

RFQ: 22-RG0018/PH

Professional Engineering Services – Two (2) LAP Projects

441103-1-38-01 Freeport Drive Sidewalks

441107-1-38-01 Eastside Elementary Sidewalks



Dilip Mundkur, PE
dilip@besinceng.com
19108 Wood Sage Drive
Tampa Florida 33647

February 22, 2023

BES INC

TRANSPORTATION ENGINEERS
ENGINEERING • QUALITY • SOLUTIONS

TAMPA | WINTER HAVEN | TALLAHASSEE | HARTFORD

February 22, 2023

Hernando County Board of County Commissioners
Attention: Purchasing and Contracts Department
15470 Flight Path Drive
Brooksville, FL 34604

Subject:RFQ 22-RG0018/PH
Professional Engineering Services – Two (2) LAP Projects, 441103-1-38-01 Freeport Drive Sidewalks & 441107-1-38-01 Eastside Elementary Sidewalks

Dear Hernando County Board of County Commissioners:

Baslee Engineering Solutions (BES), Inc. has established a strong reputation within the civil engineering industry. We have been fortunate to work on LAP Projects with Polk, Hendry, and your County. We have also worked on sidewalk projects with FDOT Districts One, Three, and Seven over the past 19 years. **We are a certified Disadvantaged Business Enterprise (DBE), a Minority Business Enterprise (MBE), and a Small Business Enterprise (SBE).** Our project experience, knowledge, and expertise make us uniquely capable of completing this project successfully for Hernando County; the Elgin Boulevard sidewalk LAP project between Deltona Boulevard and Mariner Boulevard that we designed for Hernando County is being constructed within a mile of Freeport Drive.

Our Winter Haven office will be providing the design services for this project and is located at 225 Avenue D NW in Winter Haven, Florida. This office will be supported by our Headquarters in Tampa, Florida.

Dilip K. Mundkur, PE will serve as Project Manager and will be the primary point of contact between the County and BES. Dilip has 32 years of experience working on projects such as highway design, ITS, and traffic engineering and has served as the Engineer-of-Record for traffic studies, plans, specifications, and estimates for over a hundred transportation projects. These projects involved sidewalk, turn-lane projects, analysis and design of pavements, traffic signal systems, ATMS applications, roadway lighting, highway signing, pavement marking, intersection improvement studies, and geometric design of highways. He is a hands-on Principal of the firm, including plans and studies.

BES is FDOT Pre-Qualified in Work Types 3.1 Minor Highway Design, 3.2 Major Highway Design, 3.3 Controlled Access Highway Design, 6.1 Traffic Engineering Studies, 6.2 Traffic Signal Timing, 6.3.1 Intelligent Transportation Systems Analysis and Design, 6.3.2 Intelligent Transportation Systems Implementation, 6.3.3 Intelligent Transportation Traffic Engineering Systems Communications, 7.1 Signing and Pavement Markings, 7.2 Lighting, 7.3 Signalization, 9.3 Highway Materials Testing, 10.1 Roadway CEI, 13.5 Subarea & Corridor Planning, 13.6 Land Planning & Engineering, and 13.7 Transportation Statistics. Our subconsultant Cumbey & Fair will cover the 8.1 Control Surveying and 8.2 Design, Right of Way, Construction Surveying requirements for this contract.

Listed below will be our staff assigned to this project and their roles:

- | | | |
|----|-------------------|---|
| 1. | Dilip Mundkur, PE | Project Manager & Principal-in-Charge/President |
| 2. | KC Lim, PE | Chief Roadway Engineer |
| 3. | Robert Woods, PE | QC Engineer |
| 4. | Tom Ward, PE | Drainage Engineer |

- | | | |
|----|--------------------|----------------------------|
| 5. | Lucas Reynolds | Project Engineer |
| 6. | Zuhair Almaghrabi | Project Engineer |
| 7. | Pat McCormack, PSM | Survey/SUE (Cumbey & Fair) |

Our proposed subconsultants are:

1. Cumbey & Fair, Inc.
2. Tierra South Florida, Inc.
3. Earth Resources, Inc.

The Authorized Representatives of our firm are:

1. **Dilip K. Mundkur, PE, Project Manager**
(813) 985-7800 | Office and (813) 817-3020 | Cell
dilip@besinceng.com
2. **KC Lim, PE, Chief Roadway Engineer**
(813) 985-7800 | Office and (813) 541-4630 | Cell
kclim@besinceng.com

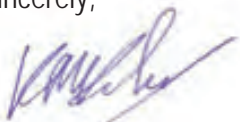
The Authorized Representatives for our subconsultants are:

1. **Pat McCormack, PSM, Survey Manager – Cumbey & Fair, Inc.**
(727) 324-1070 | Office and (813) 476-1715 | Cell
pmccormack@cumbeyfair.com
2. **Amy L. Guisinger, PE, Manager/Principal Engineer – Tierra South Florida, Inc.**
(813) 993-0093 | Office and (813) 789-3160 | Cell
aguisinger@tsfgeo.com
3. **Nancy Scott, Principal Scientist/President – Earth Resources, Inc.**
(813) 333-2971 | Office and (813) 748-6262 | Cell
nscott@earthresources.us

BES is pleased to submit this electronic copy of our Technical Proposal to Hernando County Procurement Division.

Please contact me directly if you have any questions.

Sincerely,



Dilip Mundkur, PE
President, BES, Inc.
19108 Wood Sage Drive
Tampa, Florida 33647
813-985-7800
dilip@besinceng.com



CUMBNEY & FAIR, INC.

2463 Enterprise Road, Clearwater, Florida 33763
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax www.cumbeyfair.com

February 14, 2023

Mr. Dilip Mundkur
BES Inc.
19108 Wood Sage Drive
Tampa, Florida 33647

**RE: RFQ 22-RG0018/PH
Professional Engineering Services – Two (2) LAP Projects, 441103-1-38-01
Freeport Drive Sidewalks & 441107-1-38-01 Eastside Elementary Sidewalks**

Dear Mr. Mundkur:

We appreciate the opportunity to join the BES Inc. team for the above-referenced contract for Hernando County. Please accept this letter as our commitment to provide Survey and Mapping services for this contract as outlined in the scope of work.

If selected, we will commit to BES Inc. and Hernando County the following staff for Survey and SUE services.

Pat McCormack, PSM / Survey and SUE Manager / 2463 Enterprise Road, Clearwater, FL 33763 / pmccormack@cumbeyfair.com / (727) 797-8982

Cumbey and Fair, Inc. will provide all Surveying/Mapping, and SUE services referenced in the Scope and the services. All services will be in accordance with Hernando County Policies, Standards and Procedures, as well as in compliance with the Florida Statutes and the Florida Administrative Code.

We look forward to working with you on this project. Please let me know if I may be of further assistance.

Sincerely,
Cumbey & Fair, Inc.

Pat McCormack, PSM
Vice President / Survey/SUE Manager
pmccormack@cumbeyfair.com / 727.797.8982



February 20, 2023

Mr. Dilip Mundkur
BES Inc.
19108 Wood Sage Drive
Tampa, Florida 33647

**RE: RFQ 22-RG0018/PH
Professional Engineering Services – Two (2) LAP Projects, 441103-1-38-01 Freeport Drive Sidewalks &
441107-1-38-01 Eastside Elementary Sidewalks**

Dear Mr. Mundkur:

We appreciate the opportunity to join the BES Inc team for the above-referenced contract for Hernando County. Please accept this letter as our commitment to provide Geotechnical Engineering Services for this contract as outlined in the scope of work.

If selected, we commit to BES Inc and Hernando County the following staff for Geotechnical Engineering Services:

Harmon Bennett/ Principal Engineer/ 2765 Vista Parkway, Ste. 10, West Palm Beach Florida 33417/
hbennett@tsfgeo.com/ (561) 687-8536

Amy Guisinger/ Principal Engineer/ 6011 Benjamin Rd, Ste. 106, Tampa Florida 33634/ aguisinger@tsfgeo.com/
(813) 993-0093

Below is our understanding of the Scope and the services we will provide. All services will be in accordance with Hernando County Policies, Standards and Procedures, as well as in compliance of the Florida Statutes and the Florida Administrative Code.

