITY ENGINEERS (SUE)



DAVID SULLIVAN
SUBSURFACE UTILITY ENGINEERING
MANAGER (SUE)

JEREMY JONES: SENIOR V.P.
GEOMATICS

DALTON PROCTOR: FAA-CERTIFIED
DRONE PILOT & 3D SURVEY TECH.

USVI LOCAL SURVEYING FIRM



BRIAN MOSELEY & ASSOCIATES, INC.
RYAN C. WISEHART, PLS
PROFESSIONAL LAND SURVEYOR

RETIRED VIWAPA PERSONNEL
67 YEARS OF VIWAPA EXPERIENCE

FELIX REY
ON-SITE CONSTRUCTION MANAGER

CLAUDE RICHARDSON
CONSTRUCTION INSPECTOR

JUSTIN CALLWOOD
SAFETY OFFICER

LOCAL FXB PARTNER



JOSEPH M. MCGILLIAN, P.E.
QA/QC ENGINEER

USVI LOCAL CIVIL ENGINEERING FIRM



JEFFREY L. BATEMAN, PE, PLS
CIVIL ENGINEER

ROY A. PEMBERTON JR.
ON-SITE PROJECT MANAGER

SPENCER BATEMAN: CONSTRUCTION
INSPECTOR

DENNIS ARTHURTON: CONSTRUCTION
INSPECTOR

SECTION 3

BID FORM

VIWAPA - RFP for FEEDER UNDERGROUNDING PROJECT MANAGEMENT SERVICES

BID FORM

PROJECT MANAGEMENT SERVICE for FEEDER UNDERGROUNDING PROJECTS

ITEM NO.	ESTIMATED QUANTITY (SEE NOTE)	UNIT	UNIT COST	DESCRIPTION	TOTAL COST
1	400	Hours	200	Sr. Project Manager	\$80,000
2	4,000	Hours	115	On-Site Project Manager	\$460,000
3	8,000	Hours	100	On-Site Construction Manager	\$800,000
4	8,000	Hours	175	Project/Construction Engineer	\$1,400,000
5	16,000	Hours	70	Construction Inspector	\$1,120,000
6	4,000	Hours	165	QA/QC Engineer	\$660,000
7	384	Hours	60	Safety Officer	\$23,040
8	4,000	Hours	80	Document Control / Admin.	\$320,000
9	800	Hours	155	Home Office Engineer Support	\$124,000
10	1	LS	249,352	Mobilization	\$249,352
11	1	LS	99,741	Demobilization	\$99,741
12	5,698	Days	113	Per Diem (Per Person Per Day)	\$643,874
TOTAL PROJECT COST (SUM ITEMS 1 THRU 12)					\$5,980,007

SECTION 4

BIDDERS QUESTIONNAIRE

B. OFFER

1. **Name of the Bidder:** FXB Engineering

(Individual, Partnership, or Corporation, as case may be)

2. **Date of Offer:** 11/18/2019

3. **The Virgin Islands Water and Power Authority**

4. Pursuant to and in compliance with the Request for Proposals and other Contract Documents relating to the following:

Project Management Services for Feeder Underground Projects

5. The undersigned, having carefully read, examined and having become familiar with the proposed project, scope of work, and local conditions affecting the performance and cost of the work at the proposed work-site; hereby, proposes and agrees to fully perform the work in accordance with the proposed contract documents. This includes furnishing all labor, materials, tools, supervision, equipment, and insurance necessary to complete said project in accordance with the contract documents.
6. The above-named Bidder affirms and declares that:
- a) *The Bidder is of lawful age and that no other person, firm, or corporation has any interest in this Bid Proposal or in the Contract proposed to be entered into.*

- b) This Proposal is made without any understanding, agreement or connection with any other person, firm, or corporation making a Proposal for the same purposes, and is in all respects fair and without collusion or fraud.*
- c) The Bidder is not in arrears to the Virgin Islands Water & Power Authority, upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to the Virgin Islands Water & Power Authority.*
- d) No officer, employee or person whose salary is payable in whole or in part from the Virgin Islands Water & Power Authority currently is, shall be, or will become interested, directly or indirectly, as a contracting party, partner, stockholder, surety or otherwise, in this Proposal, in the performance of the Contract, in the supplies, materials, equipment, work, or labor to which it relates, or in any portion of the profits thereof.*
- e) The Bidder has carefully examined the site of the work and, from his own investigations, has satisfied himself as to the nature and location of the work; the character, quality, and quantity of materials; the kind and extent of equipment and other facilities needed for the performance of the work; the general and local condition and all difficulties to be encountered; and all other items which may, in any way, affect the work or its performance.*
- f) All bids shall remain firm for a period of ninety (90) days following the opening bid date.*

VIWAPA – RFP for FEEDER UNDERGROUNDING PROJECT MANAGEMENT SERVICES

g) The undersigned, as Bidder, also declares that he has carefully examined and fully understands all the component parts of these Contract Documents and agrees that he will execute the Contract and furnish the required Performance Bond and will completely perform the work in strict accordance with the terms of the Contract and the Contract Documents therein referred to for the following lump sum bid price.

C. TOTAL BID PRICE: (from Bid Form)

\$ 5,980,007

Numbers

Five Million, Nine Hundred Eighty Thousand, and Seven Dollars


Words

1. The amount in Section C above shall be shown in both words and figures; and in the case of discrepancy, the amount shown in words shall govern. In the event of a discrepancy between the total of the items and the total stated, the total of the items shall govern. The Contractor must also completely fill out the Bid Form and the sum total indicated there must match the amount shown in Section D.
2. Interlineations, alteration or erasure may void the bid. The prices shall be typewritten or written by hand in ink.

VIWAPA – RFP for FEEDER UNDERGROUNDING PROJECT MANAGEMENT SERVICES

3. The payment schedule for completed work shall be based on the itemized unit prices as listed on the Bid Form and invoiced monthly. Payments will be made on a Net 30 schedule.

D. ADDENDA

Addendum I 

1. Addendum No. _____
2. Addendum No. _____ N/A
3. Addendum No. _____ N/A
4. Addendum No. _____ N/A

a) (Insert addendum (a) numbers and initial)

b) The Bidder certifies that the above addendum (a) has been received and that changes covered by the addendum (a) have been taken into account in the bid.

VIWAPA – RFP for FEEDER UNDERGROUNDING PROJECT MANAGEMENT SERVICES

E. ACCEPTANCE

1. This offer shall be open to acceptance for ninety (90) days from the date of bid opening.

F. CONTRACT DURATION

1. If this Bid is accepted, we will complete the Work in (730) calendar days from Notice to Proceed.

G. PRINCIPALS INVOLVED

1. (If Bidder is a partnership, fill in the following blanks) Name of Partners
2. Partners Address (If Bidder is a corporation, fill in the following blanks)
3. Organized under the laws of the State of Pennsylvania
4. Name and address of President Peter J. Bonnes, 479 Thornton, Road, Thornton, PA 19373
5. Name and address of Vice President Jeremy Gill, 585 Pumping Station Way, Kirkwood, PA 17536
6. Name and address of Secretary Peter J. Bonnes, 479 Thornton, Rd, Thornton, PA 19373
7. Name and address of Treasurer Jeremy Gill, 585 Pumping Station Way , Kirkwood, PA 17536

BIDDER'S QUESTIONNAIRE:

A. The undersigned guarantees the truth and accuracy of all statements and answers herein contained.

B. Please use additional sheets to answer the following questions.

1. How many years has your organization been in business providing Project or Construction Management Services?
 - Our organization has been providing Project Management and Consulting Engineering services for 51 years. Frank X. Bonnes, Consulting Engineering services was founded in 1968. FXB Engineering was founded/incorporated in 1989.
2. Have you ever failed to complete work in accordance with Contract Specifications or within the time limits of a Contract awarded to you? If so, where and why?
 - FXB has never failed to complete work in accordance with Contract Specifications or within the time limits of a Contract.
3. Provide a list of at least three (3) Consulting contracts your company has performed similar in nature to this scope of work. Supply project names, locations, how it applied to this job, contracted amount, completed amount, and contact person on the owner side for verification for each of the three (3) submittals.

- 1) New 34.5-13.8kV substation project for VIWAPA, the Randolph Harley Power Plant, St Thomas, USVI:

Description: This was a multi phased project that included a complete replacement of the outdoor open air 34.5kV substation and the rooftop 13.8kV substation at the Randolph Harley Power Plant. FXB Engineering provided Engineering & Design Services along with Construction Administration and Construction Management Services for every phase of the project. The new indoor 34.5kV GIS and indoor 13.8kV Arc Resistant Metal Clad Switchgear was engineered, purchased, constructed and energized prior to the de-energization of the existing 34.5kV and 13.8KV substations. This project included two 34.5kV/13.8kV/13.8kV three winding bus tie power transformers, refeed to three 34.5kV transmission lines, refeed to six 13.8kV distribution lines, a new double ended 13.8kV Arc Resistant Metal Clad Switchgear for station service, and reconnection of Eight generators to the new switchgear. The project required close management of/and coordination with several Contactors, Manufacturers and VIWAPA Personnel.

Contract amount and construction cost: Our total estimated contracted amount for this project was \$770,000.00. The estimated total construction cost is \$14 million. However, the project could have easily exceeded \$18 million if awarded a single EPC project.

Contact Person: Clinton Hedrington, The Virgin Islands Water & Power Authority.

2) Underground Duct Bank Project, Cruz Bay, St. John USVI.

Description: This project consists of replacing the overhead 13.2kV distribution system in Cruz Bay with a new underground distribution system. The project has been split up into three separate construction projects as follows: Feeder 7E, Feeder 8E and Feeder 9E. FXB prepared the electrical engineering & design services for all three of the projects. As such we are in a unique position to immediately offer our Project and Construction Management services for the first three Underground Feeder Projects (St. John feeder 7E, 8E and 9E) as well as the upcoming projects in St. Thomas and St. Croix.

Contract amount and construction cost: the FXB contracted amount for this project was \$257,050. The estimated total construction cost is \$50 million.

Contact Person: Clinton Hedrington, The Virgin Islands Water & Power Authority.

3) Several Underground Duct Bank Projects in St Croix and St Thomas

Description: Over the past thirty years, FXB Engineering has provided engineering & design for several underground duct bank projects for VIWAPA on the Islands of St Thomas and St Croix. These projects, along with others indicates are extensive experience as it relates to the planning, engineering & design, and construction management of underground distribution systems within the US Virgin Islands. Some of these projects are listed below:

- The Randolph Harley Power Plant & vicinity: New duct banks for Feeder 5A, 6A, 7A, 8A, 9A and 10A.
- The Randolph Harley Power Plant & vicinity: New duct banks for 34.5kV feeder OAOB1 (feeder 11), OAOB2 (feeder 12) and OAOB (feeder 13)
- The Randolph Harley Power Plant: New duct banks for generator 11, 12, 13, 13, 15, 18
- New duct banks for Feeder 11 and 12 from Texaco Bulk Fuel Facility to pedestrian bridge on Veterans Drive and to existing Manhole on Harwood Highway, St. Thomas.
- Underground Duct Bank project: Raphune Hill to Lovers Lane, St Thomas.
- Underground Duct Bank project: Fort Mylner to Nadir: St Thomas.
- Underground Duct Bank project: Christiansted, St. Croix
- Underground Duct Bank project: two 25kV feeders, St Croix

Contact Person: The Virgin Islands Water & Power Authority (several people)

4. Have you personally inspected the areas where Project Management Services are planned? St. Thomas? St. John? St. Croix?

- a) **Inspection of the areas:** Our proposed overall Project Manager, Peter J. Bonnes, P.E., and our proposed On-site Project Construction Engineer/Manager, Felix Re, and our Document Control / Administrative Support Specialist, Clare Cosenza, have personally walked/driven, inspected & analyzed the complete path of the proposed Feeder 7E, 8E and 9E duct banks for the Cruz Bay

project in St. John. Furthermore, our overall project team is extremely familiar with St. Thomas, St John and St. Croix. Several of our proposed project team members live in the US Virgin Islands.

Describe any anticipated problems with the sites and your proposed solutions.

- b) **Anticipated problems:** We anticipate that each and every one of these underground distribution projects will face multiple challenges and obstacles along the way. The conversion of overhead power distribution systems to underground systems, while still maintaining service to customers is almost always a challenge. Achieving this goal in the US

The Virgin Islands will include many unique challenges. A brief list of expected challenges are as follows:

- Unknow subsurface conditions
- Unavailability of As Built Utility Drawings and Surveys
- Right of way research, permits, & road closures
- Locating equipment on private property
- Rock Excavation – Undefined quantities of rock excavation
- Meeting Seismic requirements, for all pad mounted equipment
- Potential Dewatering for the installation of manholes
- Limiting specific project to less than one acre of work in order to avoid CZM permits
- Coordination with Public Works, and all utilities
- Bridge crossings and culvert crossings
- Material deliveries: Especially as it relates to the Island of St. John.
- Availability of equipment storage and construction staging areas
- Primary tie into existing equipment
- Secondary tie into existing equipment and minimizing impacts to service
- Minimization of shutdowns and switch overs and minimizing impacts to service
- Addressing code issues or construction issues for existing installations
- Managing owner furnished equipment and insuring proper coordination of deliveries, Shipping splits, cable reel lengths, between Equipment suppliers, VIWAPA and the installing Contractors
- Supervision of Safety and Security Measures
- Hurricane Preparedness Plan
- Managing construction activities to minimize impact to residents and tourists

- c) **Proposed Solutions:** The key is to anticipate the obstacles & challenges that each project will bring and to mitigate the effects. This requires a team of skilled and experienced professionals, with an in-depth knowledge of Underground Power Distribution Systems, extensive familiarity with the US Virgin Islands as well as with VIWAPA power systems and standards. Our selected team has the technical skills and experience successfully manage these challenging projects for VIWAPA. Some examples of risk mitigation techniques that we will implement are as follows:

- Prepare and maintain a comprehensive Project Management Plan (PMP) for each project in accordance with the RFP.

VIWAPA - RFP For Feeder Undergrounding Project Management Services

- Consider splitting larger projects up into multiple phases in order to promote local competition, accelerate project schedules, allow for multiple projects to be constructed at the same time if desired, and to reduce the impact to tourist seasons, construction during hurricane season and road closures. This is the same course of action that FXB suggested be taken for the Cruz Bay duct bank project. As such, that single project has been split up into three smaller construction projects.
 - Limited available locations for pad mounted switchgears and pad mounted transformers.
 - Prepare and maintain a Safety Plan and a Risk Management Plan for each project in accordance with the RFP.
 - Prepare and maintain a QA / QC Plan, for each project, in accordance with the RFP.
 - Prepare and maintain 'Lessons Learned' reports in accordance with the RFP.
5. Will you subcontract out any part of this contract? If yes, what parts and who will be the subcontractor(s). Do you plan to employ local personnel or companies?
- Yes, FXB Engineering plans to subcontract and to use local personnel:
 - a) Subcontractors: Our selected team consist of FXB Engineering in house employees, as well as several local subcontractors. The following firms & individuals will be subcontractors to FXB Engineering:
 - On-Site Project Manager: Roy Pemberton Jr. - USVI resident
 - On-Site Construction Manager: Felix Rey - USVI resident and retired VIWAPA employee
 - Construction Inspector: Claude Richardson - USVI resident and retired VIWAPA employee
 - Additional Construction Inspectors: The Green Piece: Civil Engineers-USVI Firm
 - Safety Officer: Mr. Justin Callwood - USVI resident and retired VIWAPA employee
 - QA/QC Engineer: Joe McGillian, President of Paradigm Engineers
 - Optional Services: Brian Mosely & Associates: Professional Surveying Services: USVI Firm
 - Optional Services: CPC Engineering: Subsurface Utility Engineering / Laser Scanning
6. What equipment do you own that is available for the proposed work?
- At FXB Engineering we will utilize the below referenced equipment, that we presently own, to perform our work:
 - Several Computers and servers
 - Plotters, copiers and printer
 - Software programs including MS Project, Excel, Word and AutoCAD
 - Our proposed sub consultants for this project own the following equipment that is available for our work if needed:
 - Unmanned Aerial Systems (UAS/Drones)
 - Robotic Total Stations
 - 3D Laser Scanning equipment

VIWAPA - RFP For Feeder Undergrounding Project Management Services

- GPS Equipment
 - Survey vehicles
7. What equipment will you purchase for the proposed work?
- We do not anticipate the need to purchase any additional equipment to perform our work.
8. What equipment will you rent for the proposed work?
- We do not anticipate the need to rent any additional equipment to perform our work.
9. Have you included any exceptions with your proposal? If yes, please elaborate.
- We have not included any exceptions with our proposal.
10. Have you included the professional resume of your intended Project Manager and other key staff with your proposal?
- Yes, we have included the professional resume of all key personnel. Refer to Attached Resume Section 5.
11. Please add any relevant information you believe is important to this Bid Questionnaire that has not been asked in a previous question?
- Refer to Overall Project Approach Section 1.
12. The business is a Sole Proprietorship, Partnership, or Corporation? (circle one)
13. The address of principle place of business is **5 Christy Drive, Suite 307, Chadds Ford, PA 19317**
14. The names of the corporate officers, or partners, or individuals doing business under a trade name are as follows: Peter J. Bonnes
15. Bidder's Signature

Peter J. Bonnes

END OF BID

SECTION 5

QUALIFICATIONS

FIRM BACKGROUND

UTILITY / MEDIUM VOLTAGE / DISTRIBUTION SYSTEMS



FEATURED PROJECT



RANDOLPH HARLEY POWER PLANT ST. THOMAS, U.S.V.I.