Geotechnical Engineering Services

We look forward to working with you on this project. Please let me know if I may be of further assistance.
Sincerely,

A handwritten signature in blue ink, appearing to read 'Raj Krishnasamy', with a long horizontal stroke extending to the left.

Raj Krishnasamy, P.E.
President



February 15, 2023

Mr. Dilip Mundkur
BES Inc.
19108 Wood Sage Drive
Tampa, Florida 33647

**RE: RFQ 22-RG0018/PH
Professional Engineering Services – Two (2) LAP Projects, 441103-1-38-01 Freeport Drive Sidewalks &
441107-1-38-01 Eastside Elementary Sidewalks**

Dear Mr. Mundkur:

We appreciate the opportunity to join the BES Inc team for the above-referenced contract for Hernando County. Please accept this letter as our commitment to provide environmental services for this contract as outlined in the scope of work.

If selected, we commit to BES Inc and Hernando County the following staff for environmental services:

Nancy Scott/President
Melisa Reiter/Senior Scientist
Michelle Rutishauser/ Senior Scientist
3411 W. Dorchester Street
Tampa, FL 33611
(813) 333-2971

Below is our understanding of the Scope and the services we will provide. All services will be in accordance with Hernando County Policies, Standards and Procedures, as well as in compliance of the Florida Statutes and the Florida Administrative Code.

- Environmental assessments, investigations, permit acquisition, reports, and other environmental services as required.
- SWFWMD (Southwest Florida Water Management District) Permit Application Packages (Notice of General permit or Exemption Verification)

We look forward to working with you on this project. Please let me know if I may be of further assistance.
Sincerely,

A handwritten signature in blue ink that reads "Nancy Scott". The signature is written in a cursive, flowing style.

Nancy Scott
President

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SECTION C: PROJECT UNDERSTANDING

SCOPE

The intent of these Hernando County projects is to design sidewalks connecting local streets to schools. FPN 441103-1-38-01 (Freeport Drive Sidewalks) involves the design of a six (6)-foot-wide walking path for students of Fox Chapel Middle School along Freeport Drive, Fox Chapel Lane, and Moongate Road. FPN 441107-1-38-01 (Eastside Elementary Sidewalks) involves the design of a five (5)-foot-wide sidewalk for students of Eastside Elementary School along Raley Road, Dakota Drive, and Boxwood Street. This is a Local Agency Program (LAP) and is federally funded. The project's tasks typically include the following:

- Agency Meetings
- Field Reviews
- Survey & Mapping
- Sidewalk Plan & Profile Plans
- Cross Section Plan Sheets
- Utility Adjustment Sheets
- Signing & Pavement Marking Sheets
- LAP Specification Package
- Cost Estimates
- ERC Responses
- Scheduling
- Utility Coordination
- Environmental Assessments
- SWFWMD Permitting
- Post Design Services

SCHEDULE

Immediately following contract execution, **BES** will schedule a meeting between the County Project Manager and our Project Manager to lay out a production schedule and ensure that our efforts meet the County's required Final Plans submittal date. We anticipate the Notice to Proceed from the County in May 22, 2023. Our surveyor will gather topography and R/W information within the first ten weeks and deliver data by July 31, 2023. We will initiate design using aerials and obtain initial markups (greenlines from utilities) during this period. A concept layout of sidewalk improvements will be presented to the County by June 19, 2023. Once we obtain concurrence, we will proceed to submit the 60% plans by August 21, 2023. Typically, the County reviews the plans for 20 days and then the Consultant is given 10 days for responses to the comments. Following the acceptance of responses, subsurface utility engineering (SUE) data will be obtained where drainage structures are proposed. Utility conflicts will then be resolved and adjustments designed as needed. The sidewalk design will be completed along with drainage designs by October 30, 2023 (90% submittal), along with preliminary Specifications and Utility Work Schedules. 100% (Final) Plans will be submitted by December 18, 2023.

- Board Approval & Award May 16, 2023
- Notice to Proceed May 22, 2023
- 60% Plans Submittal August 21, 2023
- 90% Submittal October 30, 2023
- 100% Plans (Final) Submittal December 18, 2023

DELIVERABLES

BES will provide the County with 60%, 100%, Final Plans, and the LAP Specifications package. All submittals will include a comprehensive Engineer's Estimate for submittal to FDOT. The plans will be submitted using the latest version of AutoCAD and in PDF format.

SECTION C: PROJECT UNDERSTANDING

CRITERIA

We will be designing the project with the criteria found in the latest editions of the following documents:

- Florida Greenbook
- FDOT Florida Design Manual
- FDOT Standard Plans
- FDOT Drainage Manual

Per the 2018 Florida Greenbook Chapter 8, Section C.2.a, the sidewalk should be placed as far from the roadway as practical following the sequence of desirability.

- As near the right-of-way line as possible (ideally 3 feet of width behind the sidewalk for utilities).
- Outside of the clear zone.
- Offset from the curb to allow for placement of signs.
- 5 feet from the shoulder point of flush roadways.
- At the grass shoulder point of flush roadways.

On a recent project with Hernando County on Elgin Boulevard, we placed the sidewalk 2 feet from the right-of-way line with the County's concurrence.

EXISTING CONDITIONS

All roads where sidewalks are proposed are two-lane local roads or collectors where drainage flows across the road onto roadside swales. Ditch bottom inlets exist at some locations. Residential driveways slope downward toward the roads. Sidestreets intersect these roadways. Trees and shrubs are present along some shoulders.



Figure 1: Looking South Freepoint Drive



Figure 2: Looking South Raley Drive

SIDEWALK PLACEMENT

The sidewalk will be placed at a minimum of 2 feet from the right-of-way line; however, there will be locations where the sidewalk may have to be shifted closer to the roadway to avoid aboveground utilities and to cross residential driveways in order to meet ADA criteria. The sidewalk will need to be transitioned closer to the roadway at each side street intersection in order to provide a crosswalk in front of the stop bar. Having the crosswalk in front of the stop bar increases safety for the pedestrians because it makes them more visible to vehicles turning into and out of the side street. We do not anticipate relocating any of the mailboxes on any roadway. A determination will need to be made during the design phase related to the

SECTION C: PROJECT UNDERSTANDING

thickness of the concrete sidewalk. Based on our observations there is clear evidence of vehicles parking along the roadway where the new sidewalk would be constructed at some locations. If standard 4-inch-thick sidewalk were constructed in those areas, it would become an area of continuous maintenance for the County. We recommend in those areas that 6-inch-thick sidewalk be constructed. The thicker sidewalk reduces the cracking and damage should a vehicle drive or park on it.

Based on our site visits, we recommend placement as follows:

Freeport Drive Sidewalks (6-foot-wide concrete sidewalk):

- Freeport Drive – West side (fewer driveways/steep slopes/mailboxes)
- Fox Chapel Lane – South side (fewer driveways; adjacent to school)
- Moongate Road – North side (fewer driveways; adjacent to school)

Eastside Elementary Sidewalks (5-foot-wide concrete sidewalk):

- Raley Road – East side (fewer driveways/steep slopes/mailboxes)
- Dakota Drive – East side (fewer driveways/steep slopes/mailboxes)
- Boxwood Street – East side (fewer driveways/steep slopes/mailboxes)

DRAINAGE

Existing drainage patterns will remain for the proposed drainage design. Damaged existing drainage structures to remain will be repaired or replaced. Existing drainage structures include side drains, mitered end sections (MESs), and ditch bottom inlets (DBIs). Side slope failures along swales can be addressed by removing the sediment, reshaping the side slope, and the installing permanent erosion protection measures such as geotextile matting or concrete ditch pavement. Floodplain and wetland impacts are not anticipated. If necessary, dry upland areas along swales can be excavated to floodplain compensation and wetland mitigation. It is anticipated that water quality treatment and attenuation will not be required since no additional pollution sources such as travels will be part of this proposed project. Sidewalk design profiles and alignment will consider existing drainage, utilities, trees, and side street connections. The profile will be set to allow offsite runoff to sheet over the sidewalk in an effort to preserve existing drainage patterns. Offsite drainage connections will be preserved by sidewalk flumes or side drainpipes with MESs for safety.