Frank X Bonnes and now FKB Engineering has been providing the VIWAPA with engineering services since the 1960's. One major project was the electrical design for the replacement of 13.8kV and 34.5kV open bus distribution system and oil circuit breakers with new 13.8kV indoor switchgear in a double-bus, double-breaker scheme and new 34.5kV indoor GIS (gas-insulated switchgear). The new indoor substation supports the entire island of St Thomas. The project included new primary underground duct banks from the new 13.8 /34.5kV switchgear building to several generator step up transformers, three 34.5kV transmission line feeders and eight 13.8kV primary distribution feeders.

UTILITY/MEDIUM VOLTAGE/ DISTRIBUTION SYSTEMS

Facility Types Include:

Substations
Institutional
Industrial
Corporate
Pump Stations
Waste Water Treatment Plants
Generator Farm

What We Do:

Site Power Distribution Systems
Substation Design
High & Medium Voltage Systems
Utility Interconnect Applications
Co-Generation / CHP Systems



UTILITY/MEDIUM VOLTAGE/DISTRIBUTION SYSTEMS PROJECT SNAPSHOT

AGI/Klearfold
Allen Envelope
Amazon.Com
Ambler Station
American Food Service
Ball Substation
Bethel Township Sewer Authority
Chester Community Rehab. Center
Comcast
Concord Township Sewer
Authority Council of Devon
DAF Greenwood
Dish Network
Dream Valley Pump Station
Dunwoody Village
Edgmont Country Club Pump
Station Episcopal Academy
Fair Acres Pump Station
Glaxo SmithKline Biologicals
Glen Mills School
Glen Mills Shopping Center
Global Pharmaceuticals
Longwood Gardens
Maintree Shipping Center
Merrill Lynch & Company
Metromedia
Fiber Network
Mid County Shopping Center
Mount Hope Waste Water
Treatment Plant

Network Plus
Neuse Colony Waste Water
Treatment Plant
Providence Town Center
Public Ledger Building
Reilly Foam Corp.
Renaissance Technologies
Rio Grande Shopping Center
St. Joseph's University
St. Judes Catholic Education Center
Sims Hugo New Group
State Street Corp.
Steamfitters Local 420 Union
Stonehurst Court Apts.
Summit Hill Water Authority
TEK Park
TD Bank Facilities
Turn 5
Verisign Inc.
Virgin Islands Water & Power
Authority (VIWAPA)
Wawa Dairy
Weber Display & Packaging
Yearsley Mills Pump Station



EAST END SUBSTATION

ST. THOMAS, U.S.V.I.

Engineering for the restoration & expansion to East End due to hurricane damage which included new control building to house the new station service, and all new 13.2/34.5/69kv protection & control systems. New GIS building to house the new 34.5kv and 13.2kv GIS lineups. New 69kv GIS building to house a new 69kv GIS. Two new 50MVA 3-69-34.5kv transformers, new 10 bay, 34.5kv GIS and 5 bay 13.2kv GIS. Completed primary & backup protection lines, transfers & feeders. Total project cost is estimated at \$23 million.



THE EPISCOPAL ACADEMY

NEWTOWN, SQUARE, PA

Electrical engineering for the design for multiple upgrades for the campus including a 13.2 kV underground distribution system upgrade for this 232-year-old, award winning independent school. The project included new generators and pump station design.



SOLAR SUBSTATION

DONOE, ST. THOMAS, U.S.V.I.

Electrical engineering services for a 5 MW solar project which included a new 34.5kv Gas Insulated Switchgear (GIS) substation located in a Power Distribution Center. (PDC) for the purpose of tying in 5 MW of solar power into the utility companies' transmission system. The new substation was commissioned in March 2015. The project provided 4-5% of St Thomas's current base load capacity during daylight hours.

LONGWOOD GARDENS

KENNETT SQUARE, PA

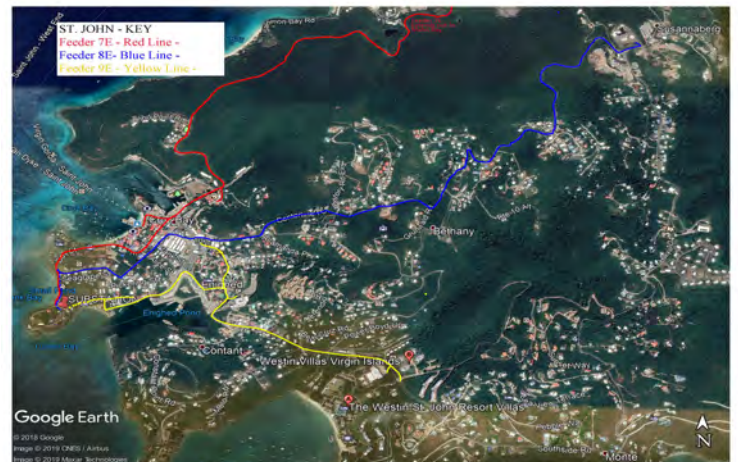
Electrical engineering for the extension of a primary ductbank. Design includes an 1,800 foot extension, new manholes at 250' intervals, new communications quazite boxes, and new 15kv rated cable.



RICHMOND POWER PLANT

ST. CROIX, U.S.V.I.

Electrical design to replace a 25kv open bus distribution system with OCB's and substation type vacuum breakers with a new 24.9 kV indoor switchgear utilizing 1200 amp vacuum circuit breakers in a main-tie-main scheme. Design included: 24.9 kV metal clad line up – 12 sections. Solid state overcurrent phase and ground relays, bus differential relays, instrumentation and metering. Control transformers to each bus, 125 volt DC battery system, distribution to existing 24.9 kV feeders, connection to 13.2 kV system through redundant bus tie transformers.



CRUZ BAY, UNDERGROUND DUCT BANK

ST. JOHN, U.S.V.I.

Electrical engineering for the electrical design services for the new underground primary electrical distribution system to replace the overhead system along Feeders 7E, 8E & 9E, in which over 90% was destroyed by the 2017 hurricanes. Included was the design and locations for 29, 15kv padmounted switches & one 15kv source transfer switch, 79 pad mounted transformers, 13 sectionalizing cabinets, metering cabinets and 66 new manholes & handholes throughout the Cruz Bay area. Est cost \$53 Mill.



DUNWOODY VILLAGE

NEWTOWN SQUARE, PA

MEP/FP and FA engineering & design for the Infrastructure renovations of five (5) apartments buildings and the West Country Houses. Design was completed in three (3) phases which included a new main distribution switchboard, new power distribution for each building and new MEP/FP & FA systems for the corridors and amenity spaces.



GLAXOSMITHKLINE BIOLOGICALS

MARIETTA, PA

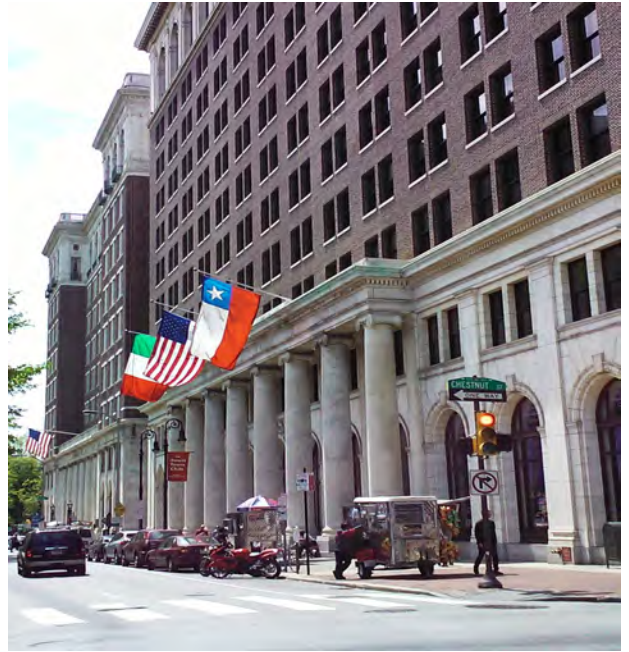
FXB served as the Owners Electrical Consulting Engineer for several projects, including a new 69kV-12.47kV substation project consisting of two 69kV services from PPL, 2-26MVA power transformers, and double ended 12.47kV switchgear lineup with main-tie-main and auto throw over located in a power distribution center. New site distribution to over 20 buildings.



WHITE HORSE VILLAGE

EDGMONT, PA

Engineering services for a new 33kV-480/277V substation and 3100kW back-up diesel generator for the entire site



SIMS HUGO NEU GROUP RECYCLING

QUEENS, NY

Engineering services for the construction of a transformer vault/switchgear building, and interconnection with the utility company.



PUBLIC LEDGER BUILDING

PHILADELPHIA, PA

Engineer services for a new 13.2kV metal clad switchgear in main-tie-main configuration including the new service from two PECO 13.2kV lines.

COUNCIL OF DEVON

WILMINGTON, DE

Engineering services for two new 15kV electric services for a 290,000 SF, 16-story high rise including a 3,000A low-voltage switchgear design for the building service/distribution



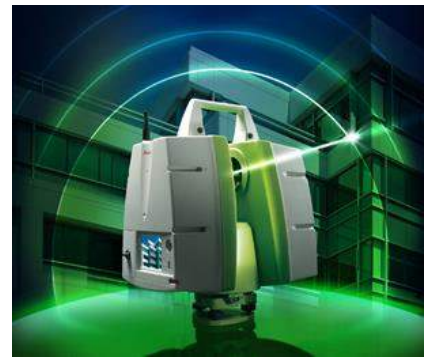
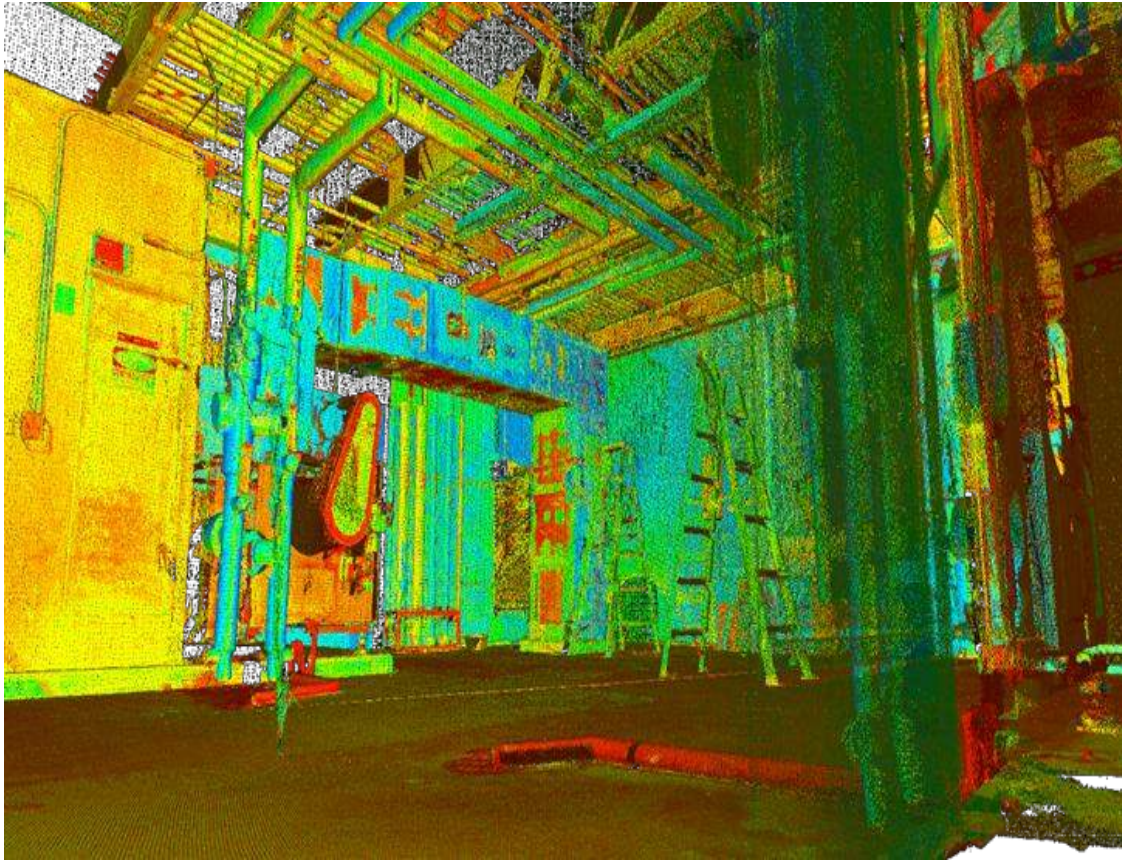
Excellence in Engineering for over 40 Years



www.cpc-eng.com

- Government Services
- Land Development
- Transportation / Traffic Engineering
- Construction Services (CEI)
- Geomatics / Surveying

Geomatics/Surveying Services



CPC is involved in a wide variety of information-gathering activities to design, develop and operate systems for collecting and analyzing spatial information. Our Geomatics group utilizes technologically advanced tools like robotic total stations, global positioning system (GPS) equipment, digital aerial imagery, 3D Terrestrial Laser Scanning, Building Information Modeling (BIM), computer-based drafting and design (CADD), and geographic information systems (GIS) to provide clients with the most cost-efficient and innovative solutions.



Geomatics/Surveying Services

- **ALTA/NSPS Land Title Surveys**
- **As-Built Surveys**
- **Boundary Surveys**
- **Full-Service Platting Management**
- **Construction Layout Services**
- **Control Surveys**
- **Design Surveys**
- **Expert Witness Testimony**
- **GPS Surveying**
- **GIS Applications**
- **Legal Descriptions**
- **Right-of-Way Surveying & Mapping**
- **3D Terrestrial Laser Scanning**
- **Topographic Surveys**
- **Unmanned Aerial Systems (UAS/Drones)**
- **Subsurface Utility Engineering (SUE)**

Surveying and Mapping are the foundation of any successful design or construction project. CPC's professional surveyors and mappers perform the full array of highly technical services for projects of any size.

We utilize the latest technology of GPS, Robotic Total Stations and 3D Terrestrial Laser Scanners for all survey projects. The use of high-definition laser scanners enables our surveyors to collect data from a multitude of subjects including complex facilities, buildings and assets, bridges, structures and roadways, and directly translates to time and money saved for the client.

CPC is also a market leader in streamlining Plat Management to help developers pull building permits and break ground faster than ever before.



PROJECT LIST

- NASA Launch Pad 39B (Brevard)
- Rollins College Contract (Orange)
- I-4 Ultimate (Orange/Seminole)
- Florida Mall Renovation (Orange)
- Dania Pointe (Broward)
- FPL Contract (East Coast FL)
- SeaWorld Contract (Orange)
- South Bay Pipeline Expansion (Hendry)
- Disney's Sausalito (Orange)
- Florida Turnpike
- Volcano Bay (Orange)
- US Virgin Islands Watermain
- Embry Riddle (Orange)



Subsurface Utility Engineering (SUE)



Subsurface Utility Engineering Services (SUE) is the latest service offering from CPC. With Subsurface Utility Engineering Services, CPC can now offer its clients a cost effective, non-destructive method of understanding the location and extent of subsurface utilities utilizing the most current geophysical sensing technology to identify subsurface infrastructure.

Subsurface Utility Engineering (SUE)

SUE is mainly used at the design stage of projects and when information is being collected for asset management purposes. In both situations, a similar process is followed but the scope of the work and presentation of the information may vary. When a SUE investigation is carried out for a capital works project prior to construction, the objective is generally to collect accurate utility information within the project area to avoid conflict at later stages of the project.

For initiatives involving asset management, project owners may be missing information about their underground utilities or have inaccurate data. In this situation a SUE provider would collect the required information and add it to the asset management database, according to the four quality levels prescribed by ASCE Standard 38-02.

- Quality Level D. Most basic level of information for utility locations. It comes from existing utility records or verbal recollections.
- Quality Level C. Involves surveying visible above ground utility facilities (e.g., manholes, valve boxes, etc.) and correlating this information with existing utility records (QL-D information).
- Quality Level B. Involves the application of appropriate surface geophysical methods to determine the existence and horizontal position of virtually all subsurface utilities within a project's limits.
- Quality Level A. Also known as "daylighting", is the highest level of accuracy presently available. It provides information for the precise plan and profile mapping of underground utilities through the actual exposure of underground utilities (usually at a specific point), and also provides the type, size, condition, material and other characteristics of underground features. Exposure is typically achieved through hand digging or Hydro-Vacuuming.

3D Laser Scanning/BIM

Architectural:

- Exterior & Interior As-Builts
- BIM Modeling

Construction:

- Pre-Existing Conditions
- Prefabrication
- Quality Control
- Quantity & Volume Surveys

Engineering:

- Route Surveys
- Topographic & Land Features
- As-Builts

Energy Facilities:

- Overhead Wires & Poles
- Chiller Plants, Power Plants, Substations

3D Terrestrial Laser Scanning has advanced the collection and delivery of accurate survey data for infrastructure and construction projects. This cutting-edge technology allows CPC surveyors to gather a large amount of precise project data points (also known as a “point cloud”) in a short period of time.

This data can be used to model surfaces for a variety of uses, and easily converted to standard design platforms like AutoCad. Viewing the data in 3D gives our clients a complete picture of their project from any angle, improving their ability to make informed project decisions.

3D Laser Scanning also minimizes labor, health and safety issues, and accelerates a project’s timeframe to lower costs.



PROJECT LIST

- NASA Launch Pad 39B (Brevard)
- Disney’s Sausalito (Orange)
- Volcano Bay (Orange)
- US Virgin Islands Schools
- Breakers Hotel (Palm Beach)
- Robinson St. PD&E (Orange)
- ORMC Hospital (Orange)
- Water Treatment Facilities
- Watermain Replacements
- Pipeline Expansions



3D LASER SCANNING & MODELING

At CPC, we use the latest Leica Scan Station P50 to capture 3D geometry of civil infrastructure, creating an as-built representation of a large industry complex or generating data for integration into Building Information Modeling (BIM). We collect millions of measurements in three dimensions called point clouds at the highest quality, and at an extremely fast scan rate of one million points per second with ranges of up to 3,280 feet.

The result is an organized 3D digital representation of a subject which is delivered quickly, efficiently and accurately.

The versatility of laser scanning, combined with our ability to handle complex environments, means CPC can deliver accurate measurements for a wide range of applications. Whether it's a large infrastructure hub, heritage site, underground tunnel or office building, by applying innovative laser scanning technologies we can deliver the most precise measurement solution.



CPC is pushing laser scanning technology to the limit by combining scan data to create the ultimate visual tour of a scanned site.

- **Rapid site data collection – 1 million points per second**
- **Accurate information – each point accurate to +/- 2mm**
- **Completeness of data – all information in the scan view is collected**
- **Reduces risk and safety constraints – allows remote surveys at hazardous sites or reduces repeated returns to restricted locations**
- **Permanent “point-in-time” archive for heritage recording and reinstatement**

LEICA TruView GLOBAL

All of CPC's surveys can be supplied in a variety of 2D and 3D formats. Additionally, point cloud information from laser scanners can be supplied quickly in a TruView Global format that gives you instant access to interrogate the raw data dimensionally. In line with the evolution of Building Information Modeling (BIM), we can deliver Measured Building Survey data directly to all parties in a BIM-compatible format.

Real-time access to this data can provide critical measurements instantly, or once post-processing techniques are applied, can provide the measurement platform to extract 2D drawings, 3D models or BIM deliverables.

What used to take weeks or months of surveying, engineering and architectural drawing now takes days.

- **TruView Global Instant Point Cloud Access**
- **Early access to data, quicker decision making and collaboration**
- **Greater interpretation and information**
- **Remote Internet access, multi-user facility**
- **Reduces site investigations and visits**
- **Enhances Building Information Deliverables**

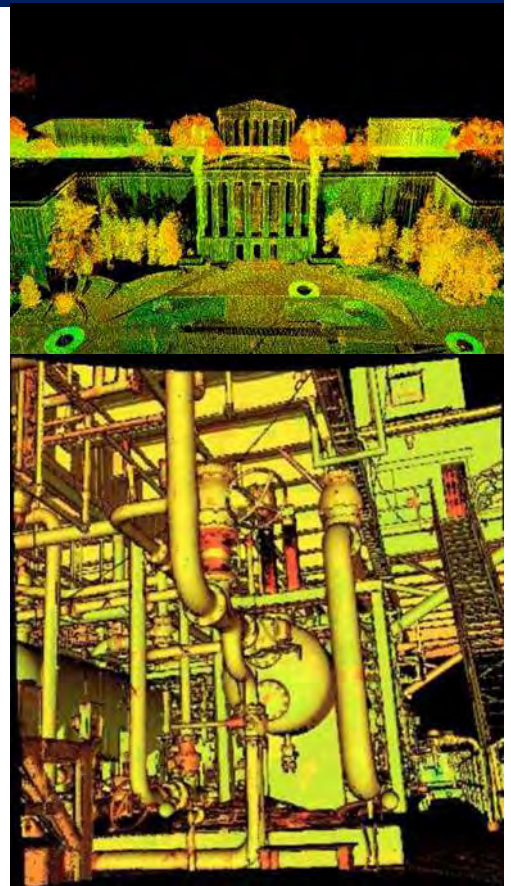
BENEFITS of 3D LASER SCANNING SOLUTIONS FOR A/E/C INDUSTRY

CPC is a leader in the emerging technology of 3D Laser Scanning that is providing rapid access to large amounts of highly measureable survey data, and its benefits for the A/E/C industry far outweigh the cost. Key benefits include versatility throughout a project, keeping deadlines on schedule and reducing risk by ensuring accurate as-built documentation. On a typical project, rework can account for 12 to 15 percent of the total cost.

Identifying conflicts and exposing inaccuracies before they occur translate into huge savings for you on rework/design.

This is accomplished by utilizing a 3D laser scanner with a one- or two-person field crew. The point cloud data from this effort can help generate 2D-, 3D- or a hybrid of deliverables that include pipe locations, sizes, supports, foundations, walkways, topography and clearances of any vertical structure or MEP/HVAC on your site to prevent the clash of existing versus design.

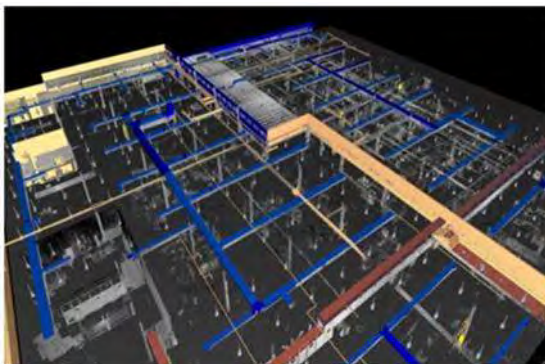
3D Laser Scanning gives the design team more information up front, allowing design decisions to happen faster for a more complete set of bid drawings. This strengthens contractor confidence in their bids, empowers them to fully utilize BIM for virtual construction and to prefabricate more of their products. Altogether, it allows contractors to meet critical path schedule dates and limits both re-order of materials and delays due to unforeseen field conditions.



EXISTING CONDITIONS & AS-BUILT CONSTRUCTION SURVEYS

Creating existing conditions and as-builts has never been easier, more accurate or more complete than it is now with the use of 3D Laser Scanning. The growing real estate development trend of repurposing older buildings and adapting structures for new purposes (as-built construction) is making 3D Laser Scanning an integral tool for Architects, Engineers and General Contractors.

Streamline the construction process and prefabricate materials off-site to help ensure reduced labor costs, fewer schedule delays, and the satisfaction of delivering a project on time and under budget.



Construction Services



We provide a wide range of construction management services tailored to our clients' needs, whether they're state and local agencies or commercial and residential developers. As an Owner's Representative we ensure that a project is built as designed, on schedule and at the best value possible. From 17-mile stretches of new highway to thousands of acres of community master planning, the scale and complexity of the CPC portfolio speaks to our team's wealth of experience.



Construction Services

- **Project Oversight**
- **Owner's Representative**
- **Constructability Plan Reviews**
- **Construction Contract Administration**
- **Construction Engineering & Inspection**
- **Construction Estimating & Scheduling**
- **Contractor Quality Control**

FDOT Work Categories:

- 10.1 Construction Engineering & Inspection**
- 10.3 Construction Materials Inspection**
- 10.4 Minor Bridge & Miscellaneous Structures**
- 8.1 Control Surveying**
- 8.2 Design, Right of Way & Construction Surveying**
- 8.4 Right of Way Mapping**

Construction Engineering and Inspection (CEI) Services provided by CPC ensure our clients' projects are built in accordance with their plans and specifications.

We offer CEI services in support of CPC's engineering design, or independently as a CEI consultant. In either situation, our clients receive the added perspective of pooled expertise from other disciplines within our firm to resolve constructability issues that arise.

CPC serves the Florida Department of Transportation and numerous counties and municipalities. Utilities include the inspection of sewer mains, manholes, lift stations, sanitary sewer improvements, stormwater drainage improvements, waste water treatment plants and utility relocations.



PROJECTS LIST

- Florida Turnpike (St. Lucie, Indian River & Okeechobee)
- SR 710 Warfield Blvd (Palm Beach)
- Krome Ave (Miami-Dade)
- Education Corridor (Broward)
- West Commercial Blvd (Broward)
- I-95 Lighting (Martin)
- 57th Avenue Grouping (Miami-Dade)
- SR 70 Okeechobee (St. Lucie)
- SR 60 86th to 82nd Ave (St. Lucie)
- Orange Ave (St. Lucie)
- Dixie Hwy Flyover (Broward)
- Andrews Ave (Broward)
- Lantana Road (Palm Beach)



Government Services



CPC realizes that governments face a challenge of planning new infrastructure that must meet the needs of their communities and enhance overall quality of life for years to come. As a continuing professional services consultant for cities, counties and other local governments, we routinely perform design and engineering services in the public sector. Having served as owner's rep and prime consultant, CPC can anticipate challenges from both sides of any development issue.

Government Services

- **ADA Compliance**
- **Conceptual & Design**
- **Construction Administration**
- **Construction Inspection**
- **Cost Estimating**
- **Permitting**
- **Site Development**
- **Surveying**
- **Transportation**
- **Traffic Engineering**
- **Local Agency Program (LAP)**

The changing needs of communities and the economic base needed to maintain infrastructure continues to be an ongoing challenge for governmental agencies today.

CPC serves multiple governmental agencies on professional services contracts on an as-needed basis. To accomplish projects of this nature, we dedicate a client manager to serve as an extension of your staff to coordinate the planning, engineering and surveying resources needed.

Working to understand our clients' goals, CPC has developed a division solely devoted to cities, counties and other local governments. From project commencement through completion, CPC provides innovative solutions to our municipal clients and communities at large.



CLIENT LIST

- City of Delray Beach
- City of Deerfield Beach
- City of Dania Beach
- City of Coral Springs
- City of Coconut Creek
- City of Oakland Park
- City of Margate
- City of Miramar
- City of North Lauderdale
- Town of Hillsboro
- Town of Lauderdale-By-The-Sea
- Town of Pembroke Park
- Seminole Tribe of Florida



Transportation & Traffic Services



Our approach to transportation services, whether working for a public agency or private entity, is to find the perspective of clients and stakeholders on a project and strive to achieve balanced solutions. CPC's team has the ability to consider a project's overall vision in the context of surrounding land uses and transportation networks, and offer concrete solutions aimed at maintaining the safe and efficient interaction between motorists, pedestrians and other modes of transportation.



Transportation & Traffic Services

- **Transportation Planning**
- **Traffic Studies**
- **Transit Studies**
- **Access Management**
- **Safety Studies**
- **Traffic Simulation**
- **Traffic Control Plans**
- **Lighting Design**
- **Roadway Design**
- **Roundabout Analysis & Design**
- **ADA Improvements**
- **Signalization**
- **Signing and Pavement Marking**
- **Utility Coordination**
- **Local Agency Participation (LAP)**
- **Complete Street Local Initiative Planning**
- **Parking Studies**
- **Growth Management**
- **Video Animation**

Complete Streets policies are gaining traction across the country as more communities prioritize implementing these transportation design guidelines.

CPC works hand in hand with agencies and local governments to turn vision into tangible plans, integrating best practices that guide future mobility and helping cities realize the benefits of safe, accessible and healthy streets. Our innovative thinking can find alternatives to improve transportation and traffic operations, all within your available resources to meet a community's needs.



CLIENT LIST

- City of Dania Beach
- City of Hollywood, FL
- City of Margate
- City of Coconut Creek
- FDOT District 4
- Miami-Dade County
- Town of Lauderdale-By-The-Sea
- City of Coral Springs
- Complete Streets Assistance (Various Counties in FL)



CPC Firm Profile & Services



Carnahan Proctor & Cross (CPC) is a multi-disciplined professional consulting firm that offers the full array of Land Development services (Civil Engineering), Surveying & Geomatics, Transportation Engineering, Government services and Construction Engineering & Inspection (CEI).

Since our inception in 1977, CPC has strived to meet the needs of public and private sector clients, broadened and refined its services and is proud to have grown in size and leadership. The firm has distinguished itself by developing innovative solutions for difficult challenges faced by the real estate development, construction and transportation sectors. Excellent working relationships with our clients have afforded CPC repeated opportunities to partner on market-leading projects.

CPC ranks among the Top 25 Engineering firms in Central and South Florida. With regional offices in both locations, CPC has the resources, experience and capacity to successfully complete assignments of any size and complexity.

Our engineers are leaders in the Florida consulting industry. CPC manages more than 80 professional and technical team members in-house who work together to service clients' project needs, and are fully equipped with state-of-the-art technology and design software. True to CPC's reputation and practice, we strive to fill the role of trusted advisor for our clients, providing a long-lasting reciprocal relationship that can solve today's development challenges, and plan strategically for a sustainable future.

CPC's corporate philosophy is to provide exemplary professional services with emphasis on quality, cost efficiency and exceptional personal service. Our clients come from both the public and private sectors and include city, state and federal agencies, utility companies, private developers, investment groups, individual landowners, theme parks and hospitality groups, hospitals, and financial and educational institutions. After 42 years, CPC's success rests clearly on seasoned management and the expertise of our professional staff. The firm provides a strong framework regardless of a project's size, scope or phase. CPC is committed to providing value to our clients through professional, timely and cost-effective services.

*Celebrating
42 Years*

**SURVEYING &
GEOMATICS**

**GOVERNMENT
SERVICES**

**LAND
DEVELOPMENT
SERVICES**

**TRANSPORTATION
SERVICES**

**CONSTRUCTION
INSPECTION &
ENGINEERING (CEI)**

**OFFICE LOCATIONS:
ORLANDO
DEERFIELD BEACH**

**FIELD OFFICES:
FORT PIERCE
INDIANTOWN
MIAMI**



Land Development Services



As one of Florida's premier civil engineering firms, CPC is consistently pushing the market forward with innovative services for its partners and clients. Established in 1977, the firm's success and growth is attributed to the leadership and diversity of its team, with four practice area leaders who total more than 109 years of professional experience. Through a constant focus on delivering high-quality services, CPC has built a reputation for reliability and integrity as a problem-solving partner for public and private clients.



Land Development Services

- Due Diligence
- ADA Compliance
- ALTA/NSPS Land Title Surveys
- As-Built Surveys
- Boundary Surveys
- Wetland Delineation Survey
- Transportation Impact Assessment
- Geometric Site Civil Layout
- Paving/Grading/Drainage Design
- Water and Sewer Collection and Conveyance Design
- Permitting and Entitlements
- Plat Preparation & Processing
- Construction Administration & Inspection

Providing civil engineering for residential and commercial properties requires a certain finesse to ensure a client's vision meets the functional needs of the end user.

Residential community development continues to evolve due to ever-changing expectations of residents.

Communities have been revolutionized with open spaces, walkable amenities and a prioritization of harmony with the surrounding environment.

Regardless of where your development falls on the spectrum of new housing or commercial, CPC combines value engineering with our technical expertise and industry knowledge to manage a project from conceptual phase through construction, and into post-design and certification.



PROJECTS LIST

- Solivita (Polk County)
- Aventura District (Miami-Dade)
- Aventura Square (Miami-Dade)
- Old Town (Osceola)
- Vitalia at Tradition (St. Lucie)
- Gables Aventura (Miami-Dade)
- Lake Flores (Manatee)
- Peninsula Bay (Manatee)
- Hanover Dr. Phillips (Orange)
- Galt's Landing (Osceola)
- Overture Dr. Phillips (Orange)



Brian Moseley and Associates, Inc.~ Organization

Brian Moseley and Associates, Inc. (BMA) is an S-Corporation entity established in the U.S. Virgin Islands in 1994. BMA has one shareholder:

Ryan C. Wisheart, PLS
President
4003 Raphune Hill Road #606
St. Thomas, VI 00802

Phone 340-774-5310 Fax 340-776-4090 Email rwisheart@visurveyors.com

BMA is fully insured and also carries a \$1,000,000 Professional Liability insurance policy.

Project Team

Ryan C. Wisheart, PLS — President

A licensed professional land surveyor in the U.S. Virgin Islands (License #773LS), Ryan brings 28 years of experience to projects of this type; 19 years of this experience are within the U.S. Virgin Islands. Ryan has been instrumental in the completion of over 700 land surveys exceeding a total \$1 billion of commercial real property in the United States and U.S. Virgin Islands. Overall business development, project management, quality assurance and quality control are Ryan's responsibilities. He also appears as an Expert Witness in property litigation cases. Ryan has a Bachelor of Science degree in Land Surveying from Purdue University, West Lafayette, Indiana.

David J. Starshak — Survey CAD Technician and Researcher

A graduate of Elgin Community College, David has over 20 years' experience as a CAD technician. He is proficient with AutoCAD and Land Development Desktop software. David prepares drawings and deliverables as well as conducts research at the Cadastral Department and Recorder's Office.

Andrew Bennett — Field Crew Chief

With over 14 years' experience Drew's recent and relevant experience includes topographic and as-built surveys, particularly on large commercial sites. He is proficient in the operation of electronic data collectors, survey instrumentation and GPS. He is responsible for field reconnaissance, data collection, and field crew supervision.

Adams Prosper — Field Crew Chief (On-Call)

Adams has over 40 years' experience conducting field surveys in the U.S. Virgin Islands. He is proficient in conducting boundary, land title, and topographic surveys of all sizes and types. He is also responsible for field reconnaissance, data collection, and field crew supervision.



Wilkins Joseph — Rod Worker

Wilkins is a dedicated field survey technician responsible for field reconnaissance and site preparation in support of the Field Crew Chiefs. With almost five years of experience he has a strong grasp on GPS RTK implementation and execution.

Gilson Pascal — Rod Worker (On Call)

Gilson is a dedicated field survey technician responsible for field reconnaissance and site preparation in support of the Field Crew Chiefs.

Karen S. Haga — Office Manager

Karen serves as office manager, researcher, and all-around-get-it-done person. She has 30 years of experience and has resided on St. Thomas since 1987.