Figure 3: Drainage Inlet at Dakota Drive/Wakefield Drive NE Quadrant



Figure 4: Drainage Inlet at Freeport Drive/Elkin Ave SE Quadrant

SECTION C: PROJECT UNDERSTANDING

ENVIRONMENTAL PERMITTING

It is anticipated that this project will qualify for a Southwest Florida Water Management District (SWFWMD) Environmental Resource Permit (ERP) EXEMPTION. BES will coordinate with Hernando County to schedule a SWFWMD Pre-Application Meeting to identify all permit requirements.

UTILITY COORDINATION

BES will be providing Utility coordination. Utility coordination with the Utility Agency/Owners (UAOs) typically begins during the preliminary engineering phase of a project (as-built request). **BES** will work to identify potential conflicts and develop solutions to mitigate or eliminate impacts to Utility Owners. As a result of many years of experience providing utility coordination services for the Department of Transportation (FDOT) and local municipalities (Hillsborough, Pinellas, Pasco), our team has established an excellent working relationship with the UAOs located within Hernando County's service area. Our staff is experienced and knowledgeable regarding the required documentation related to UAOs with compensable interests and has developed a clear, open line of communication and mutual professional respect. We are well versed in FDOT utility coordination policies, procedures and preferences.

The following Utility Agency Owners (UAOs) have been identified within the project corridor Freeport Drive from Deltona Boulevard to Northcliffe Boulevard:

1. A T & T/Distribution
2. Charter Communications
3. Duke Energy
4. Hernando County Utilities
5. Hernando County Utilities - Sewer
6. Withlacoochee River Electric Cooperative
7. Zayo Group

The following Utility Agency Owners (UAOs) have been identified within the project corridor Raley Road from US98/SR50/Cortez Boulevard to Roper Road:

1. A T & T/Distribution
2. Charter Communications
3. Hernando County Utilities
4. Hernando County Utilities - Sewer
5. Withlacoochee River Electric Cooperative

SUBSURFACE UTILITY ENGINEERING (SUE)

Cumbey & Fair, Inc. will provide Subsurface Utility Engineering (SUE) for this project. Subsurface utility designations (paint on the ground) will be surveyed when the topographic survey is collected. Then during the design phase, test holes will be performed verifying the vertical and horizontal locations at conflict points between underground construction (drainage construction) and existing utility facilities. **BES** will work to minimize utility conflicts. If there are unavoidable conflicts, Utility Work Schedules (UWS) will be prepared defining the affected utilities' responsibilities during the construction phase.

SECTION C: PROJECT UNDERSTANDING

SURVEY & MAPPING

Cumbey & Fair, Inc. will complete the design survey of all roads using traditional survey techniques. They will first establish a horizontal and vertical control network for the project referenced to state plane coordinate system and on NAVD 1988. They will then use total stations and data collectors to collect the topographic information. In order to determine the location of the existing right of way along different corridors and intersecting side streets' right of way, monuments will be located as the design survey proceeds. They will work with **BES** to obtain utility as-built information, then designate/flag the subsurface utilities in the field utilizing electronic detecting equipment and ground-penetrating radar. Soft dig locations of the buried utilities will be performed at the direction of the **BES** engineer as the design progresses.

GEOTECHNICAL ENGINEERING

Tierra South Florida, Inc. will complete any necessary geotechnical engineering.

COUNTY COORDINATION

BES will coordinate work activities with any ongoing and/or planned Hernando County projects that may affect this project. **BES** will also coordinate with Hernando County and other local government entities to ensure that all proposed improvements are compatible with other local improvements and right-of-way activities including, but not limited to, County Maintenance of public rights-of-way. Our Project Manager will coordinate with Hernando County's Project Manager all activities with other agencies or entities prior to holding these activities.

With the technology available today, distance or location of our office to government and permitting agencies is not a constraint. We have file transfer websites that allow large documents to be transferred. We also use TEAMS communicate with field personnel.

FDOT COORDINATION

Our staff members have taken all the LAP trainings offered by the FDOT, and we are well versed in the requirements to successfully complete the LAP Construction Checklist and provide Design and Post Design Services. The Construction Checklist is a requirement by FDOT to ensure that all FHWA and State rules and regulations are followed. The checklist defines the required documents and/or information needed for the project, the Local Agency responsibilities, the District responsibilities, and where each requirement can be found. We will create the required LAP Construction Checklist.

We will coordinate with FDOT regarding the ERC reviews that will be performed and directly communicate with reviewers if the County Project Manager approves. It's been our experience that directly coordinating with the reviewer is the best way to resolve comments.

SECTION D: PROJECT TEAM

KEY STAFF—PRIMARY TEAM MEMBERS



DILIP K. MUNDKUR, PE, PROJECT MANAGER, PRINCIPAL-IN-CHARGE – Dilip has 32 years of experience working on projects such as highway design, ITS, and traffic engineering. He has served as the Engineer-of-Record for traffic studies, plans, specifications, and estimates for over a hundred transportation projects. These projects involved sidewalk, turn-lane projects, analysis and design of pavements, traffic signal systems, ATMS applications, roadway lighting, highway signing, pavement marking, intersection improvement studies, and geometric design of highways. He is a hands-on Principal of the firm, including plans and studies.



KC LIM, PE, CHIEF ROADWAY ENGINEER – KC has 34 years of highway engineering consulting experience in Florida. He is experienced in providing post-design services/construction assistance, including reviewing shop drawings for compliance with design plans, preparing construction observation reports, certifying record plans, and providing swift and complete responses to requested information. KC has experience organizing the development of technical proposals and oral presentations. He has been the engineer of record and project manager on numerous transportation construction plans.



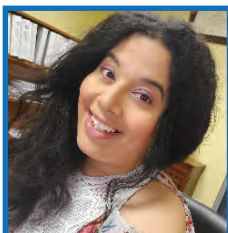
ROBERT WOODS, PE, QC ENGINEER – Robert has 36 years of experience, with a strong background in all aspects of highway design, including roadway, signing and marking, and traffic control plans. He was one of the lead engineers on the two largest infrastructure projects ever built in Florida: the I-595 PPP project in Fort Lauderdale and the I-4 Ultimate PPP project in Orlando. He has extensive experience in every FDOT District including Florida's Turnpike.



THOMAS WARD, PE, DRAINAGE AND PERMITTING ENGINEER – Tom has 47 years of experience in the consulting engineering industry with more than 35 years of FDOT drainage design experience. He has been responsible for numerous roadway drainage design projects. He provides concise and comprehensive direction to staff with guidance and mentoring on the design of stormwater management systems, bridge hydraulics reports and scour evaluations, cross drains, floodplain analysis, and storm drain systems. Tom has obtained surface water permits from every water management district in the State of Florida, as well as local, state, and federal governing agencies for major and minor roadways.



LUCAS W. REYNOLDS, PROJECT ENGINEER – Lucas has 8 years of experience. He is a CADD technician supporting BES Inc's engineering design staff, and is currently responsible for plans production for engineering design projects. He is well-versed in plans production for minor and major improvement projects for municipal clients.



ZUHAIR ALMAGRABI, PROJECT ENGINEER – Zuhair has 6 years of experience in transportation and traffic engineering, transportation planning, GIS, transportation safety, statistics, PD&E studies, and travel demand modeling. She worked in FDOT District Five as a Roadway Designer and has prior experience as a Transportation Engineer.

SECTION D: PROJECT TEAM



PAT MCCORMACK, PSM, SURVEY & SUE (CUMBNEY & FAIR) – Pat has 27 years of diversified Survey and Mapping experience. His Land Surveying and Mapping experience includes Boundary Surveys, Topographic Surveys, Subsurface Utility Engineering, Right of Way Maps, Control Surveys, Wetland Jurisdictional Surveys, Construction Layout, and Route Surveys. Pat presently serves as Vice President and Senior Survey Manager for Cumbey & Fair. In this capacity, he develops and negotiates scope of services, establishes and maintains project budgets, and generates schedules and quality assurance procedures. As Senior Survey Manager he is responsible for the management and oversight of all of Cumbey & Fair's Survey and SUE-related projects and staff.

ADDITIONAL BES STAFF – BES has additional engineers and designers to assist should the need arise to accelerate the schedule. **Charles Chiappone, PE as Constructability Reviewer** has been involved in the design of roadway projects for over 25 years. His experience includes engineering of minor to major roadway projects that encompass a range of multi-disciplined tasks. He has a solid background in the design of rural and urban roadways, including horizontal and vertical geometry, superelevation calculations, pavement design, signing and marking plans, quantities computations, cost estimates, and utility coordination. **Douglas Buchanan as Senior Designer** and **Edwin Diaz as Designer** will support the primary team members. **Douglas** has 41 years of experience and has been responsible for keeping design staff current with up-to-date practices of the FDOT. He has implemented inter-office training by internet-based seminars, presenting the most current Electronic Standards and GeoPak design software. **Edwin** has 24 years of CADD experience working on bridge, rail, and roadway. **Edwin** has drafted plans preparations under MicroStation and AutoCAD for the New Jersey Department of Transportation and the New Jersey Turnpike Authority, among other entities including Metropolitan Transportation Authority and New York City Transit. **Julie Decker as Documents/Utility Coordinator** will support the team as necessary. She has 18 years of experience coordinating with various government agencies and meeting clients' and teaming partners' needs in an efficient and timely manner. She also acts as a liaison between engineers, field personnel, and governmental agencies. **Julie** has provided utility coordination for FDOT projects in Districts One, Five, and Seven, and for County projects in Hernando and Polk Counties.

OUR SUBCONSULTANTS

CUMBNEY & FAIR, INC. – Cumbey & Fair is a full-service land survey firm providing survey services for this project. They have been a leader in land surveying throughout Florida for over 31 years. They provide large acreage surveys, as-built surveys, roadway design surveys for interstate interchanges and major bridge replacements, aerial control, and horizontal and vertical control. They own their GPS equipment, and employ staff that is both highly trained and experienced in the use of GPS. They are able to produce survey drawings as well as digital files in numerous formats. **Pat McCormack, PSM**, listed above, is part of the primary team for this project.

TIERRA SOUTH FLORIDA, INC. – Tierra South Florida (TSFGeo) will provide geotechnical engineering as needed for this project. They provide an extended range of geotechnical engineering services. They use their expertise to define the construction and long-term performance risks associated with subsurface conditions. TSFGeo is able to evaluate and develop recommendations for both existing structures and new construction. TSFGeo owns a large, diverse fleet of 8 drill rigs with automatic hammers (truck-mounted, track-mounted, rotary, tripod, ATV, barge) capable of drilling in challenging conditions including remote, soft, marshy, over-water, difficult access, or environmentally sensitive areas. TSFGeo's geotechnical services include laboratory testing and analysis, pavement evaluations and design, subsurface exploration, deep and shallow foundation analysis and design, site preparation recommendations, slope stability analysis, soil reinforcement, corridor studies, expert witness testimony, sinkhole studies, value engineering, and unknown foundation studies. **Amy Guisinger, PE** will lead the geotechnical efforts for this project, supported by **Harmon Bennett, PE**.

SECTION D: PROJECT TEAM

EARTH RESOURCES, INC. – Earth Resources will be providing environmental assessments, investigations, permit acquisition, reports, and other environmental services as required for this project. They will also handle the SWFWMD (Southwest Florida Water Management District) Permit Application Packages (Notice of General Permit or Exemption Verification). These efforts will be led by **Melisa Reiter, PWS, Senior Scientist** with more than 30 years of experience in marine, terrestrial, vegetative, and aquatic ecology. Her specialized expertise includes regulatory permitting, marine studies, habitat assessment and evaluation, water quality studies, seagrass mapping, aerial photointerpretation, land use mapping, ecological assessments, threatened and endangered species studies, and wetland mitigation design and monitoring. Her regulatory experience includes marine-related projects for docks and large-scale marinas, seagrass assessment, and coral reef monitoring. Her state and federal regulatory permitting experience includes roadway and pipeline corridors, large-scale subdivision permitting, and project development and environment (PD&E) and habitat restoration studies. Components of these projects involve field sampling, agency coordination, and permit package/application preparation. Also available to support these efforts are **Principal Scientist Nancy Scott** (29 years of experience) and **Senior Scientist Michelle Rutishauser** (19 years of experience).

EXPERIENCE ON PROJECTS AS A TEAM

Our team has successfully delivered the following LAP projects related to sidewalks within the last twelve months:

1. **Harlem Community Sidewalks (Hendry County):** We analyzed driveways between sidewalk construction limits and ensured an ADA-compliant path was attained by routing the sidewalk toward the roadway at driveways.
2. **Crystal Lake Elementary Sidewalks (Polk County):** We coordinated the County's concurrent design of drainage improvements with our sidewalk design to ensure redundant drainage structures were eliminated.
3. **Elgin Boulevard Sidewalk (Hernando County):** We reviewed a proposed gravity wall with SUE data and concluded that a 12" HCUD Watermain need not be relocated as there was enough cover above the WM and bottom of wall. This saved significant redesign costs as originally the WM was to be relocated.

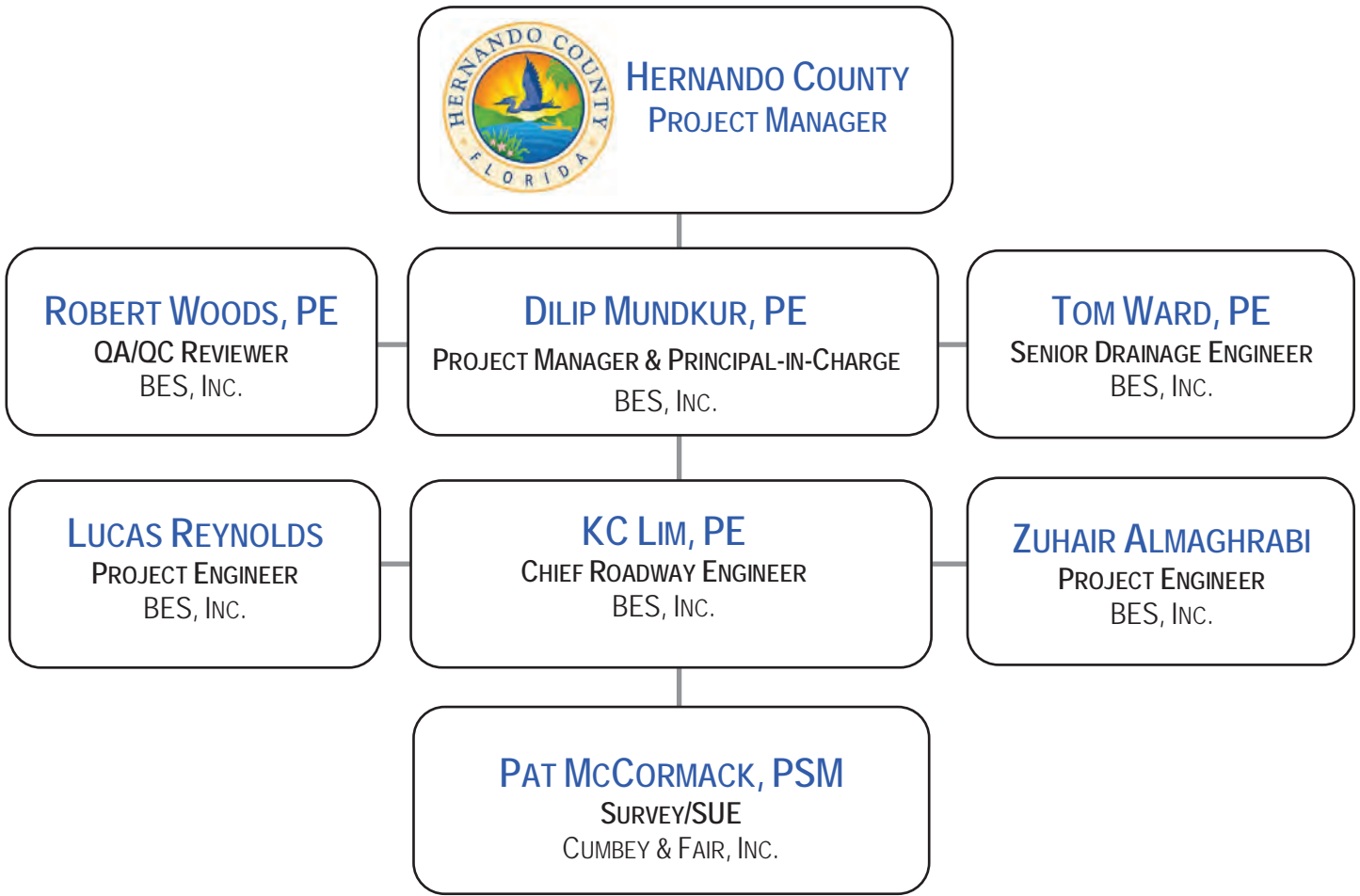
Additional details related to these projects are provided in Section E – Past Experience.