Professional Surveying Services

- ALTA/NSPS Land Title Surveys for Commercial and Residential Properties
- Boundary and topographic surveys
- Storm & sanitary sewer & Utility as-built surveys
- Subdivision planning, permitting, layout, and mapping
- Digital terrain modeling
- Route surveys and Utility route planning
- Construction layout services
- Structure monitoring surveys
- Earthwork quantity surveys
- Discrete site drone mapping
- Right-of-Way and Easement Mapping
- Site and Conceptual Planning
- Storm & sanitary sewer as-built surveys
- FEMA Flood Elevation Certificates
- Geodetic surveys and photogrammetric survey control
- Full survey support staff for Engineers
- Expert witness consultation and litigation review



Representative Project Experience

Long regarded as the leading land surveying firm in the U.S. Virgin Islands, Brian Moseley and Associates, Inc. is based on St. Thomas. We provide professional surveying services territory wide, with over 7,000 completed projects. Our extensive records and database span over 50 years of surveying in the Virgin Islands. Several projects of particular interest are worthy of mention here:

Private Residential and Commercial Properties

We have provided ALTA/NSPS Land Title (as-built) Surveys, Topographic, and Cadastral Surveying services for numerous financial institutions and private clients including:

ScotiaBank	Firstbank	Merchants Commercial Bank
BancoPopular	Flagstar Bank	George H. T. Dudley, Esq.
A. James Casner III, Esq.	William McConnell, Esq.	
Norman P. Jones, Esq.	Birch, de Jongh, & Hindels, PLLC	
David E. Nichols PC	Kellerhals Ferguson Kroblin PLLC	
Marcia Resnick, Esq.	Marjorie Rawls Roberts, PC	
Leigh Goldman, Esq.	Arthur Pomerantz, Esq.	
Bolt Nagi, PC	Ruth Ann Magnuson, Esq.	
C.A.Ferreya & Associates	Springline Architects	

Resorts and Hospitality Projects

We have provided ALTA/NSPS Land Title Surveys, Topographic, and Cadastral Surveying services for numerous clients including:

- The Ritz-Carlton Hotel and Club (fractional ownership)
- Marriott's Frenchman's Reef Hotel
- Marriott's Frenchman's Cove (time-share)
- The Westin Resort, St. John
- Wyndham-Margaritaville, St. Thomas
- Bolongo Bay Beach Resort, St. Thomas

Residential Development Projects

Private developments ranging from low to high density, condominium and fractional ownership have required our services which include topographic and boundary surveys, site planning and permitting, cadastral mapping, and road layout. Projects include:

- The Preserve at Botany Bay, St. Thomas
- Ditleff Point, St. John
- Green Cay, St. Thomas
- Peter Bay, St. John
- Pillsbury Heights, St. Thomas



Private and Public Commercial Development Projects

Numerous commercial development owners have benefitted from our wide range of specialized services, including ALTA/NSPS Land Title Surveys, topographic and boundary surveys, site planning and permitting, and cadastral mapping.

Representative commercial developments include:

- East End Plaza
- Market Square East
- Tutu Park Mall
- First Bank Plaza
- The West Indian Co., Ltd. Cruise Ship Facility
- Havensight Mall
- American Yacht Harbor
- Yacht Haven Grande

Government and Institutional Project Experience

Virgin Islands Waste Management Authority

BMA has provided On-Call Surveying Services to the Authority including as-built, topographic, and boundary surveys.

Mangrove Lagoon Waste Water Treatment Plant and Interceptor

BMA provided route survey control, as-builts, and easement mapping for Parsons Engineering Science and the Department of Public Works.

Virgin Islands Water and Power Authority

BMA has provided various and numerous services in support of WAPA projects including as-built and topographic surveys as well as easement mapping.

West Indian Company Cruise Ship Facility & Havensight Mall (GERS)

WICO Cruise Ship Dock and associated shops in Havensight are significant facilities serving tourism in St. Thomas. BMA has a long history of providing surveying services including parcel mapping and inventory, as-built surveys, utility surveys, and right-of-way mapping.

Cyril E. King Airport

BMA has provided AECOM (formerly URS Corporation) with photogrammetric survey control and runway as-builts to facilitate complete runway rehabilitation. Additional services include extensive property boundary mapping.

University of the Virgin Islands

UVI has campuses on St. Thomas and St. Croix. On-call services include as-built and topographic surveys as well as limited site planning.



Reliance Housing Projects

New modes of moderate-income housing began developing over the last fifteen years initiated with Lovenlund Apartments, Calabash Boom, and Grandview projects. BMA provided a host of services including due diligence, topographic, and construction surveys.

Bordeaux Road, Route #318, St. Thomas

Route Surveying services were provided by BMA in support of this 2.2 mile road improvement project. Tasks included right-of-way mapping, topography, and survey control.

Veteran's Drive, St. Thomas

BMA provided Parsons Brinkerhoff survey support for soil boring locations, horizontal and vertical survey control network and tie-in to aerial data, right-of-way boundary determination, as-built survey of improvements and topography, utility locations of all above ground poles and wires as well as sewer manhole locations and sewer invert elevations.

Scott Free Road, St. Thomas

Completed in 2006, this corridor survey of horizontal and vertical locations of improvements and utilities provided base surveys facilitating the highway engineers Parsons Brinkerhoff with their highway plans. BMA also performed right-of-way mapping for required easements and takings along the entire route.

Main Street Revitalization, St. Thomas

As-built survey of improvements, topography, hardscape, utility locations, sanitary and storm sewer documentation.



Representative Clients

Utility

Virgin Islands Water and Power Authority	Alpine Energy Group
Virgin Islands Waste Management Authority	

Government

Virgin Islands Housing Finance Authority
Virgin Islands Port Authority
Virgin Islands Department of Public Works
Virgin Islands Department of Property and Procurement
National Park Service (St. John)
Government Employees Retirement System of the Virgin Islands

Commercial, Industrial & Institutional

The West Indian Company, Ltd.	Lockhart Realty
Reliance Housing	University of the Virgin Islands
Island Global Yachting	Marriott Frenchman's Reef
Starwood (Westin)	ScotiaBank
Firstbank	Merchants Commercial Bank
BancoPopular	The Ritz-Carlton Hotel & Club

Real Estate Development

John Foster Real Estate	Charaf & Company
Harthman Leasing, Inc.	David Jones Real Estate
The Ginn Company	Botany Bay Partners
Lockhart Realty	Legacy VI
Michaels Development Co.	Jackson Development Co., Inc.

Private

George H. T. Dudley, Esq.	International Capital & Management Co.
A. James Casner III, Esq.	William McConnell, Esq.
Norman P. Jones, Esq.	Birch, de Jongh, & Hindels, PLLC
David E. Nichols PC	Kellerhals Ferguson Kroblin PLLC
Marjorie Rawls Roberts, PC	Marcia Resnick, Esq.
Leigh Goldman, Esq.	Arthur Pomerantz, Esq.
Bolt Nagi, PC	Ruth Ann Magnuson, Esq.

Architects & Engineers

The deJongh Group	C.A. Ferreyra & Associates
Jaredian Design Group	CDR Maguire Group
URS Corporation/AECOM	Harris Civil Engineers
Springline Architects	PB World

Builders & Project Managers

Kraus-Manning, Inc.	Zenith Development Corporation
J. Benton Construction, LLC	American Bridge
GEC, LLC	Manhattan Construction
Apex Construction	Custom Builders



Equipment

Global Positioning System (GPS)

Sokkia GRX2 GPS Rover & Base
Topcon Legacy-H Receiver (base station) with Topcon Legant Antenna
All GPS equipment enabled with L1/L2 Dual Frequency

Electronic Total Stations

Sokkia CX-105 (5 arc-second) Reflectorless and Wireless Bluetooth Communications
Topcon GPT 3003W (3 arc-second) Reflectorless and Wireless Bluetooth Communications
Topcon GPT 3005W (5 arc-second) Reflectorless and Wireless Bluetooth Communications

Legacy Theodolite

Wild T-2 (1 arc-second)
Wild TC1600 (1.5 arc-second)

Levels

Topcon DL-102C Electronic Digital Level
Topcon ATG-7 (2)
Topcon AT-G6
Fuji (split bubble)

Data Collectors & Reconnaissance Equipment

Nautiz X8 w/ Topcon Magnet Field (2)
Ranger NX TDS Survey Pro
Ranger 300X TDS Survey Pro GPS RTK Controller
Schonstedt Metal Detectors (4)

UAV (drone)

Parrot Drone (Anafi Work model)

Survey Vehicles

2008 GMC Sierra (4-wheel drive)
2009 Chevy Colorado (4-wheel drive)

CAD Stations, Plotters and Software

CAD stations (3) with Autodesk Land Desktop 2009
and Autodesk Civil 3D 2015
Hewlett Packard DesignJet T120 plotter
TDS Survey Link with Geodetic Module
Topcon Tools GPS Post-Processing
Microsoft Professional Office and Adobe Acrobat Professional



RESUMES



RESUMES

TABLE OF CONTENTS

Resumes of Key Personnel:

Peter J. Bonnes:	Senior Project Manager & Project / Construction Engineer
Justin Callwood	Safety Officer
Joseph McGillian	QA/QC Engineer

Resumes of Supporting Personnel:

Felix Rey	On-Site Construction Manager
Roy Pemberton	On-Site Project Manager
Jeffrey Batemen	Civil Engineer

Resume of Optional Support Services Personnel:

David Sullivan	Subsurface Utility Engineering Manager
Jeremy Jones	Senior VP Geomatics
Dalton Proctor	FAA-Certified Drone Pilot & 3D Survey Tech
Ryan Wisehart	Professional Land Surveyor.



Peter J. Bonnes, P.E.

President/Principal Engineer



PROFESSIONAL PROFILE

Peter Bonnes has over 33 years in the engineering industry and is President of FXB Engineering. He is dedicated to building client relationships through partnerships where mutual respect for trust and integrity lead to long-term engagements over multiple projects. His focus is client satisfaction and he guarantees that your project will be engineered safely, efficiently, accurately and within your budget.

REPRESENTATIVE PROJECTS

Peter has vast engineering experience in electrical service & distribution system projects as well as institutional, commercial and industrial building design.

EXPERIENCE

FXB Engineering -
President: Since 2002
FXB Engineering - Partner /
Senior Project Engineer/
Designer: 1985-2002

EDUCATION:

BS - Electrical Engineering
The Pennsylvania State University

PROFESSIONAL REGISTRATIONS:

Alabama, Arizona, California,
Colorado, Connecticut,
Delaware, Florida, Georgia,
Iowa, Illinois, Indiana, Kansas,
Kentucky, Louisiana, Maine,
Maryland, Massachusetts,
Michigan, Minnesota,
Mississippi, Missouri,
Nebraska, New Hampshire,
New Jersey, New York,
North Carolina, Ohio,
Pennsylvania, Rhode Island,
South Carolina, Tennessee,
Utah, Virginia, Washington,
Washington DC, West Virginia,
Wisconsin, U.S.V.I.

AFFILIATIONS:

- The National Society of P.E.
- Institute of Electrical & Electronics Engineers, Inc.
- National Fire Protection Association
- National Electrical Contractors Association
- U.S Green Building Council

Randolph Harley Power Plant, St. Thomas, U.S.V.I.: Project engineer and lead electrical engineer for the replacement of 13.8kV and 34.5kV open bus distribution system and oil circuit breakers with new 13.8kV indoor switchgear in a double-bus, double-breaker scheme and new 34.5kV indoor GIS (gas-insulated switchgear). The new indoor substation supports the entire island of St. Thomas. The project included new primary underground duct banks from the new 13.8 /34.5kV switchgear building to several generator step up transformers, three 34.5kV transmission line feeders and eight 13.8kV primary distribution feeders.

Richmond Power Plant, St. Croix, U.S.V.I.: Project engineer for feasibility study & design to replace a 25kV open bus distribution system with OCB's and substation type vacuum breakers with a new 24.9 kV indoor switchgear utilizing 1200 amp vacuum circuit breakers in a main-tie-main scheme. Design included: 24.9 kV metal clad line up – 12 sections. Solid state overcurrent phase and ground relays, bus differential relays, instrumentation and metering. Control transformers to each bus, 125 volt dc battery system, distribution to existing 24.9 kV feeders, connection to 13.2 kV system through redundant bus tie transformers.

Underground Project, Cruz Bay, St. John, U.S.V.I.: Project engineer and lead electrical engineer for the electrical design services for the new underground primary electrical distribution system to replace the overhead system in which over 90% was destroyed by the 2017 hurricanes.

East End Substation, St. Thomas, U.S. V. I.: Project engineer for a complete replacement and expansion of the East End substation after major components sustained major Hurricane damage. The project included the following major highlights. New control building to house the new station



Peter J. Bonnes, P.E.

President/Principal Engineer

TECHNICAL EXPERTISE:

- Project Management
- Substation Design
- Medium Voltage/Systems
- Electrical Service & Distribution Systems
- Lighting/Lighting Controls
- Power & Controls
- Generators/Emergency Systems
- Cogeneration
- Mission Critical Power Systems
- Feasibility Studies
- Energy Audits / Studies
- Commissioning

CONTINUING EDUCATION:

- Principles of Substation Fundamentals and Controls
The University of Wisconsin
- 57th Annual Protective Relaying Conference
Georgia Tech Technical Institute of Technology
- Substation Design & Construction
The University of Wisconsin
Power Systems Design & Analysis
SKM System Analysis
- Numerous online continuing education courses, technical training
- Webinars, and in office training classes.

service, and all new 13.2/34.5/69kV protection & control systems. New GIS building to house the new 34.5kV (phase 1) and 13.2kV (phase 2) Gas Insulated Switchgear lineups to replace the damaged 34.5kV and aging 13.2kV Air Insulated switchgear lineups. New 69kV GIS building (phase 3) to house a new 69kV GIS to be configured in a ring bus arrangement. Two new 50MVA 69-34.5kV power transformers (phase 3). New 10 bay, 34.5kV GIS, New 5 bay, 13.2kV GIS and complete primary & backup protection for lines, transfers and feeders. Total project cost is estimated at \$ 23 million.

Underground Project, Cruz Bay, St. John, U.S.V.I.: Electrical engineering Services for the new underground primary electrical distribution system to replace the overhead system in which over 90% was destroyed by the 2017 hurricanes. The project was separated into three (3) separate Construction Projects: feeder 7E, feeder 8E and feeder 9E. Project included 100,00 feet of 15kV Main Feeder Cable and 50,000 Feet of 15kV transformer feeder cable, Twenty-Nine new 15kV pad mounted switches & one 15kV source transfer switch. Seventy-eight new pad mounted distribution transformers and Sixty-six new manholes and handholes. Total project cost is estimated at \$53 million.

Substation Auxiliary Power Enhancement Projects St. Thomas, USVI: Project engineer for station service enhances to three substations in ST Thomas. The project included the following major highlights. A new control building to house the new station service, and all new 13.2/34.5kV protection & control systems for the Tutu Substation. A new station service included a new diesel backup generator and new redundant DC battery systems. New diesel backup generator for the Randolph Harley Substation New diesel backup generator and new redundant DC systems Auxiliary power systems for the Donald Francois Substation

Duct Bank Project, Christiansted, St. Croix, U.S.V.I.: Project engineer and lead electrical engineer for the design for a 15kV primary underground duct bank & distribution system in Christiansted, St Croix.

Duct Bank Project, Feeder 6 and Feeder 8, St. Croix, U.S.V.I.: Project engineer and lead electrical engineer for the design for a 25kV primary underground duct bank in St Croix.

Duct Bank Project, St. Thomas, U.S.V.I.: Project engineer and lead electrical engineer for the design for a 15kV primary underground electrical distribution system along Main Street. Charlotte Amalie, St. Thomas

Duct Bank Project, St. Thomas, U.S.V.I.: Project engineer and lead electrical engineer for a 15kV primary underground electrical distribution system from Texaco Fuel Bulk Facility to Calvary Baptist Church.



Peter J. Bonnes, P.E.

President/Principal Engineer

Duct Bank Project, St. Thomas, U.S.V.I.: Project engineer and lead electrical engineer for a 15kV primary underground duct bank & distribution system from Raphune Hill Road to Lovers Lane.

Duct Bank Project, St. Thomas, U.S.V.I.: Project engineer and lead electrical engineer for a 35kV primary underground duct bank from Fort Mlyner to Nadir.

Virgin Islands Water & Power Authority, St. Thomas, U.S.V.I.: Provided engineering services, Owner Furnished Equipment Procurement Services and Bid Stage Construction Administration Support Services associated with the design and construction for replacement of plant auxiliary, equipment at the Harley Power Plant and replacement of 480 volt switchgear at the Richmond Power Plant.

Richmond Power Plant, St. Croix, U.S.V.I. - Owners consulting engineering services for the complete review of the design and construction of a turnkey 24.9kV and 69kV substation project for the Richmond Power Plant, St Croix, U.S.V.I.

Donoe, St. Thomas, U.S.V.I.: Electrical engineering services for a 5 MW solar project which included a new 34.5kV Gas Insulated Switchgear (GIS) substation located in a Power Distribution Center. (PDC) for the purpose of tying in 5 MW of solar power into the utility companies' transmission system. The new substation was commissioned in March 2015. The project provided 4-5% of St Thomas's current base load capacity during daylight hours.