KEY STAFF INVOLVEMENT IN PROJECT MANAGEMENT & ON-SITE PRESENCE

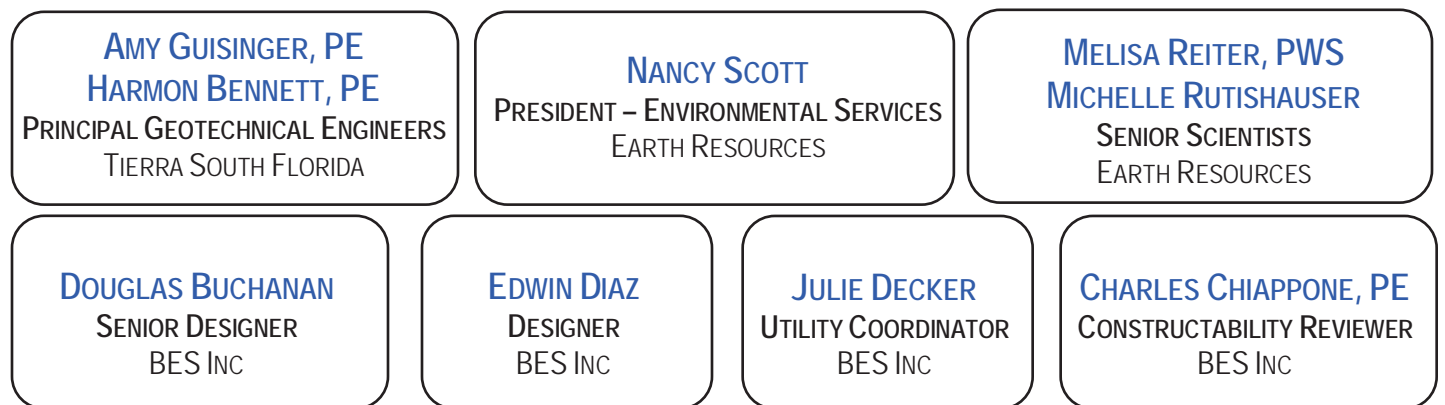
Dilip Mundkur and his team are deeply involved in any project undertaken by the firm; we will continue that tradition with this project. KC Lim will be available as a backup if necessary to address any needs that the County may have should Dilip be unavailable. Both Dilip and KC bring many years of experience in roadway/sidewalk design and have addressed constructability challenges very efficiently, knowing limited budgets and tight schedules on these LAP projects demand very quick resolution.

SECTION D: PROJECT TEAM

ORGANIZATIONAL CHART



SUPPORTING TEAM MEMBERS



Note: BES, Inc. is an FDOT-certified Small Business Enterprise and Disadvantaged/Business Enterprise. Subconsultants' Status: Cumbey & Fair is SBE; TSFGeo is DBE; Earth Resources is DBE & SBE.

SECTION D: PROJECT TEAM

WORKLOAD

Current Projects				
Project Location Description	Agency	Role	Status	Est. Completion
I-4/Thonotosassa Operational Improvements	FDOT D7	Roadway/Traffic Design	90%	September 2023
Turnpike widening (MM 242- 249)	FDOT Tpk.	Traffic Design	90%	November 2023
SR 40 (CR 314 to CR 314A) Plans Update	FDOT D5	Traffic Design	90%	December 2023
Henry Lane Improvements	Pinellas Co.	Roadway Design	60%	May 2023

Upcoming Projects				
Project Location Description	Agency	Role	Status	Est. Start
SR 369 Resurfacing	FDOT D3	Traffic Design	30%	May 2023
FDOT D5 Landscaping Contract (Task Orders)	FDOT D5	TTCP Design	30%	March 2023

OUR COMMITMENT

Ensuring a **Timely Completion** of every project is our primary focus. A schedule will be developed immediately upon the LAP Agreement Execution to ensure the completion of each phase submittal and final deliverables. The requirements for each deliverable are clearly defined in the scope of services and the defined schedule is achievable.

Ensuring the County is satisfied with the progression of schedules, Dilip K. Mundkur, our Project Manager, will be the City's single point of contact. Projects typically present some unforeseen design challenges after the project enters the design phase. If design challenges do arise, it is Dilip's job to provide the County's Project Manager clear information concerning the challenge and provide alternative solutions and recommendations to remedy the problem.

Dilip may request an internal peer review or a constructability review to evaluate design options. It will be Dilip's job to make sure the design mitigates the schedule change. Good communication skills are mandatory and he has demonstrated success in keeping local government and FDOT projects on schedule.

We will attend and participate in the LAP project kickoff meetings, providing LAP process guidance to the local agency. Additionally, we will guide Hernando County through the LAP project development process and explain requirements that make changes to their standard project development process and bid package template necessary.



CREDENTIALS

Professional Engineer, FL – 49031
Certified IMSA Signal Inspector
MBA, University of South Florida, 2002
ME, University of Florida, 1993
BE (Hons.), BITS, Pilani, India, 1989

AFFILIATIONS

AASHTO Representative on PIARC
Technical Committee TC 2.2
Improved Mobility in Urban Areas
ITE, FES Member
FES, Tampa Chapter
Officer 2006-2010
Scholarship and MATHCOUNTS
Committee Co-Chairman, 1996-1997
CPM – Level II
Competent Toastmaster (CTM)

CERTIFICATIONS

FDOT Temporary Traffic Control
Advanced Refresher Course (2018)
Asphalt Paving Technician Level 1 & 2
(2018)
Final Estimates Level 1 & 2 (2018)
QC Manager (2018)
FDOT Specifications Update 2011
FHWA Road Safety Audit 2009
FHWA Intersection Safety 2006
FHWA Signalized Intersections 2006
Stormwater Management 2005
Guardrail for Designer, 2005
FDOT Specifications Training 2004
FDOT Electronic Review Comments
2004
Horizontal Clearance, 2004

PROFESSIONAL BACKGROUND

- 32 Years in Transportation Engineering (19 years with BES)
- Pavement Design, Traffic Analysis, Design and Construction Experience
- Experienced in Production of Roadway, Signalization, Signing and Pavement Marking (SAPM), ITS and Lighting Plans
- Engineer-of-Record for Roadway, Traffic Studies, Signals, SAPM, and Lighting Projects

Dilip has a strong background in highway design, ITS, and traffic engineering. He has served as the engineer-of-record for traffic studies, plans, specifications and estimates for over a hundred transportation projects. These projects involved the turn-lane projects, sidewalk construction, analysis and design of pavements, traffic signal systems, ATMS applications, roadway lighting, highway signing, pavement marking, intersection improvement studies, and geometric design of highways. As Project Director, Dilip is responsible for the quality, schedule, and budget of all BES projects. A hands-on Principal of the firm, he leads his staff in the production of contract documents, including plans and studies. Some of those projects are listed below.

Elgin Boulevard Sidewalk from Deltona Boulevard to Mariner Boulevard – Hernando County: This is a LAP project that includes the design activities of a sidewalk along Elgin Boulevard from Deltona Boulevard to Mariner Boulevard. The project consists of designing approximately 2.5 miles of sidewalk on the south side of Elgin Boulevard from Deltona Boulevard to Mariner Boulevard. Dilip was the Principal-in-Charge.