Transit Wireless, 1350 Broadway, 3rd floor, New York, New York: Project engineer and lead electrical engineer for the complete MEP/FP/FA design, as well as overall project management and construction supervision services for a total of five (5) Base Station buildings (critical infrastructure facilities that houses radio heads, base stations, WIFI cabinets, servers, internet gateways, switches and routers). The project included: Complete MEP/FP & FA buildouts of 7,000 – 15,000 SF mission critical facilities in Midtown Manhattan, Downtown Manhattan, The Bronx and Brooklyn. Complete electrical buildout of 7,000 SF mission critical facility Queens. These facilities served as the infrastructure support system that is responsible for bringing WIFI to the NYC underground subway system. The facilities were constructed between 2012 and 2016. The overall project (WIFI to all 278 subway stations) was completed two years ahead of schedule and under budget. FXB was the project lead for all five of the fit outs and as such was responsible for architectural, structural, mechanical, electrical, plumbing, fire protection and fire alarm services for all sites. These projects included a significant amount of owner furnished equipment totaling over \$5 million. FXB prepared all owner furnished equipment specifications and provided bid leveling services for all equipment, as well as for all construction contracts. FXB prepared detailed construction cost estimates for each of the five build outs. FXB provided complete project management, construction administration services and project closeout services for all five of the build outs. FXB provided complete Power Systems Studies for all five buildouts which consisted of Arch Flash, Short Circuit and Coordination Studies. FXB provided Commissioning services for three of the buildouts. Total project cost is estimated at \$15 million. Each build out included a backup diesel generator ranging from 750kW – 2,000kW. Mechanical systems included DX system design, condenser water system design and pump refrigerant system designs. Fuel oil system designs were prepared for three of the build outs.

Dunwoody Village, Newtown Square, PA: Project engineer and lead electrical engineer for the MEP/FP and FA engineering & design for the infrastructure renovations of five (5) apartments buildings and the West Country



Peter J. Bonnes, P.E.

President/Principal Engineer

Houses. Design was completed in three (3) phases which included a new main distribution switchboard, new power distribution for each building and new MEP/FP & FA systems for the corridors and amenity spaces.

White Horse Village, Edmont, PA: Engineering services for a new 33kV-480/277V substation and 3,100kW back-up diesel generator for the entire site.

GlaxoSmithKline Biologicals, Marietta, PA: Project engineer for FXB who served as the Owners Electrical Consulting Engineer for several projects, including a new 69kV-12.47kV substation project consisting of two 69kV services from PPL, 2-26MVA power transformers, and double ended 12.47kV switchgear lineup with main-tie-main and auto throw over located in a power distribution center.

Tek Park, Allentown, PA: Engineering services to tie in six (2) 2,000kW, 13.2kV generators in an existing 69-13.2kV substation to provide for backup to the entire site – to be utilized for mission critical collocation space.

Ball Substation, Delran, New Jersey: Engineering services for the expansion of the existing 26.4kV substation to be expanded by one bay.

Public Ledger Building, 600 Chestnut Street, Philadelphia, PA: Project engineer and lead electrical engineer for a new 13.2kV metal clad switchgear in main-tie-main configuration including the new service from two PECO 13.2kV lines.

Mid County Shopping Center, Marple Newtown, PA: Project engineer and lead electrical engineer for a new primary (33kV) electrical underground distribution system which were coordinated with PECO.

Providence Town Center Shopping Center, Collegeville, PA: Project engineer and lead electrical engineer for a new primary underground duct bank and distribution system to support several large retail buildings and restaurants at Providence Town Center.

Glen Mills Shopping Center, Glen Mills, PA: Engineering services for a new primary underground duct bank and distribution system to support several large retail buildings and restaurants at the Glen Mills Shopping Center.

Longwood Gardens, Webb Barn Lane, Kennett Square, PA: Project engineer and lead electrical engineer for the extension of a primary duct bank on Webb Barn Lane. Design includes an 1,800 foot extension, new manholes at 250 feet intervals, new communications quazite boxes, and design for new 15kV rated cable.

The Episcopal Academy, Newtown Square, PA: Project engineer and lead engineer for the design for multiple upgrades for the campus including a 13.2 kV underground distribution system upgrade for this 232-year-old, award winning independent school. The project included new generators and pump station design.

Glen Mills Schools, Glen Mills, PA: Electrical engineering services for generator and distribution upgrades for an 850-acre campus, 2500 kW, 4.16kV generator and a 4.16kV substation upgrade.

State Street, Grafton, MA: Engineering services for New 13.8kV primary electrical service for a Tier IV Mission Critical Data Center.

WAWA Dairy, Wawa, PA: Engineering services for a new 33-4.16kV substation and a new primary underground duct bank and distribution system to support the entire campus.

JUSTIN O. CALLWOOD

P.O. Box 7485, St. Thomas, VI 00801. Cell Phone# 340-643-0197

Email: callwoodjo@yahoo.com

OBJECTIVE: To obtain a position utilizing the skills acquired in the experience outlined.

2011 – 2018

Virgin Islands Water and Power Authority – Security Manager

- Establishes, maintains and promotes security and property protection programs
- Develops policy and procedures to insure the security of the Authority's assets and workforce
- Establishes and maintains official liaison with related local and federal agencies
- Prepared the Security Department's Budget

2003 – 2011

Virgin Islands Water and Power Authority – Security Inspector

- Reviewed and submitted the Security Department's documents for payments
- Inspect and tour the Authority's facilities to detect security breaches and take appropriate actions
- Participated in investigation of internal and external theft, vandalism and illegal entries to the Authority's facilities
- Enforced all federal and local, security protocols both to ensure security rules and regulations are followed by all security guards
- Performed the duties in the absent of the Safety Officer

2001 – 2003

Headquarters TARC, Virgin Islands Army National Guard Production Recruiter

- Planned, organized and coordinated recruiting activities
- Interviewed and counseled qualified applicants about enlistment into the Army National Guard
- Explained Army benefits
- Prepared enlistment forms and other documentation

1989 – 2003

786th Quartermaster Battalion, Virgin Islands Army National Guard Battalion Supply Sergeants

- Supervised the units supply sergeants
- Performed logistics staff duties at all echelons of logistics systems
- Conducted inspections to subordinate unities to determine degree of logistical preparedness
- Reviewed units records for accuracy of information and compliance with policies and procedures
- Managed the Battalion maintenance fund

EDUCATION:

- High School Diploma- 1975
- Associates of Science Degree in General Studies from Colorado Technical University (CTU) – August 2010

JOSEPH M. MCGILLIAN, P.E.

SUMMARY OF QUALIFICATIONS

15 years of experience in electrical building design, construction, and commissioning.
15 years of experience in electrical power system design, construction, and commissioning.
18 years of experience in commercial and industrial electrical construction.

EDUCATION

Bucknell University

Bachelor of Science, Electrical Engineering
Concentration in Electrical Power System Design

PROFESSIONAL LICENSES

Professional Engineer

Licensed Professional Engineer in Pennsylvania, New Jersey, New York, Delaware, Maryland.

Master Electrician

Licensed Master Electrician

Affiliations

International Code Council (ICC)
Institute of Electrical and Electronics Engineers (IEEE)
InterNational Electrical Testing Association (NETA)
National Fire Protection Agency (NFPA)
National Society of Professional Engineers (NSPE)

AREAS OF EXPERTISE

Power System Design/Construction/Commissioning
Power System Studies
Electrical Building Design

SELECTED PROJECT EXPERIENCE

MEDIUM AND HIGH VOLTAGE POWER SYSTEMS

PPL Summit Substation, Scranton, PA

Project Engineer for new substation control house. This project included:

- (2) 230kV buses and (3) 230kV bays for (4) 230kV transmission lines (day one)
- (9) 230kV circuit breakers (day one) in breaker-and-one-half configuration
- (2) 170MVA; 230-69kV power transformers with on-load tap-changers
- (2) 69kV buses and (4) 69kV bays for (6) 69kV transmission lines (day one)
- (12) 69kV circuit breakers (day one) in breaker-and-one-half configuration
- 2400SF control house
- (14) primary protection panels, (14) backup protection panels, (2) SCADA panels, and (19) control panels for line protection, bus protection, transformer protection, breaker failure protection, breaker control, monitoring, and automation.

PPL Milton Substation, Milton, PA

Project Engineer for new substation control house. This project included:

- (2) 230kV buses and (2) 230kV bays for (3) 230kV transmission lines (day one)
- (6) 230kV circuit breakers (day one) in breaker-and-one-half configuration
- (2) 170MVA; 230-69kV power transformers with on-load tap-changers
- (2) 69kV operating buses, (1) 69kV transfer bus, and (5) 69kV bays for (4) 69kV transmission lines
- (8) 69kV circuit breakers in main-and-transfer bus configuration
- 2400SF control house
- (11) primary protection panels, (11) backup protection panels, (2) SCADA panels, and (14) control panels for line protection, bus protection, transformer protection, breaker failure protection, breaker control, monitoring, and automation.

PPL Jenkins Substation, Luzerne County, PA

Project Engineer for new substation control house. This project included:

- (2) 230kV buses and (3) 230kV bays for (3) 230kV transmission lines (day one)
- (7) 230kV circuit breakers (day one) in breaker-and-one-half configuration
- (3) 170MVA; 230-69kV power transformers with on-load tap-changers
- (2) 69kV buses and (9) 69kV bays for (7) 69kV transmission lines (day one)
- (17) 69kV circuit breakers (day one) in a double-breaker double-bus configuration
- 2400SF control house
- (15) primary protection panels, (15) backup protection panels, (2) SCADA panels, and (14) control panels for line protection, bus protection, transformer protection, breaker failure protection, breaker control, monitoring, and automation.

PSE&G Keys Energy Center, Prince George's County, MD

Project Engineer for new 500kV switchyard and plant substation control houses. This project included:

- Control house for interconnection of new 755MW natural gas fired combined cycle power plant to two 500kV PEPCO transmission lines utilizing (3) 500kV circuit breakers in a breaker-and-one-half configuration and (2) 500kV circuit breakers in a double-breaker configuration.
- Control house for 500kV-19kV plant substation with two 162/216/270 MVA and one 246/328/410 MVA generator step-up transformers and three 500kV circuit breakers.

CPV St Charles Energy Center, Charles County, MD

Project Engineer for new 230kV switchyard and plant substation control houses. This project included:

- Control house for interconnection of new 725MW natural gas fired combined cycle power plant to four 230kV PEPCO transmission lines utilizing (8) 230kV circuit breakers in a breaker-and-one-third configuration.
- Control house for 230kV-19kV plant substation with three generator step-up transformers and three 230kV circuit breakers.

Longwood Gardens, Kennett Square, PA

Project Engineer for new main substation to support 1000-acre botanical garden. This project included:

- 34.5kV switchgear
- Two 34.5-13.2kV substation class transformers
- Two 13.2-2.4kV substation class transformers
- Two 2250kW diesel generators
- Generator paralleling switchgear
- 13.2kV metal-clad switchgear
- Retrofits to existing 2.4kV switchgear
- New site distribution
- Site-wide power system study
- Control system including auto-transfer and generator paralleling/synchronizing.

DuPont Pioneer Stine-Haskell Research Facility, Newark, DE

Project Engineer for the expansion of 34.5kV aerial distribution system at this research campus.

This project included:

- Aerial 34.5kV distribution
- 34.5kV terminal poles with interrupter switches
- 34.5kV pad mounted switchgear

GlaxoSmithKline Biologicals North America, Marietta, PA

Project Engineer for new main substation to support pharmaceutical campus expansion. This project included:

- Two 69kV PP&L services
- Five 138kV gang-operated air break switches
- Outdoor open-bus 69kV substation designed for future 138kV operation
- Two 138kV SF6-insulated circuit breakers
- Two 26/32/40 MVA, 69-12.47kV power transformers with on-load tap-changers
- 12.47kV double-ended arc-resistant switchgear lineup (20 sections) with closed-transition auto-transfer system
- New site distribution to over 20 buildings
- Equipment procurement, commissioning services, standard operating procedures, preventative maintenance procedures, and end-user training

Fortress Mission Generator Farm, Breinigsville, PA

Project Engineer for a 12MW/15MVA diesel generator farm and substation upgrade. This project included:

- Six 2MW/2.5MVA; 13.2kV diesel generators
- 13.2kV generator paralleling switchgear
- New protection and SCADA for existing 20MVA; 69-13.2kV substation
- 13.2kV site distribution

Janssen Biotech, Inc – Pharmaceutical Companies of Johnson & Johnson, Malvern, PA

Project Engineer for new substation to support pharmaceutical manufacturing facility. This project included:

- 34.5kV metal-clad switchgear lineup
- Four 2000/2667kVA cast-coil transformers
- Four 480V switchgear lineups
- Main-Gen-Tie-Gen-Main-Tie-Main-Gen-Tie-Gen-Main bus configuration
- 900SF switchgear building/control house
- Two 2000kW diesel generators
- Control system including auto-transfer and generator paralleling/synchronizing.

Randolph Harley Power Plant, St. Thomas, U.S.V.I.

Project Engineer for the replacement of 13.8kV and 34.5kV open bus distribution system with new indoor switchgear in new building. This project included:

- 13.8kV arc-resistant metalclad switchgear
- 34.5kV gas-insulated switchgear
- Two three-winding transformers rated 26/35/43 MVA
- 13.8kV arc-resistant station service switchgear
- Eight incoming feeders from existing 13.8kV generators at power plant
- Six outgoing 13.8kV distribution feeders
- Three outgoing transmission lines which feed remote substations on island
- The new substation supports the entire island of St Thomas, USVI.

Ball Corporation, Delran, NJ

Project Engineer for new substation. This project included:

- 26.4kV open-bus outdoor substation
- Three 26.4kV services from PSE&G
- SF6 line and tie circuit breakers, motor-operated air-break switches

Sanofi-Pasteur, Swiftwater, PA

Project Engineer for power system study at this vaccine manufacturing facility. This project included:

- Site-wide harmonic analysis for (32) 12.47kV-480V substations and main 80MVA; 69-12.47kV substation.

EVRAZ Claymont Steel, Claymont, DE

Project Engineer for this Electric Arc Furnace and substation upgrade. This project included:

- Upgrade of 32MW; 49kA @ 218V Electric Arc Furnace (EAF) to 42MW; 45kA @ 310V.

Episcopal Academy, Newtown Square, PA

Project Engineer for the 13.2kV electrical distribution and emergency generation for this new 120-acre campus with 350,000 SF of institutional space. This project included:

- 15kV switchgear
- Electric manholes with separable connectors, junctions, and fusing.
- Five 1500kVA pad-mounted transformers
- Two 500kVA submersible transformers
- Three 400kW diesel generators

Glen Mills Schools, Glen Mills, PA

Project Engineer for installation of campus generator and distribution upgrades for this 850-acre campus.

This project included:

- 34.5kV electric service
- 3000kVA pad-mounted transformer
- 5kV closed transition automatic transfer system
- 2500kW/3125kVA, 4.16kV diesel generator
- 11 section, 5kV switchgear lineup
- Upgraded 5kV distribution throughout entire campus ó over 30 buildings total.
- Coordination, short-circuit, and arc flash study for entire campus
- Component testing, integrated testing, commissioning services

Glen Mills Schools, Glen Mills, PA

Project Engineer for 5kV distribution upgrades. This project included:

- Ten 225kVA pad-mounted transformers
- Two pad-mounted PME switches
- Component testing, integrated testing, commissioning services

Council of Devon, Wilmington, DE

Project Engineer for new electrical service for 290,000 SF, 16-story high rise in center-city Wilmington.

This project included:

- Two 15kV electric services
- Main-Tie-Main 15kV switchgear lineup with auto-transfer capability
- 1500kVA pad-mounted transformer
- 3000A low-voltage switchgear for building service/distribution
- Coordination, short-circuit, and arc flash study

Dunwoody Village Retirement Community, Newtown Square, PA

Project Engineer for installation of campus generator and distribution upgrades for this 400+ resident, 83-acre campus. This project included:

- 34.5kV electric service
- 3750kVA pad-mounted transformer; 33-13.2kV
- 13.2kV closed-transition automatic transfer system
- 3100kW/3875kVA, 13.2kV diesel generator
- 13.2kV SF6 switchgear lineup
- Upgraded 13.2kV distribution throughout campus
- Coordination, short-circuit study for new substation
- Component testing, integrated testing, commissioning services

Sims Hugo Neu Group Recycling, Queens, NY

Project Engineer for construction of transformer vault/switchgear building, and interconnection with utility company. This project included:

- Three 27kV electric services (one aerial and two underground, approx 3000 ft each)
- Three 2000kVA network transformers
- Three 4000A network protectors
- 4000A-480/277V switchgear; main-tie-main-tie-main
- De-commissioning of 7MW prime-power diesel generator



Jeffrey L. Bateman, PE, PLS

Summary of Professional Experience

Mr. Bateman is responsible for a multi-disciplined staff of engineers, construction managers, environmental specialists, surveyors, and technical and administrative support staff. His experience includes the design and calculation of residential, commercial, agricultural and industrial development projects including stormwater and utility extensions; surveying for transportation and construction projects utilizing subsurface utility engineering (SUE) and global positioning systems (GPS), and Planning actions including rezonings, amendments and variances.

Education

- ❖ B.S./1987/Surveying Engineering/The Ohio State University, Columbus, Ohio
- ❖ B.S./1988/Civil Engineering/The Ohio State University, Columbus, Ohio
- ❖ 40 Hour OSHA Hazwopper, Transportation Workers Identification Credentialed

Professional Registrations

- ❖ Professional Engineer/1992/**North Carolina**, No. 18663, **Florida**, No. 45142
- ❖ Professional Engineer/1995/**Ohio**, No. 59299
- ❖ Professional Engineer/1996/**South Carolina**, No. 17216
- ❖ Professional Engineer/1997/**Virginia**, No. 030873
- ❖ Professional Engineer/1999/**Kentucky**, No. 21120, **Georgia**, No. 26573
- ❖ Professional Engineer/2003/**New Jersey**, No. 24GE04476100
- ❖ Professional Engineer/2009/**US Virgin Islands**, No. 1052 E
- ❖ Professional Engineer/2010/**Alabama**, No. 31139-E

- ❖ Professional Surveyor & Mapper/1991/**Florida**, No. 4884
- ❖ Professional Land Surveyor/1992/**North Carolina**, No. L-3502
- ❖ Professional Land Surveyor/1995/**South Carolina**, No. 17216, **Ohio**, No. 7748
- ❖ Professional Land Surveyor/1996/**Virginia**, No. 001301
- ❖ Professional Land Surveyor/1999/**Kentucky**, No. 3490
- ❖ Professional Land Surveyor/2002/**Georgia**, No. 2904
- ❖ Professional Land Surveyor/2009/**Virgin Islands**, No. 1053, **Alabama** 30807-S
- ❖ Professional Land Surveyor/2010/**Mississippi**, PS-3161

**Project
Experience**

- ❖ **2002 – 2019:** BCSC Dospiva, LLC / The Green Piece Engineering + Environment, LLC
Bateman Civil Survey Company, PC (to Jan 2018)
- ❖ Watergate Villas East Condominium Association, Estate Bolongo, St. Thomas, VI. BCSC Dospiva performed field surveys, Environmental Assessments, civil engineering and construction administration services for this project which involved designing a solution to a severe erosion issue. This project is situated directly on the beach and ultimately involved the construction of a toewall, installation of plantings on the beach and in the water, sand replenishment and all associated permitting through DPNR, CZM, Fish & Wildlife, and the local Building Permit process.
- ❖ Rattan Road (Rt 74) Route Surveying and Level B Subsurface Utility Engineering, Christiansted, St Croix. BCSC Dospiva is performing a route survey of approximately 3.5 miles of Rattan Rd including location of all underground utilities for a drainage and safety improvement project. This work is being performed under an on-call contract with the Department of Public Works.
- ❖ Brookman Quarry, St. Thomas, VI. BCSC Dospiva is currently performing engineering duties to address USEPA concerns at the quarry complex. Project Improvement plans, SWPPP, SPCC, IPWW TPDES permits and associated exhibits have been prepared. New topography was performed using sUAS (small Unmanned Aircraft System) at both St Thomas and St Croix facilities.
- ❖ Coastal Interceptor Relocation, Christiansted, St Croix. BCSC Dospiva is performing boundary, topographic and planimetric surveys for the design build of this sewer relocation project. Underground utilities were also located in portions of the project.
- ❖ University of the Virgin Islands Athletic Field Construction, Kingshill, St. Croix, VI. BCSC Dospiva performed boundary verification and topographic surveys, coordinated the archeological and environmental permitting, and the geotechnical evaluations, designed the FIFA Soccer Facility and practice fields including, erosion and sedimentation control, grading, drainage, field underdrains, turf and lighting specifications, irrigation and the preparation of a Stormwater Pollution Prevention Plan, and the administration and observation of the construction process
- ❖ Metro Motors, St. Thomas and Centerline Auto Rentals, St. Croix. BCSC Dospiva was part of design build teams for each of these projects Services provided include site planning, grading, erosion control, utility services and construction observation.
- ❖ Subsurface Utility Engineering: BCSC has performed Level A and Level B SUE services on various projects for environmental consulting firms, construction companies and professional engineering firms, including the use of Ground Penetrating Radar on several power/chemical industrial facilities. BCSC currently provides 24/7 On-Call SUE services for the US Army at Ft. Stewart and Hunter Army Air Field in Savannah, GA.
- ❖ Communication Facility Surveys: BCSC has completed numerous surveys for communication tower facilities including FAA 1A and 2C certifications, as well as boundary and topographic surveys, balloon tests, and zoning and title research, for projects throughout the southeastern US, Puerto Rico and the US Virgin Islands.
- ❖ **1993-1995, 2002-2006:** Instructor, Wake Technical Community College, Raleigh, North Carolina: Conducted full semester classes in the Civil Engineering and

Surveying curriculums. Specific courses included Drafting, CADD 1 & 2, Hydrology, Photogrammetry/GPS, Surveying 1, 2 & 3, Surveying Law, Business Management and Operations, Statics & Strength of Materials, and Soil Mechanics.

- ❖ **1999 – 2002:** Regional Manager, Draper Aden Associates, Apex, NC. Performed regional office management duties including opening regional office, client development, project management, accounts payable and receivable, project development and human resources.
- ❖ **1994-1999:** Regional Manager, Taylor Wiseman & Taylor, Raleigh, North Carolina: Performed client development, project management, accounts payable and receivable, project development and human resources. Directed over \$2.5 million of contracts with the North Carolina Department of Transportation, including Subsurface Utility Engineering, Route Surveying, GPS Surveys, and Roadway Design. Performed civil design of residential and commercial projects, directed boundary surveys as large as 850 acres, managed construction surveys of major roadway, industrial and residential projects, certified county-wide GPS survey of Wake County, NC for aerial mapping project, landfill closures and construction, wireless communication sites, and houseline services with major homebuilders.
- ❖ **1993-1994:** Office Manager, Geotrack, Raleigh, North Carolina: Performed Resident Professional Engineering / Surveying and Project Management duties for Subsurface Utility Engineering contract with the North Carolina Department of Transportation. Responsibilities included scoping meetings, estimate preparation, supervision of work products, submittals and contract administration.
- ❖ **1991-1993:** Senior Engineer, Collier County Government, Naples, Florida: Performed the review of all land development projects. Areas of review responsibility included review for South Florida Water Management District regulations, environmental review including wetlands and endangered species, water and sanitary sewer extensions, and construction conformance with development ordinances. Represented County Development Services on the County Environmental Advisory Board, which conducted public meetings for major projects. Selected to sit on Quality-Plus committees.
- ❖ **1989-1991:** Project Engineer, Brown Collins Incorporated, Ft. Myers, Florida: Performed engineering calculations and design of residential, commercial and agricultural projects. Design included stormwater management, utility design, grading and permitting. Performed occasional surveying project management.
- ❖ **1988:** Project Engineer, Hoppes Engineering, Springfield, Ohio: Performed calculations for stormwater management, utility design of water and sewer extensions, and grading of residential and commercial projects.
- ❖ **1977-1982:** Surveyor, Taylor, Wiseman & Taylor, Mt. Laurel, NJ: Performed survey functions as rodman, instrument operator and junior party chief. Also performed Business Office duties including Accounts Receivable preparation and collections.

FELIX S. REY

Dorothea 1A -2
St. Thomas USVI

phone: 340-227-1942
Email: frelectricvi@gmail.com

Objective: To use my electrical and civil knowledge and experience to improve my community.

Employment: Started work at the Virgin Island Water and Power Authority in April 25, 1989 and worked in the following capacity:

- 1) Engineer Tech 2, where I designed electrical service connections of customer service to the VIWAPA electrical systems.
- 2) Project Coordinator: Inspected and managed underground high voltage power system installations and managed overhead power installations, supervised water line installations and inspected generating unit connections to substations.
- 3) Line Superintendent: Over 10 years' experience in the position.

Education: (1982) CAHS Graduate

(1984-1986) Memphis Technical installation of Technology

(1987-1988) Memphis State University

Associates in Civil Engineering

Master Electrician- USVI

Certificate for Underground Cable Technology

Certificate for High Voltage Cable Splicing and Termination

Certificate for NESC Training

Certificate for NEC Training

Certificate from UEC (utility education courses) Certificate for IEEE Power and Energy Society Certificate in Partner Software

Accreditation and other certificates .in safety and utility designs

Roy A. Pemberton Jr.
6501 Red Hook Plaza
Suite 201
PMB 911
St. Thomas, USVI 00802

Born and raised on the island of St. Croix U.S.V.I.

Education and Training:

Virginia Institute of Marine Science, Gloucester Point, Va., School of Marine Science, College of William & Mary - 2001, M.S. in Marine Science

Hampton University, Hampton, Va., Department of Marine and Environmental Science - 1994, B.S. in Marine and Environmental Science

Experience:

September 2015 - Present: Independent contractor working for Strategic Development International. Duties included managing demolition and building projects, inspections of construction sites, permit submittals for the Department of Planning and Natural Resources.

September 2015 - Present: Independent contractor working for Bateman Civil Survey and Engineering (Now Green Piece Environmental Service). Duties included acquiring maps and survey information for various properties in the St. Thomas/St. John District, assist in the surveying and mapping of underground utilities, Beach surveys for sand replenishment projects for several major hotels on St. Thomas, assisting in the underground utilities surveys in the St. Thomas/St. John District for the Modular Building Project for Public Schools after Hurricanes Irma and Maria.

September 2011 - August 2015: Served as Director of the Division of Fish and Wildlife for the territory of the U.S. Virgin Islands in the Department of Planning and Natural Resources. Responsibilities included, providing scientific advice to the Commissioner of the Department of Planning and Natural Resources on the condition of the territories natural resources and the best strategies to sustain these resources for all of the citizens of the U.S. Virgin Islands. Duties prioritized fisheries management and wildlife resource management in the territory and community outreach, along with cross training in Coastal Zone Management, Historical Preservation, Environmental Protection, Building Codes and Permits, Earth Change, and Environmental Enforcement. The Division is 100% federally funded by the U.S. Department of Interior, U.S. Fish and Wildlife Service, Federal Aid Service and by the Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, served on the Caribbean Fisheries Management Council, and Chaired the Seemap Program for the U.S. Caribbean.

February 2001- September 2011: Served as Caretaker for the historical Burgh Westra Estate; a 350-acre estate in Gloucester County, VA. Duties included wildlife and land management for the sustainable hunting of big game waterfowl and small game; commercial harvest of timber; and management of various horticulture and building projects on the historical sight. Managed the major restoration project of the Burgh Westra. Duties included construction site inspection,

burying of underground utilities, sewage and water lines, the management of the construction of the Carriage house, Guest house and the boat dock.

August 13, 2001- January 2009: worked for the Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Fisheries Science Center, Protected Species Branch. Duty Station: Virginia Institute of Marine Science, The College of William and Mary, 1208 Greate Road, Gloucester Pt. VA 23062. Duties include working with the NMFS Fisheries Observer program and to improve the efficiency and effectiveness of turtle population studies and management measures in the northeast region, other duties included working with deep drop fishers in studying the age and growth and population dynamics of Black Sea Bass in the Virginia, North Carolina and Maryland area, and participation in Fisheries Scientific Cruises offshore in Northeast and Mid-Atlantic region of the U.S.

April 2000 – August 2001: Part time National Marine Fisheries Service Observer for P.T.S.I. and End to End Inc. Norfolk, Va. 23518. Worked as a Fisheries Observer on commercial fishing vessels from 25ft - 125ft in Virginia and North Carolina. Responsible for the documentation of sea turtle, marine mammal and sea bird interactions with Commercial Fishing Gear, Biological sampling of incidentally captured sea turtles, marine mammals, and sea birds, biological sampling of important commercial fish species, and the generation of reports of each commercial fishing trip observed.

August 1996 – January 2001: Graduate Student at The College of William and Mary, School of Marine Science / Virginia Institute of Marine Science, Gloucester Pt. Va. 23062. Working with the marine mammal and sea turtle stranding network. Responsible for care of stranded sea turtle and marine mammals, tagging, measuring, and weighing sea turtles, maintaining turtle and mammal tank facilities, transporting and relocating sea turtles, and performing necropsies and gut content analysis. Completed master's thesis Project: Habitat Utilization of Juvenile Hawksbill Sea Turtles (Eretmochelys imbricate) Buck Island Reef National Monument St. Croix U.S. Virgin Islands.

September 1994 - September 1996: National Marine Fisheries Observer for Manomet Observatory, Manomet Mass. 02345. Worked as a Fisheries Observer on commercial fishing vessels from 25ft - 125ft from Maine to North Carolina. Responsible for the documentation of sea turtle, marine mammal and sea bird interactions with Commercial Fishing Gear, Biological sampling of incidentally captured sea turtles, marine mammals and sea birds, biological sampling of important commercial fish species, and the generation of reports of commercial fishing trips observed in the region.

RELATED EXPERIENCE:

October 1978 – started spearfishing in the Virgin Islands

1985 – 2000 active commercial fisherman St. Croix U.S. Virgin Islands: Long line, Fish traps, rod and reel and spear fishing. Operated 15ft - 25ft vessels.

March 1989 - SCUBA certified NAUI

June 1989 - Graduate and Board of Trustees Recipient from the St. Croix Country Day School

October 1994 - Certified Observer for the National Marine Fisheries Service.

1996 - U.S. Coast Guard Boating Safety Class

1999-2001: Served as a member of the St. Croix, U.S. Virgin Islands Fishery Advisory Committee. Worked on regulations for the Commercial Fisheries of St. Croix, U.S. Virgin Islands and advised the Commissioner of DPNR on Fisheries issues in the territory of the U.S. Virgin Islands.

Over 40 years of in water and boating experience in U.S. and U.S.V.I.

Experience

23 Years Total

Education

Technical College
of the Lowcountry (S.C.)
Surveying, 2000 - 2002

University of South
Carolina-Aiken
Civil Engineering Tech.,
1994 - 2000

Jeremy Jones' 23 years of experience include niche expertise in the geospatial industry, with a focus on 3D Laser Scanning and Building Information Modeling. He was part of a Harvard/NIST team that created the chapter and addendum to the Building Information Model Guide for the U.S. General Services Administration (GSA). In addition to being a leader in the geospatial industry, Mr. Jones is well versed in all aspects of construction. Experience includes GIS, topographic surveys, boundary surveys, ALTA surveys, construction surveys, and due diligence reports. These skill sets have been tested in multiple industry sectors ranging from design survey data collection to complex construction as-built verification.

U.S.V.I. Water and Power Authority, St. Thomas & St. Croix, The Water and Power Authority on the islands was in the process of shifting from diesel-fueled generators to natural gas. This process required the design and construction of mounds that would house the tanks, along with thousands of feet of piping tie-ins and reroutes. The process also included a state-of-the-art boiler room and **gas "burn off" turbine. CPC provided all the geo-**referenced scan data for the various project teams and worked with local survey vendors to ensure a complete deliverable met the needs of multiple design disciplines. CPC was retained to provide 3D Laser Scanning services to capture as-built conditions for two (2) of Vitols terminals in the islands. Mr. Jones scanned both terminals utilizing control points that were provided by the Client. Dozens of targets were captured and registered to the point cloud. For our Client's convenience, CPC hosts an online tool that allows the Client to lifetime access to the project from various viewpoints. Assumed measurements can also be obtained from these files.

Sunoco Butane Blending Team/ Various U.S. Locations, Sunoco has a patented butane blending process that they are selling to their partners in the industry. Firms such as Kinder Morgan, Phillips and Marathon are embracing this process. Our team was tasked with developing corridor surveys for the design of future tanks and piping that would enable butane to be distributed on these sites. The CPC team captured the on-site conditions typically in 1-2 days. The scan was requested to rule out tank deformation and **the following artifacts of 2" and larger included:** piping, pipe supports, bracing, stairs, pipe racks, dike walls, buildings, tanks, concrete pads, light poles, and bollards. The data were georeferenced using OPUS observations while on site. Immediately following the field scans and registration, CPC delivered a TruView solution for the project teams to begin their review and isolate areas for detailed CAD modeling. Once these parameters were relayed, the CPC team modeled and extracted 3D objects for use in Autodesk Civil 3D. The scan data was delivered in a 2D/3D Autodesk hybrid deliverable.

City of Ormond Beach Water Main Replacement, Mr. Jones provided 3D laser scanning and QA/QC for a survey of approximately 24,500 feet of the proposed City of Ormond Beach water main replacement project. The project included a control survey and the determination of apparent Right-of-Way lines. Additionally, a topographic survey was performed locating all drives, sidewalks, hydrants and other features along the route. Fifty-foot cross-sections were collected along with additional intersection details. All manholes, invert elevations and sizes were included in the survey.

Florida City Gas/AGL, **Master Services Agreement, 3.5 miles of 8" Gas Main Extension** to the Miami-Dade County Solid Waste Management Landfill, The gas main extension includes NW 89th Ave from NW South River Drive to NW 93rd Street to NW 87th Avenue then to NW 74th Street along the north 35 feet of the 58th Street Landfill, then on NW 97th Avenue. Extensive permitting and topographic survey were required along NW 89th Street to route the pipe, so as to not interfere with the storm drainage improvements the City was planning in the near future, and modification of Conditions under DEP Permit #0065435-004-SF along the property line on NW 74th Street in a dedicated easement. The Natural Gas will be used by Miami-Dade County Resource Recovery Facility (PA77-08) for start-up, shut-down and carbon monoxide control in lieu of propane.

Nueces Bay Power Plant, Corpus Christi, TX, Responsible for documenting 800 of 8' diameter

cooling tunnels, classified as confined spaces. One day of field scanning produced a 6 mm accurate 3D Model of the tunnel for use in deformation studies, as well as plan location horizontally and vertically for use in the engineering documents.

Reference: Trisha Elizondo, Topaz Power Group (720) 344-3719

As-Built Levee LPV-104, New Orleans, LA, Responsible for providing laser scan as-built analysis of proposed engineering versus construction for 1.2 miles of levee along Lake Pontchartrain. Two days of field scans produced millimeter-accurate topography that was used to deliver a DTM, cross-sections, volume analysis, and 3D model.