Crystal Lake Sidewalks at Various Locations – Polk County: Dilip was Principal-in-Charge for this project which placed sidewalk on four roadways around Crystal Lake Elementary and providing connection to the school. The sidewalk traverses multiple driveways and requires some to be reconstructed. Extensive coordination with property owners is required to place the sidewalk along the right-of-way because of existing encroachments. The project also included constructing two mid-block crossings with RRFBs and close coordination with Lakeland Electric for placement of joint use street lighting along the sidewalk and at the mid-block crossings.

Harlem Community Sidewalks LAP – Hendry County: This is a LAP-funded 5-foot sidewalk on the south side of Florida Avenue and Carolina Avenue, including a mid-block crossing at 7th, 10th, and 11th Street. Beyond sidewalk construction, this project involved signing and pavement markings, drainage improvements, geotechnical investigations, and utility coordination. The sidewalk was being placed at the right-of-way line and required some driveway modifications and drainage upgrades. Dilip was the Principal-in-Charge.

Archer Road Trail – Alachua County, FDOT District Two: BES provided roadway analysis, roadway plans, drainage analysis, drainage plans, utility coordination, environmental permitting, signing and pavement marking analysis/plans, and signalization analysis for a multi-use trail along Archer Road

from SW 75th Terrace to SW 41st Boulevard. The SR 24 Multi-Use Path was to function as a 2.41-mile bi-directional shared use path (SUP) consisting of a 10' wide asphalt pavement with 1'- wide unpaved shoulders that meets ADA criteria. The SUP was planned to cross three (3) signalized intersections, six (6) paved side streets, seven (7) paved driveways, fifteen (15) unpaved driveways, and a recently constructed Dollar General sidewalk. This SUP was designed within the Gainesville Regional Utility (GRU) easement that parallels SR 24. BES maintained communication with the three major stakeholders (FDOT, Alachua County, and GRU) and resolved conflicting comments. Dilip was the Project Manager.

US 41 from Riverview Drive to Denver Street – FDOT District Seven: Dilip was the Project Manager for this 5-mile milling and resurfacing project. BES provided the pavement design, Traffic Control Plans, lighting design, and signal design. Concrete pavement will be constructed at two signalized intersections (US 41/Pendola Point Rd. and US41/Port Sutton Rd.) near the Port of Tampa. Significant detours and lane shifts were associated with the intersection reconstruction. LED street lighting will be provided from Riverview Drive to Denver Street. Crosswalk lighting was upgraded to 2016 FDOT Standards. The signal at Gibsonton was reconstructed.

Orlando Sidewalk Cost Estimate: This project consisted of providing a construction cost estimate for the proposed Downtown Connector Trail for the City of Orlando. The cost estimate was necessary to ascertain the level of funding needed to deliver the project. A field review was conducted to determine where the trail will be placed and what the impacts will be on landscaping, utilities, drainage, lighting, etc. Dilip was the Engineer-of-Record for the Cost Estimate.

DW Landscape Architecture Design – FDOT District Seven: BES Inc is developing Maintenance of Traffic Plans for landscaping activities authorized to Kimley-Horn and Associates by District Seven. Four task orders have been issued that involve landscaping along interstate roadways, stormwater facilities, and other arterials. Dilip is assisting with plans development on these task orders.

SR 87 at CR 191, Santa Rosa County, FL – FDOT District Three: Due to a large number of turning vehicles, BES Inc. is designing a northbound right-turn lane at this urban intersection. Coordination with the City of Milton, a gas station/convenience store, and Milton High School are key public involvement items along with obtaining right-of-way and clearing utilities in time for letting. Dilip serves as the Engineer-of-Record for the Roadway and SAPM plans.

SR 189 at 14th Street, Okaloosa County, FL – FDOT District Three: The presence of Baker School that generated turning movements on a two-lane rural facility prompted the Department to add a northbound right-turn lane and a southbound left-turn lane at this intersection. On BES Inc recommendation and observation regarding lane transition lengths and tie-in to available pavement upstream, another left-turn lane is being designed at 15th Street for the use of school buses. Dilip serves as the Engineer-of-Record for the Roadway and SAPM plans.

SR 583 from South of East 23rd Avenue to South of Fowler Avenue, Hillsborough County, FL – FDOT District Seven: Maintenance of Traffic Plans were designed for this 6-mile project. Sidewalk was constructed to facilitate pedestrians. The bridge railing over Hillsborough River was retrofitted in some sections. The presence of a transit hub, a high school, and a downtown city area required the MOT plans to address multimodal users and their safety during construction. Dilip was the EOR for the Traffic Control Plan.

SR 590 – Old Coachman Road Improvements, Pinellas County, FL – FDOT District Seven: BES performed an intersection evaluation study that analyzed crash data and turning volumes and determined the need for turn lanes. This was followed by a feasibility study to determine if intersection improvements could be constructed without impacting an adjacent flood plain and project schedule. Roadway improvements were designed and involved the addition of 4' paved shoulders, upgrading existing guardrail, installing a closed drainage system, and replacing a signal. Coordination with Pinellas County, the City of Clearwater, CSX Rail, and the FDOT was critical since a railroad track bisected the intersection diagonally. All roadway and traffic engineering was executed by BES as a prime consultant. Since the signals were placed within RR Right-of-Way, permits were obtained from the RR owner. At the proposed foundations, subsurface utility exploration was performed to ensure no utilities conflicted with the structure. The project incorporated water main relocation plans as part of a UWHCA (Utility Work by Highway Contractor Agreement) between FDOT and the City of Clearwater. Dilip served as the Engineer-of-Record for the Roadway, SAPM and signal plans.



CREDENTIALS

Professional Engineer, FL – 45297
ME, University of Florida, 1988
BSCE (Honors), University of Florida,
1987

AFFILIATIONS

FES Member

CERTIFICATIONS

FDOT Advanced Temporary Traffic
Control Certification
FICE/FDOT Project Management
FDOT Specifications Package Prep
Certified Envision Sustainability
Professional

PROFESSIONAL BACKGROUND

- 34 Years in Transportation Engineering
- Familiar with local municipality, FDOT, & AASHTO design standards & preferences
- Former GEC Reviewer and Scoping Engineer at FDOT District Seven
- Designed and managed roadway facilities ranging from collectors to interstate highways and urban freeways. Proposed improvements ranged from resurfacing, restoration and rehabilitation (RRR) to reconstruction to expand capacity and enhance roadway network.

Mr. Lim has 34 years of highway engineering consulting experience in Florida. He spent the first dozen years of his career as a design and plans production engineer where he acquired extensive production skills in roadway design using engineering design and CADD software. He then spent four years as a General Engineering Consultant (GEC) in Florida Department of Transportation (FDOT), District Seven (D7), performing scope development, negotiation, and plans review of highway design projects. He developed and updated FDOT Proposed Project Reports (PPR), Long Range Estimates (LRE), and subsequent Engineer's Estimates during design phases.

Mr. Lim is experienced in providing post-design services/construction assistance, which includes reviewing shop drawings for compliance with design plans, preparing construction observation reports, certifying record plans, and providing swift and complete responses to requested information. Mr. Lim has experience organizing the development of technical proposals and oral presentations. He has been the engineer of record (EOR) and project manager (PM) on numerous transportation construction plans.

HIGHWAY DESIGN PROJECTS

- I-4 (Segments 3A and 3B) from Tampa Downtown Interchange to East of Columbus Drive/50th St. Interchange, FDOT District Seven, Tampa, Hillsborough County, Florida: Served as project engineer for the design of this 3.5-mile section of urban freeway facility.
- SR 55/US 19 from Cardinal St. to Green Acres St., FDOT District Seven, Homosassa Springs, Citrus County, Florida: Project Engineer to widen two miles of the existing four-lane high-speed arterial to six lanes.
- SR 55/US 19 from Green Acres St. to Jump Ct., FDOT District Seven, Homosassa Springs, Citrus County, Florida: Project Engineer.
- Hanley Road Project (CIP 61153) Hillsborough Ave. to Fountain Ave., Tampa, Hillsborough County, Florida: EOR for this multimodal and safety project that reconfigured the existing four-lane roadway to accommodate bicycles (Sharrows) and pedestrian traffic.
- I-275 Widening at Fowler Ave. Interchange, FDOT District Seven, Tampa, Hillsborough County, Florida: Widening of mainlines and ramps.
- I-175 from I-275 to 4th St. S., FDOT District Seven, St. Petersburg, Pinellas County, Florida: PM and EOR for this concrete pavement rehabilitation. This project included two major urban interchanges, drainage, overhead signs,

and safety improvements. The traffic control plans for the interchanges required ramp closures and offsite detours.

- I-75/SR 574 (MLK, Jr., Blvd.) Interchange-SB Exit Ramp Reconstruction, FDOT, District Seven, Hillsborough County, Florida: PM and EOR for this design project to expand the southbound exit ramp of this interchange.
- SR 686 Resurfacing, FDOT District Seven, Pinellas County, Florida: PM and EOR for this RRR project of SR 686/East Bay Drive from SR 595/651/Missouri Avenue to East of Highland Avenue.
- SR 597 (Dale Mabry Highway), FDOT District Seven, Pasco County, Florida: PM and EOR for this RRR project from County Line Road to US 41.
- US 41 (SR 45) from N of Lamar Ave. (Old Hospital) to Twingate Ave., FDOT District Seven, Hernando County, Florida: Roadway Engineer for this RRR project.
- SR 580 (North Dale Mabry Hwy.) from Walnut St. to Beach St. and from Hillsborough Ave. to Waters Ave., FDOT District Seven, Tampa, Hillsborough County, Florida: PM for this RRR project.
- SR 590 (Philippe Pkwy) CR 638 (Enterprise Rd.) to SR 580, FDOT District Seven, Safety Harbor, Pinellas County, Florida: PM for this RRR project.
- SR 84 (Davis Blvd.) From Santa Barbara Blvd. to CR 951, FDOT District One, Naples, Collier County, Florida: Senior Roadway Engineer for a 2-lane rural undivided roadway to an urban 6-lane urban curb and gutter roadway reconstruction.
- Fowler Ave. at 19th St., FDOT District Seven, Tampa, Hillsborough County, Florida: PM for this median mod. project.
- SR 700/US 98 (Ponce De Leon Blvd.) from Jefferson St. to Yontz Rd., FDOT District Seven, Dade City, Hernando County, Florida: PM for this RRR design project.
- SR 666 (Tom Stuart C.) from SR 699 to E of Duhme Rd., FDOT District Seven, Madeira Beach, Pinellas County, Florida: PM for this RRR project.
- SR 595 (Alt. US 19) from 94th St. North to 53rd Ave. North, FDOT District Seven, Madeira Beach, Pinellas County, Florida: PM and EOR for this RRR urban curb and gutter project with a three-legged interchange.
- SR 52 from Moonlake Rd. to Suncoast Parkway, FDOT District Seven, Pasco County, Florida: RRR Project Engineer.
- Suncoast Parkway, Section 4, SR 52 to Pasco/Hernando County line, Turnpike District, Pasco County, Florida.
- Polk Parkway from Lakeland Highway Rd. to US 98, Section 4, FDOT, Turnpike District, Polk County, Florida.
- Western Beltway, Part C, Section 3, FDOT District Five, Orange County, Florida.
- SR 500, FDOT District Five, Brevard County, Florida.
- US 301/SR 70 Interchange, FDOT District One, Manatee County, Florida.
- SR 776 from Perry Lane to Dearborn St., FDOT District One, Sarasota County, Florida.
- Pinellas Trail North Gap from Enterprise Rd. to John Chesnut, Sr. Park.
- Starkey Rd. from Tyrone Blvd. N (Alt US 19) to E Bay Dr.
- Managed Multimodal LAP projects at Pinellas County.
- Oversaw GEC project managers for the County.
- Leader of a group of County Project Managers.

PD&E PROJECTS

- I-4 Master Plan Study from I-75 Interchange to US 27 Interchange, FDOT District Seven, Hillsborough and Polk Counties, Florida.
- Widening of I-75 Bridges over Peace River, FDOT District One, Charlotte County, Florida.
- Replacement of Bridges on SR 105 over Sisters Creek, FDOT District Two, Duval County, Florida.
- Kirkman Rd. Extension from Sand Lake Rd. to International Drive South of Beeline Expressway, FDOT District Five, Orlando, Florida.
- US 98 Bypass, FDOT District Seven, Dade City, Florida.
- Replacement of John's Pass Bridges, FDOT, District Seven, Pinellas County, Florida.
- Escambia River Bridge, FDOT District Three, Escambia County, Florida.



CREDENTIALS

Professional Engineer, FL – 45643
Attended University of Vermont (1967)
Attended University of New Hampshire (1970)

CERTIFICATIONS

Advanced Maintenance of Traffic (Exp. 2/2023)

SKILLS & TRAINING

MicroStation v8i
Geopak
Microsoft Office Suite (Word, Excel, PowerPoint, Project Scheduling, Outlook)

PROFESSIONAL BACKGROUND

- 36 Years in Transportation Engineering (1 year with BES)
- Accomplished in Highway Design, including Design Build
- Experience in PD&E, CEI, and Land Development

Robert has a strong background in all aspects of highway design, including roadway, signing and marking, and Traffic Control Plans. He was one of the lead engineers on the two largest infrastructure projects ever built in Florida: the I-595 PPP project in Fort Lauderdale and the I-4 Ultimate PPP project in Orlando. He has extensive experience in every FDOT District including Florida's Turnpike.

Some of Robert's project experience is outlined below.

SR 44 from Norvell Bryant Hwy to West of N Lopp Pt in Citrus County – FDOT District Seven: This 2.34-mile RRR project involves resurfacing, ADA improvements, signal reconstruction, lighting, and drainage improvements. A near-perpendicular right-slip lane was designed to improve sight distance by rebuilding the channelized island. Served as QC Engineer.

I-4/SR 400 from W of Thonotosassa Road to E. of Thonotosassa Road Project, Hillsborough County – FDOT District Seven: The purpose of this project is to add a right-turn lane and install a traffic signal at the I-4 westbound off-ramp termini, widening Thonotosassa Road from two to four lanes, with an exclusive right-turn lane at the I-4 eastbound on-ramp intersection, with signal modification. Served as QC Engineer.

SR 14 from SW Sampala Lake Rd to SR 53, Madison County – FDOT District Two: This 4.05-mile project RRR project also involved ADA improvements, guardrail improvements, CR 360 widening and realignment, utility coordination, signing & striping, signalization, and safety improvements. Drainage improvements were coordinated with Perry Maintenance in the early stages of design; these were addressed by the Maintenance office resulting in significant cost savings to the project. Served as QC Engineer.

SR 527 at SR 438 E Princeton Street Intersection Project, Orange County – FDOT District Five: The purpose of this project was to reconstruct a mast arm signal and to make intersection improvements. This project included signal reconstruction, minor intersection improvements, and access management safety modifications. Served as QC Engineer.

FDOT District 1 – US 27 in Clewiston: 2.5 km, four-lane urban reconstruction with sidewalk improvements, access management and drainage improvements.

FDOT District 1 – US 27 in Highlands County: 7.2 miles, four-lane divided milling and resurfacing, turn lanes and drainage improvements.

FDOT District 1 – US 17 in Bartow: 2.4 km, four-lane urban milling and resurfacing, access management and drainage improvements.

FDOT District 1 – Districtwide Minor Design Program: 23 minor projects signed and sealed 1994-1996.

FDOT District 1 – SR 80 in Hendry County: 2.0-mile widening project, Traffic Control Plans

FDOT District 1 – Lake Alfred SR 600 (US 17 & 92) PD & E Study: 4-lane curb & gutter, public hearing.

FDOT District 2 – SR 9-A/I-295 Jacksonville Circumferential Highway.

FDOT District 2 – SR 13 (San Jose Blvd.) St. Johns County: Roadway and drainage improvements.