Reference: Brian Ohri, US Army Corps of Engineers (504) 832-4174

Marathon Oil, Tampa Terminal, Provided a laser scan as-built of topographic features throughout the oil terminal. Four field days were required to scan the entire terminal. Due to minimal relief across the site, the only method to obtain an accurate depiction of the surface water flow was to utilize 3D Laser Scanning. The final deliverables were 2D plan and profiles of the site together with a 3D surface model that was able to accurately define small elevation changes across the site.

Reference: Greg Gerdeman, Marathon Oil (813) 247-6371

I-4 Pedestrian Bridge, Maitland, FL, Hired by SGL Constructors in 2018 on behalf of the Florida Department of Transportation (FDOT), Mr. Jones and CPC are providing numerous services for this 625-foot metal pedestrian bridge that will span Interstate 4, south of the Maitland Boulevard interchange. CPC has provided 3D Laser Scanning for as-builts verification, 3D modeling for virtual design construction of the archway rib, and conventional surveying for construction staking as it relates to tower locations for SGL's preparation to go vertical with steel segments.

Winter Haven Hospital in Winter Haven, FL, Hired by Suffolk Construction in 2018 for planned renovations to the ground-floor emergency room, **Mr. Jones led 3D Laser Scanning of the building's roof, second floor and space above the** first-floor ceiling that includes MEP (mechanical, electrical and plumbing) infrastructure. This point cloud deliverable of the ceiling cavity helped ensure the general contractor would avoid clashes that could have otherwise shut down the emergency room.

RMC South Seminole Hospital in Longwood, FL, The hospital was performing maintenance and also replacing several blowers in **the MEP rooms. CPC's 3D Laser Scan** data was used for spatial analysis of the proposed areas, as well as the ingress/egress of new equipment to allow for proper pre-fabrication and mobilization. CPC provided Truview for the engineer and owner's **representative so** they could collaborate and virtually visit the site during team meetings. In addition to the online portal, CPC furnished a detailed 3D model showing structural supports, piping, and mechanical elements.

Kennedy Space Center, Mobile Launch Platform for Ares I-X Rocket Series, NASA, CPC used a 3D HDS High Definition Laser for its accuracy and density **capabilities to scan the Blast Hole walls of NASA's Mobile Launch Base (MLB) platform for future rocket** launches. CPC **scanned the 24' x 24'** walls at the highest resolution and density, identifying hundreds of prefabricated bolt holes for the Met-con, Inc. aerospace project. Detailed CAD drawings of the four walls, some in 3D, were generated for Met-Con to fabricate stainless-steel heat shield plates that would insulate its walls during rocket launches. These measurements and drawings assisted the client in drilling **bolt holes in the insulation plates to match the existing steel structure. This met NASA's** extremely accurate requirement of up to three decimal places for precision placement of the bolts, brackets and insulation plates. This was the first time NASA had used or allowed 3D Laser Scanning as a data collection solution for measurements on their site. It was not only innovative but also translated into cost savings for the client for their quality control of the final product.

Merritt Island Pressure Improvement Project, Florida City Gas/AGL, Performed 3D Laser Scanning, registration, cloud clean up and created a model of major vertical features and a topographic mesh of the North Atlantic Avenue and US A1A intersection. CPC provided route selection, route surveying and design plans for the installation of an 8-inch steel high-pressure gas main to be located on North Atlantic Avenue and US A1A from George King Boulevard to SR 520. This project includes close coordination with the City of Cape Canaveral, Brevard County, the City of Cocoa, FDOT and both private and public utilities in the area.

Volume Analysis, Various U.S. Port Locations, Mr. Jones has provided ongoing volume analysis of assets for various chemical companies bi-annually along the east and west coast. 3D Laser Scanning at these facilities allows for a non-contact safer approach and reduces any facility process downtime. The captured volumes and densities are reported back to the marine insurer and logged for SOX compliance. Reference: John Monticello, Marine Inspection & Logistics (908) 489-5208



<p><i>Experience</i></p> <p>23 Years Total</p>	<p>Mr. Sullivan has more than 23 years of experience in the surveying and mapping industry specializing in subsurface utility engineering. He brings a wealth of knowledge with utilities, Terrestrial Mobile LiDAR, GPS primary network, and secondary control, right-of-way mapping, topographic surveys, aerial photogrammetry, and hydrographic surveys. He has worked extensively in the public sector and private sector including the Florida Department of Transportation (FDOT), local municipalities, and the United States Army Corps of Engineers (USACE), utility companies including FPL and professional design consultants.</p>
<p><i>Education</i></p> <p>Daytona State College, Daytona, Florida</p>	<p>Cape Canaveral Air Force Station, Cape Canaveral FL, S.U.E. Manager: This project located at Cape Canaveral Air Force Station. This project involved relocation and additions to the existing Fiber Optic Duct Bank for the new launchpad. In addition to locating the duct bank, the fiber optic vaults had to be de-watered as well as 3D laser scanning of the inside of each vault.</p>
<p><i>Affiliations</i></p> <p>ASCE</p>	<p>Duval-Raven 230kV line, West Survey Route, Florida Power & Light (FPL), Lake City, FL. Mr. Sullivan served as a project coordinator and performed a Route-of-line survey of the proposed route of the Duval-Raven 230kV line, west portion (25.2 miles – Baker and Columbia Counties), which consisted of a transmission corridor route survey, recordable sketches and legal descriptions of all easements, right of way boundary, clearing staking, and pole staking.</p>
<p><i>Certifications</i></p> <p>UAS Remote pilot Certification #4197870</p>	<p>Florida Power & Light on-call services throughout Florida. Mr. Sullivan served as an S.U.E. Manager for this project. This project consisted of on-call services at various FPL Substations throughout FL where substations were to be expanded or retrofitted and the subsurface utilities needed to be identified.</p>
<p><i>Fields of Specialization</i></p> <p>Subsurface Utility Engineering (SUE)</p> <p>Advanced Maintenance of Traffic (MOT)</p> <p>Right-of-Way Surveys</p> <p>GPS Surveys</p> <p>Terrestrial Mobile LiDAR</p>	<p>City of Orlando, CR 15 Narcoossee Rd, Orange County, FL, SUE Manager: This 4-mile project for widening the roadway from 4 to 6 lanes and the addition of 4 bike lanes required full utility designating and over 300 VVH's were performed for conflicts with the proposed 36" reclaimed water line. Additionally, clearance holes were also performed for the 17 proposed mast arms. Reference: Troy Vargas P.E., WBQ Design & Engineering (407) 839-4300 Ext. 38</p>
<p>Boundary/Topo Surveys</p> <p>OSHA Confined Space Training</p> <p><i>Software Aptitude</i></p>	<p>Volusia County, Surveying Services Howland Boulevard Widening from Providence Blvd to Elkam Blvd, Deltona, FL, Contract # 17-SQ-36SR, Project Coordinator: Provided Survey and Subsurface utility engineering services as a sub to Infrastructure Engineers for a full design, Right-of-Way, and Utility survey for this project. These services were don't to support the design of widening Howland Blvd from 2 lanes to 4 lanes. Survey work was also performed for the 4 offsite pond sites.</p>
<p>CAICE Microstation GEOPAK TopoDOT Trimble Business Center TerraSolid Electronic Field Book Carlson Trimble Access</p>	<p>Forge Capital Partners, LLC, Orlando, FL, SUE Manager: This project located in Baldwin Park involved lot splits of a previous undeveloped subdivision. We performed a topographic survey of the subdivision. Prior to building on these lots, the underground utilities that were installed some years earlier were unknown. We completed an entire subsurface utility survey to identify all buried utilities. Softdigs were also done at all connection points on the utilities.</p> <p>Matanzas Shores CCCL Field Staking, Matanzas Shores Homeowner's Association, Palm Coast, FL. Mr. Sullivan served as a project coordinator and provided a traditional topographic survey to the client, which consisted of field staking the location of the coastal construction control line in the vicinity of the surf club condominium phases I, II, III, and clubhouse.</p> <p>FDOT District 5, Maitland Blvd/SR 414, Orange County, FL: Project Coordinator providing surveying services at the intersection of SR 414 and Hope Road as well as the intersection of SR</p>

David Sullivan, SUE Manager

414 and North Maitland Avenue in Orange County, Florida. This project included Mobile LiDAR, topo of obscured areas, designating and locates along SR 414 from I-4 to US 17-92.

Reference: Steven Kreidt P.E., KCG (407) 898-7858

FDOT - District 5, SR 600/Pleasant Hill Road, Osceola County, FL: Project Coordinator/SUE Technician. Mr. Sullivan provided Project Coordination for right-of-way control survey efforts, including alignment retracement, section boundaries, and subdivision boundaries as well as the designation of underground utilities at the intersection of SR 600 and Pleasant Hill Road, which is being converted to a significant highway interchange and bridge, and northeast along SR 600 for several miles. This is busy a corridor that required great attention to MOT due to the heavy traffic. Forty VVHs were dug for the initial phase.

Reference: Troy Vargas P.E., WBQ Design & Engineering (407) 839-4300 Ext. 38

Florida's Turnpike Enterprise, Suncoast Parkway Phase 2 from SR 44 to CR 486, FIN# 442764-1, Citrus County, FL, SUE Manager: This new four-lane road (two lanes in each direction) toll facility extends from SR 44 to CR 486, a distance of approximately three miles. The project included completing the interchange at SR 44 to accommodate northbound traffic movements. Construction for southbound traffic movements is currently underway as part of the Suncoast Parkway 2 from US 98 to SR 44. Related improvements include drainage, lighting, highway signing, traffic signalization, guardrail, and sidewalk. Full utility designating was done at SR 44, CR 486, major FGT crossing the mainline corridor as well as each side street crossing.

Reference: Troy Vargas P.E., WBQ Design & Engineering (407) 839-4300 Ext. 38

FDOT District 5, SR 527 Orange Ave, Orange County, FL, SUE Manager: This project consists of milling and resurfacing State Road 527 (Orange Avenue) from south of Lake Conway Drive to the north of Grant Street in Orlando. This project will also include sidewalk curb ramp improvements that comply with Americans with Disabilities Act (ADA) requirements, the installation of signing and pavement markings, pedestrian signal upgrades, minor drainage improvements, and streetscape improvements. The streetscape improvements will consist of constructing medians north of Pineloch Avenue and north of Illiana Street for future landscaping and **building curb "bulb-outs" for parking and pedestrian enhancements**. Responsibilities included utility designating throughout the entire project corridor. **VVH's were completed** for verification of the designating. Within this project MOT was critical had to be taken into consideration.

Reference: Roman Blanco, P.E., Arcadis (904) 861-2884

FDOT District 5, SR 500 at SR40, Marion County, FL, Project Coordinator for full design, right-of-way, designating, locating, and mapping underground utilities for this major intersection. The project included recovering, monumenting and referencing historical baselines for SR 40 and US 441 (SR 500) as well as designating five underground utilities throughout the project. The project begins south of State Road (S.R.) 40 (West Silver Springs Boulevard) on S.R. 500 (U.S. 441/U.S. 27) (South Pine Avenue) and extends northward stretching between SW 3rd Street to NW 2nd Street. The intent of the project is to implement traffic operation improvements and improve the life of the pavement through milling and resurfacing the existing travel lanes, and the addition of turn lane widening. Minor drainage, pedestrian, sidewalk, intersection and signalization improvements are also a part of this project. The proposed improvements will add a dual left turn on NB S.R. 500 onto S.R. 40, and extend the left turn queue length of the SB left turn on S.R. 500 onto S.R. 40 and the NB left turn on S.R. 500 onto NW 2nd Street.

Reference: Mark Bertoncini, P.E., VHB (407) 839-4006

FDOT District 5, SR 500 at SR 464, Marion County, FL: Project Coordinator for full design, right-of-way, designating, locating, and mapping underground utilities for this major intersection. This entailed designating water, sanitary force main, power, communications, and gas Performed VVHs confirming the type, depth, material, and size of each buried facility. The project begins south of State Road (S.R.) 464 (SW 17th Street) on S.R. 500 (US 441/US 27) (South Pine Avenue) and extends northward on S.R. 500 (US 441/US 27). The intent of the project is to implement traffic operation improvements to relieve congestion at the intersection of S.R. 500 and S.R. 464. The proposed improvements will create a dual left turn for northbound traffic on S.R. 500 to S.R. 464, and extend the left turn queue length of the southbound left turn on S.R. 500 onto S.R. 464. A new exclusive right turn lane will be added for westbound S.R. 464 traffic turning north onto S.R. 500. Minor drainage, pedestrian, sidewalk, signalization, and lighting improvements will also be included with this project.

Reference: Mark Bertoncini, P.E., VHB (407) 839-4006



Experience

10 Years Total

Education

Bachelor of Arts degree in
History, University of
Central Florida, 2015

Certifications

FAA Remote pilot:
UAS/Drones

Dalton Proctor has been an accomplished rod-man/chain person in the surveying field for Carnahan Proctor and Cross, Inc. In recent years he has been promoted to 3D Survey Technician to lead the **firm's three-dimensional** rendering design and achieved FAA certification as an aerial drone pilot. Working all around Florida, his experience has included FDOT Design-Builds and large-scale land development projects. Mr. Proctor is familiar with numerous aspects of surveying and mapping, including topographical and boundary surveys, as-built surveys and lot-and-block, all while utilizing GPS technology and Leica Total Stations.

US Virgin Islands, FEMA Temporary School Design-Build: CPC provided survey and geomatics support for Bateman Civil Survey on AECOM's multi-site temporary school design-build. Provided original surveys for all selected sites, using 3D laser scanning and conventional survey techniques, along with drone imaging. Continued to provide field support during construction of modular buildings including column layout, building layout, creating temporary benchmarks, and gathering any additional topographic information requested. Worked closely with AECOM consultants to ensure quick and accurate solutions to problems.

US Virgin Islands, Haugland Site Parcel 149B Temporary Asphalt Batch Plant: CPC provided conceptual and final site layouts for the stormwater pond design, erosion control plans, utility connections, and the Operations Building and parking configuration. The site design was based on the site constraints related the limited area, the terrain, the ingress/egress and plant operations and how they fit on the site. We also worked with the contractor to complete the equipment layout of the packaging plant and provided information to confirm assets would fit and function on the limited site. CPC provided topographic and boundary information on proposed site, using pre-existing surveys. Found and set control points for future layout of facility.

Continuing Surveying Services, Florida Power and Light, Company (FPL): CPC provides support to FPL under a continuing services contract on an as-need base. Tasks include Boundary, location topographic, hydrographic, and as-built surveys, construction staking, and occasional special projects on an as-needed basis for **five of FPL's eight Florida regions, covering the state's East Coast**. CPC has completed hundreds of projects as a firm.

City of Ormond Beach Water Main Replacement: Survey of approximately 24,500 feet of the proposed City of Ormond Beach Water main replacement project. The project included a Control Survey and the determination of apparent Right-of-Way lines. Additionally, a topographic survey was performed locating all drives, sidewalks, hydrants and other features along the route. Fifty-foot cross-sections were collected along with additional intersection details. All manholes, invert elevations and sizes were included in the survey.

Reference: Brad Blais, P.E., (386) 761-6810

FDOT D5 Regional Transportation Management Center (RTMC) for the Florida Department of Transportation and the Florida Highway Patrol Dispatch, FM: 437100-1-62-01: This project includes a 44,000-square-foot facility for FDOT and the Florida Highway Patrol to oversee and monitor traffic on eight state and interstate highways, including Interstates 95, I-4 and I-75, and fourteen major roadways, including SR 46 and U.S. 17-92, throughout nine central Florida counties including the Greater **Orlando area**. **The Center's state-of-the-art** technology will use cameras and other technologies to help monitor traffic, including speeds and the number of vehicles on the roadways, pinpoint traffic jams, accidents, and other emergencies, and provide for immediate coordination with law enforcement and fire and emergency crews when needed.

Reference: Hill International, Dan Sokol, PE 904-296-1004

I-4 Ultimate Pedestrian Bridge, Maitland FL: Hired by SGL Constructors in 2018 on behalf of the Florida Department of Transportation (FDOT), Mr. Proctor has **led CPC's creative design** of 3D renderings, taking surveying data and combining it with engineering plans to create a deliverable that helps the construction team identify errors in the field compared to their plans.

Davie Drainage Study, Davie FL: Scanned selected areas of the 200-acre project to produce Asbuilt drawings for engineering. Captured images using a drone to better identify drainage and fallout structures over the entire project.

Robinson Street Corridor Traffic Study, Orlando FL: Provide CAD drawings of 2.5 miles of Robinson St. Scanning was completed in one week, totaling almost 300 scan positions. Deliverables were produced in 3 weeks, showing as-built conditions and all utilities of the corridor

South Seminole Hospital, Longwood, FL: Mr. Proctor created a deliverable **3D model of the hospital's HVAC system and MEP room** using a 3D point cloud, which was imported into CADD. This helped the client to renovate its HVAC system and know in advance where inconsistencies lied in design, so construction plans could be adjusted.

Florida Turnpike Enterprise, Resurface and Roadside Improvements MP 181.1 to 190.5, Okeechobee and Indian River Counties; FIN: 43516516201, 43516536201, 43516716201, 43516736201, 43516616201, 43516636201, 43516816201, 43516836201: This \$26 million project consists of milling and resurfacing, cross slope corrections, super-elevation corrections, base construction, bridge deck joint replacements and box culvert gunite spall repairs. This project also featured safety and design improvement which included drainage, shoulder gutter, guardrail, signage for the Turnpike Mainline (SR 91) from Mile Post 178 – 190 in Indian River and Okeechobee Counties.

Reference: Christopher NeSmith, P.E. (407) 264-3482

FDOT D5 I-4 Ultimate Bridge Calculations: CPC was retained to provide survey services for the Area 2 Downtown segment. The downtown Orlando Area 2 stretch of I-4 is home to eight interchanges, including State Road 408. CPC verified existing bridge pedestals for this fast-paced construction project. The data allowed the client to check for any inconsistencies from the legacy data. This early exercise allowed them to confront design issues well in advance of material or labor arrival. Deliverable: CPC hosted live meetings where the data was reviewed and analyzed by the entire project team. From these meetings, exhibits were developed and RFIs were generated.

Reference: Chris Sullivan, SGL PM (301) 520-0271

FDOT District 5: CEI Group 148-SR 48 E of I-75 FM: 240418-2-62-01 & 433959-1-62-01, Sumter County, CPC was retained to provide conventional survey services for this CEI miscellaneous structures contract. Our firm was charged with establishing control of the area and recovering points that were not previously established. In addition to this task, we were also tasked with providing final cross-sections of the project.

References: Dan Sokol, PE, Hill International (904) 838-6752

Florida Turnpike Enterprise: Widen Beachline (SR 528) from I-4 to Turnpike MP-0.278, FIN# 24060905301, This 4.3-mile project in Orange County includes the widening of the Beachline Expressway (SR528) from I-4 to the Turnpike. Construction activities include two express lanes and two general lanes in both directions to include a 4-ft buffer, I-4/SR 528 widening, and installation of a Mainline Tri-Chord non-accessible gantry, toll equipment buildings and coordination with toll system equipment contractor. CPC is providing CEI, survey and administrative services on this project as a sub to RK&K.

Reference: Josh Carter, P.E., RK&K (863) 370-9682

FDOT District 4: SR-70 from **900' West of Jenkins Rd. to 2000' East of Jenkins Rd., FIN#'s: 42898416201**, This project, centrally located within a highly-congested section of SR-70, features improvements intended to increase the capacity of the SR-70 corridor in Fort Pierce at a critical juncture to both I-95 and the Florida Turnpike. The scope of work includes the widening of SR-70 to provide four through lanes, right turn lanes for both approaches of SR-70, dual left-turn lanes on SR-70 Eastbound and a single left-turn lane on SR-70 Westbound. **Project features include construction of a 36" outfall with wet detention pond, a box culvert extension, installation of dual 60" NSLRWCD culverts, installation of 2 large conflict structures (separating FDOT & NSLRWCD stormwater), construction of a 16" deep sheet pile wall at the perimeter of the NSLRWCD canal, lighting, and signalization upgrades and landscaping.**

Reference: Jeanette Harris, P.E., FDOT Project Manager (954) 777-4184

RYAN C. WISEHART
Professional Land Surveyor
February, 2019

Contact

Brian Moseley & Associates, Inc.
4003 Raphune Hill Road Suite 606
St. Thomas, U.S. Virgin Islands 00802

Phone: (340) 774-5310
Facsimile: (340) 776-4090
E-mail: rwisehart@visurveyors.com

Professional Qualifications & Responsibilities

- Twenty-eight years land surveying experience, 19 years in the U.S. Virgin Islands
- Quality assurance for all land surveying services
- Responsible for the completion of surveys for commercial properties valued in excess of \$1 billion
- Boundary, topographic, and land title surveys
- Structural monitoring and quantity surveys
- GPS and Conventional Methods for Geodetic Surveys
- Right-of-Way, Easement, and Route Surveys

Professional Licensure

Professional Land Surveyor, License #773LS, U.S. Virgin Islands, since 2002
Professional Land Surveyor (Inactive), State of Indiana, 1995

Expert Witness Testimony, Memorandum of Opinion, and Exhibit Preparation

Queen Charlotte v. Surtep Enterprises, a trial proceeding in the Superior Court of the Virgin Islands, Division of St. Thomas and St. John, the Honorable James S. Carroll III, presiding. Provided expert witness testimony.

Washington Gumbs v. Steven and Marcella LaPlace, a trial proceeding in the Superior Court of the Virgin Islands, Division St. Thomas and St. John, the Honorable Denise M. Francois, presiding. Provided expert witness testimony, survey, and memorandum preparation.

Wilma Marsh Mansanto v. Estate of William Clarenbach et al., a trial proceeding in the Superior Court of the Virgin Islands, Division St. Thomas and St. John, the Honorable Adam G. Christian, presiding. Conducted comprehensive parcel analysis and memorandum preparation. Disposition unknown to me.

Ida Smith v. The United States of America, et al., District Court of the Virgin Islands, Division St. Thomas and St. John. Prepared Composite Survey. Disposition unknown to me.

Kean Family Property, Inc., f/k/a Little Plantation, Inc. vs. Lew Henley, Superior Court of the Virgin Islands, Division St. Thomas and St. John, Case No. STT-2014-CV-63. Ongoing proceeding.

Adrian Cenni and Max Arc, LLC v. Estate Chocolate Hole Landowners Associates, Inc., John Doe and Jane Doe, Superior Court of the Virgin Islands, Division St. Thomas and St. John, Case No. STT-2015-CV-383. Prepared Declaration Under Oath and Survey Report. Ongoing proceeding.

RYAN C. WISEHART
Professional Land Surveyor
February, 2019

Education & Professional Development

Bachelor of Science, Land Surveying—Purdue University, 1992. Continuing education workshops in:

- Boundary Law, ALTA/NSPS (formerly ALTA/ACSM) Land Title Surveys
- Celestial Observations for Astronomic Azimuth
- Global Positioning Systems & Least Squares Adjustment
- Construing and Writing Boundary Descriptions
- Litigation and the Surveyor
- Equipment Calibration
- Subsurface Utility Design; Field Notes
- State Plane Coordinate System
- Introduction to Geographic Information Systems
- Developing and Effective Sediment and Erosion Control Plan.

Employment

Brian Moseley and Associates, Inc., St. Thomas, U.S. Virgin Islands

- President and sole shareholder, since April 2012
- Shareholder, Vice President, and Corporate Secretary, 2007 to May, 2012
- Project Manager & Land Surveyor, since 2002
- Crew Chief and Technician, upon employment in 1999

Woolpert Consultants LLP (now Woolpert Inc.), Indianapolis, Indiana

- Employed from 1992 to 1999
- Project Manager
- Licensed Surveyor
- Survey Technician

Vester & Associates, Inc., Lafayette, Indiana

- Survey Technician, 1990-1992 (part-time while in college)

Craig & McKnight, Indianapolis, Indiana

- Right-of-Way Engineering Technician, 1987-1989

Indiana Department of Transportation, Indianapolis, Indiana

- Right-of-Way Engineering Technician, 1986-1987

Community Service

St. Thomas Reformed Church

Engineering Ministries International

Virgin Islands Montessori School & Peter Gruber International Academy (former member, Board of Trustees)

Habitat for Humanity (Indiana)

Memberships

National Society of Professional Land Surveyors

SECTION 6

ADDITIONAL

SUPPORT

DOCUMENTS



Proposed Payment Schedule

- Time Duration for Mobilization: 7 days after notice to proceed
- Mobilization Fee: 5% of T&M contract amount. Refer to Bid form.
- After the initial mobilization fee, invoices will be issued monthly based on hours worked.
- Demolition Fee: 3% of the T&M contract amount. Refer to Bid form.
- Payment Terms: Net 30 Days:
- All Invoices shall include the following:
 - a) Number of Hours worked
 - b) Hourly rate
 - c) Description of tasks performed
 - d) Description of materials used
 - e) Listing of reports/documentation provided to client
 - f) Location of where work was performed (i.e. onsite, off-island home office support, etc.)
 - g) Current amount being invoiced
 - h) Prior amount invoiced to date
 - i) Balance remaining of original contract bid price

SERVICE RATE SCHEDULE	
ENGINEERING DESIGN CAD SERVICES	RATE PER HOUR
Senior Project Manager	\$200.00
Project Manager	\$115.00
Professional Engineer- Home Office Support	\$155.00
Construction Manager	\$100.00
Construction Engineer	\$175.00
Construction Inspector	\$70.00
QA/QC Engineer	\$165.00
Safety Officer	\$60.00
Document Control / Administrator	\$80.00
Registered Land Surveyor	\$145.00
CAD Technician	\$85.00

REIMBURSABLE EXPENSES	
DRAWING REPRODUCTION	RATE PER DRAWING
11" x 17"	\$4.00
22" x 34"	\$5.50
24" x 36"	\$6.50
30" x 42"	\$7.50
36" x 48"	\$8.50
Please Note: Additional fees will apply for color printing & plotting	
Hard Copy Specifications Books & Reports Prepared for Distribution	Time & Materials
Electronic File Preparation: CD & Flash Drive	Time & Materials

DELIVERY SERVICES	RATE
FedEx or Courier*	\$35.00 minimum fee
*Overnight Delivery includes standard overnight shipping for one package. If the final shipping cost exceeds \$35.00, the additional portion of the fee will be billed accordingly.	

ADDITIONAL EXPENSES	RATE
Mileage	\$0.56 per mile
Tolls	Direct reimbursement, plus 10%
Parking	Direct reimbursement, plus 10%
Airfare	Direct reimbursement, plus 10%
Train	Direct reimbursement, plus 10%
Rental	Direct reimbursement, plus 10%
Lodging	Direct reimbursement, plus 10%
Meals (\$50.00 Per 24 Hour Period)	Direct reimbursement, plus 10%



FXBIN-1

OP ID: LP

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

07/08/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Wortley/Poole Professional,Ltd 1 Penn Center 1617 JFK Boulevard, Suite 880 Philadelphia, PA 19103 Paul J. Lucci	CONTACT NAME: Paul Lucci	
	PHONE (A/C, No, Ext): 215-564-6971	FAX (A/C, No): 215-564-6975
	E-MAIL ADDRESS: plucci@wortleypoole.com	
INSURED FXB, Inc. 5 Christy Drive, Suite 307 Chadds Ford, PA 19317	INSURER(S) AFFORDING COVERAGE	
	INSURER A: Travelers Casualty and Surety	
	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	
	NAIC # 19038	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.


INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y / N <input type="checkbox"/> N / A						PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability E&O			105964602	06/30/2019	06/30/2020	Ea Claim 5,000,000 Pol Agg 5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

For professional liability coverage, the aggregate limit is the total insurance available for all covered claims presented within the policy period. The limit will be reduced by payments of indemnity and expenses.

CERTIFICATE HOLDER

CANCELLATION

For Proposal Use Only	PROPO-1
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 

© 1988-2014 ACORD CORPORATION. All rights reserved.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
01/03/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER PAYCHEX INSURANCE AGENCY INC 150 SAWGRASS DR ROCHESTER, NY 14620 (877) 362-6785	CONTACT NAME:	
	PHONE (A/C, No, Ext): (877) 362-6785	FAX (A/C, No): (877) 677-0447
INSURED FXB, INC. DBA FXB ENGINEERING DBA FX BONNES ASSOCIATES, INC. 5 CHRISTY DR STE 307 CHADDS FORD, PA 19317	E-MAIL ADDRESS: paychex@travelers.com	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A : TRAVELERS CASUALTY COMPANY OF CONNECTICUT	
	INSURER B :	
	INSURER C :	
	INSURER D :	
INSURER E :		
INSURER F :		
NAIC #		

COVERAGES **CERTIFICATE NUMBER:** 997517345341300 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	<input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR <input type="checkbox"/> _____ GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:						EACH OCCURRENCE	\$
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$
							MED EXP (Any one person)	\$
							PERSONAL & ADV INJURY	\$
							GENERAL AGGREGATE	\$
							PRODUCTS - COMP/OP AGG	\$
								\$
	<input type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY <input type="checkbox"/> _____						COMBINED SINGLE LIMIT (Ea accident)	\$
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE	\$
							AGGREGATE	\$
								\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		UB-2L697769-18	12/30/2018	12/30/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER	
							E.L. EACH ACCIDENT	\$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	\$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER FXB, INC DBA FXB ENGINEERING 5 CHRISTY DRIVE SUITE 307 CHADDS FORD, PA 19317	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE <i>Mary Kuckelmann</i>
--	---



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
09/01/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER State Farm Bryan Frey- Agent 3553 Rhoads Ave Newtown Sq, PA 19073		CONTACT NAME: Bryan Frey PHONE (A/C, No, Ext): 610-356-9795 FAX (A/C, No): 610-356-9819 E-MAIL ADDRESS: bryan@insurance4delco.com		
INSURED FXB Inc. 5 Christy Dr Ste 309 Chadds Ford, PA 19317		INSURER(S) AFFORDING COVERAGE		NAIC #
		INSURER A : State Farm Fire and Casualty Company		25143
		INSURER B : State Farm Mutual Automobile Insurance Company		25178
		INSURER C :		
		INSURER D :		
		INSURER E :		
		INSURER F :		

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR			98-BV-R901-3	09/01/2019	09/01/2020	EACH OCCURRENCE \$ 2,000,000
			DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000				
			MED EXP (Any one person) \$ 10,000				
			PERSONAL & ADV INJURY \$ 2,000,000				
	GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:					GENERAL AGGREGATE \$ 4,000,000	
						PRODUCTS - COMPIOP AGG \$ 2,000,000	
							\$
B	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			38-6729K36	09/01/2019	03/01/2020	COMBINED SINGLE LIMIT (Ea accident) \$
			BODILY INJURY (Per person) \$ 1,000,000				
			BODILY INJURY (Per accident) \$ 1,000,000				
			PROPERTY DAMAGE (Per accident) \$ 1,000,000				
						\$	
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$			98-BV-S384-7	09/01/2019	09/01/2020	EACH OCCURRENCE \$ 5,000,000
			AGGREGATE \$				
			\$				
			PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/>				
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. EACH ACCIDENT \$
							E.L. DISEASE - EA EMPLOYEE \$
							E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2015 ACORD CORPORATION. All rights reserved.



THE GOVERNMENT OF THE VIRGIN ISLANDS
DEPARTMENT OF LICENSING AND CONSUMER AFFAIRS
PROFESSIONAL LICENSE

KNOW ALL BY THIS PRESENT

That, in accordance with the applicable provisions of Title 3 Chapter 16 and Title 27 V.I.C. relating to the licensing of businesses and occupations, and compliance having been made with the provisions of 10 V.I.C. Sec. 41 relating to the Civil Rights Act of the Virgin Islands, the following license is hereby granted.

Licensee: FXB, INC	
Trade Name: FXB, INC.	
Mailing Address	Physical Address
5 CHRISTY DRIVE, SUITE 307 CHADDS FORD PA 19317	1 HIBISCUS ALLEY CHARLOTTE AMALIE ST. THOMAS VI 00802
Business No: 24195	License No: 1-24195-1B
Types of License(s) Engineer	

As provided by law, the authorized licensing authority shall have the power to revoke or suspend any License issued hereunder, upon finding, after notice and adequate hearing, that such revocation or suspension is in the public interest; provided, that any persons aggrieved by any such decision of this office shall be entitled to a review of the same by the Territorial Court upon appeal made within (30) days from the date of the decision; provided, further, that all decisions of this office hereunder shall be final except upon specific findings by the Court that the same was arrived at by fraud or illegal means.

2019

If a renewal is desired, the holder is responsible for making application for same without any notice from this office. It is the responsibility of the Licensee to notify the Department in writing within (30) days, when a license is to be cancelled or placed in inactive status. Failure to do so will result in the assessment of penalties as authorized by law.

Valid from 09/01/2019 until 08/31/2020
Printed on 08/09/2019
Issued at St. Thomas, V.I.
Fee 130.00

Richard Gugelista

Commissioner Nominee, Department of Licensing and Consumer Affairs

THIS LICENSE MUST BE PROMINENTLY DISPLAYED AT PLACE OF BUSINESS



THE GOVERNMENT OF THE VIRGIN ISLANDS
DEPARTMENT OF LICENSING AND CONSUMER AFFAIRS
PROFESSIONAL LICENSE

KNOW ALL BY THIS PRESENT

That, in accordance with the applicable provisions of Title 3 Chapter 16 and Title 27 V.I.C. relating to the licensing of businesses and occupations, and compliance having been made with the provisions of 10 V.I.C. Sec. 41 relating to the Civil Rights Act of the Virgin Islands, the following license is hereby granted.

Licensee: PETER J. BONNES	
Trade Name: PETER J. BONNES	
Mailing Address	Physical Address
5 CHRISTY DRIVE SUITE 307 CHADDS FORD PA 19317	5 CHRISTY DRIVE SUITE 307 CHADDS FORD PA 19317
Business No: 8087	License No: 0-8087-1B
Types of License(s) Engineer	

As provided by law, the authorized licensing authority shall have the power to revoke or suspend any License issued hereunder, upon finding, after notice and adequate hearing, that such revocation or suspension is in the public interest; provided, that any persons aggrieved by any such decision of this office shall be entitled to a review of the same by the Territorial Court upon appeal made within (30) days from the date of the decision; provided, further, that all decisions of this office hereunder shall be final except upon specific findings by the Court that the same was arrived at by fraud or illegal means.

2019

If a renewal is desired, the holder is responsible for making application for same without any notice from this office. It is the responsibility of the Licensee to notify the Department in writing within (30) days, when a license is to be cancelled or placed in inactive status. Failure to do so will result in the assessment of penalties as authorized by law.

Valid from 09/01/2019 until 08/31/2020
Printed on 07/26/2019
Issued at V.I.
Fee 130.00

Richard Gugelista

Commissioner Nominee, Department of Licensing and Consumer Affairs

THIS LICENSE MUST BE PROMINENTLY DISPLAYED AT PLACE OF BUSINESS