FDOT District 3 – SR 20 Jefferson County.

FDOT District 3 – I-10 Agricultural Inspection Station Escambia County.

FDOT District 4 – I-595 PPP Megaproject: 12.5 miles of widening up to 17 lanes with 63 bridges, braided ramps, reversible toll express lanes, Florida Turnpike widening and light rail envelope (MOT/TCP Lead).

FDOT District 4 – SR 700 (US 98) Palm Beach County: 24.2 km full depth reconstruction, major drainage construction with Geogrid due to subsurface soils.

SR 5 (US 1) Palm Beach County: 3.2 km 4-5 lane curb & gutter with widening, drainage and signal construction.

FDOT District 4 – SR 816 (Oakland Park Blvd.) Fort Lauderdale: 6 lane curb and gutter with access management, turn lanes and drainage improvements.

FDOT District 4 – I-95 at Okeechobee Blvd. Palm Beach County: Traffic Control Plans.

FDOT District 5 – I-4 PPP Megaproject: 21 miles of widening up to 17 lanes with 128 bridges, braided ramps, toll express lanes, 4 miles of SR 408, and new downtown four-level interchange (MOT/TCP Lead).

FDOT District 5 – I-95 and SR 528 interchange: Increase capacity to full cloverleaf with CD roads - Traffic Control Plans and Signing and Pavement Marking Plans.

FDOT District 5 – I-95 and Port St. John Road interchange (new construction): Traffic Control Plans and Signing and Pavement Marking Plans.

FDOT District 5 – SR 600 P.D.&E. Study, Lake Alfred, FL.

FDOT District 5 – Districtwide Minor Design Projects 2007 – 2009.

FDOT District 6 – Districtwide Minor Design Program 1994 – 1995: Three projects signed and sealed.

FDOT District 6 – Districtwide PD & E Studies.

FDOT District 7 – Districtwide Minor Design Program 1993-1994.

FDOT District 7 – Districtwide Transportation Enhancement Projects 2007 – 2009.

FDOT Turnpike District – Suncoast Parkway: 4.5 miles Hillsborough & Pasco Counties—Traffic Control Plans.



CREDENTIALS

Professional Engineer, FL – 52144
August 1997

BS, Civil Engineering, University of
South Florida, 1993

CERTIFICATIONS

Stormwater Management Inspector

TRAINING

ICPR v4 Workshop

PROFESSIONAL BACKGROUND

- 35 Years of FDOT Drainage Design Experience
- 26 Years as Registered Professional Engineer in Florida
- Drainage Department Manager
- Senior Roadway Drainage Engineer
- Stormwater Management Inspector
- Proficient with stormwater management design software

Mr. Ward has more than 35 years of *FDOT* drainage design experience. As Drainage Engineer of Record (EOR), Mr. Ward has been responsible for numerous roadway drainage design projects. He has provided concise and comprehensive direction to staff with guidance and mentoring during the design of stormwater management systems, storm drain systems, cross drains, and floodplain analyses, along with the preparation of bridge hydraulics reports including bridge hydraulics and scour analysis. Mr. Ward has obtained surface water permits from *every water management district in the State of Florida*, as well as local, state, and federal governing agencies for major and minor roadways that include mitigation for impaired water bodies impacted by total maximum daily loading (*TMDL*). He has provided drainage design peer reviews and quality control/quality assurance reviews. Mr. Ward has served as a Drainage Reviewer under General Engineering Consultant (*GEC*) contracts for *FDOT Districts 1 & 7 and Hillsborough County*. He has a comprehensive knowledge of the *FDOT Drainage Manual* and *FDOT Drainage Handbooks*. Mr. Ward is proficient with stormwater management design software that includes *ICPR v4, ICPRv3 with PercPak, POND5, SWMM, Geopak Drainage, ASAD, FHWA: HY-8, HDS-5, HEC Series, including HEC RAS for Bridge Hydraulics and Scour Analysis*.

SPECIFIC PROJECT EXPERIENCE

SR 44 from Norvell Bryant Hwy to West of N Lopp Pt in Citrus County – FDOT District Seven: This 2.34-mile RRR project involves resurfacing, ADA improvements, signal reconstruction, lighting, and drainage improvements. A near-perpendicular right-slip lane was designed to improve sight distance by rebuilding the channelized island. Served as Drainage EOR.

I-4/SR 400 from W of Thonotosassa Road to E. of Thonotosassa Road Project, Hillsborough County – FDOT District Seven: The purpose of this project is to add a right-turn lane and install a traffic signal at the I-4 westbound off-ramp termini, widening Thonotosassa Road from two to four lanes, with an exclusive right-turn lane at the I-4 eastbound on-ramp intersection, with signal modification. Served as Drainage EOR.

SR 14 from SW Sampala Lake Rd to SR 53, Madison County – FDOT District Two: This 4.05-mile project RRR project also involved ADA improvements, guardrail improvements, CR 360 widening and realignment, utility coordination, signing & striping, signalization, and safety improvements. Drainage improvements were coordinated with Perry Maintenance in the early stages of design; these were addressed by the Maintenance office resulting in significant cost savings to the project. Served as Drainage EOR.

SR 527 at SR 438 E Princeton Street Intersection Project, Orange County – FDOT District Five: The purpose of this project was to reconstruct a mast arm signal and to make intersection improvements. This project included signal reconstruction, minor intersection improvements, and access management safety modifications. Served as Drainage EOR.

Fletcher Avenue (SR 579) from Florida Avenue to Nebraska Avenue, FDOT District Seven, Tampa, FL (2017-2019) (Date: February 2019). Drainage Engineer of Record. Responsible for RRR drainage design support services that included identification of potential storm drain damage, followed by video inspection, manhole and pipe repairs with pipe liners to restore the storm drain systems to the design service life. Damaged inlet and manhole tops were replaced and manholes within resurfacing areas were adjusted to the finished pavement surface. Served as Drainage EOR.

SR 24 Archer Avenue Trail from SW 75th Street to SW 41st Street, FDOT District Two, Tampa, FL (2018-2019) (Date: June 2019). Drainage Engineer of Record. Responsible for drainage design support services for the proposed trail. The drainage design included maintaining positive flow from offsite areas to the existing storm drain systems on SR 24. Floodplain and wetland impacts were mitigated by excavating along dry upland ditches adjacent to the impacted areas. Served as Drainage EOR.

Two Walk-Bike Project, City of Tampa, Tampa, FL (2018-2020). Drainage Engineer of Record. Responsible for drainage design support services for Sidewalk and Bike Paths along 46th Street and Columbus Drive. The drainage design included adding a continuous sidewalk and updating inlets to improve safety along 46th Avenue and widening the sidewalk with proposed trees along Columbus Drive. Storm drain systems for both projects maintain existing drainage patterns and discharge to existing downstream storm drain systems. Served as Drainage EOR.

Boyette Road Bridge Culvert In-Kind Replacement on Redneck Canal, Hillsborough County, FL (2018-2019) (Date: May 2019). Drainage Engineer of Record. Responsible for Bridge Hydraulics Report using SWMM to evaluate flows in Redneck Canal that outfalls to the Alafia River. Coordination with Hillsborough County and permitting through the Southwest Florida Water Management District and USACOE were also a part of this project. Served as Drainage EOR.

Laurel Drive Extension, USF Tampa Campus, Tampa, FL (2017-2018) (Date: August 2018). Drainage Engineer of Record. Responsible for drainage design support services for the Laurel Drive Extension, parking lots, along Fletcher Avenue with one Stormwater Management Facility (SMF) and a comprehensive storm drain system that discharges to the proposed SMF and the existing downstream storm drain system. The onsite SMF was designed to use differences in the Time of Concentration to reduce flow rates and peak staged in an existing wetland on the site and the existing downstream storm drain system.

Sligh Avenue and Orient Road Intersection Improvement Project, Hillsborough County Public Works, Tampa, FL (2017-Present). Drainage Engineer of Record. Responsible for drainage design support services for the intersection improvements, with one Stormwater Management Facility (SMF) and a comprehensive storm drain system that directs the water quality treatment volume to the proposed SMF before discharging to the historic outfall location. The onsite SMF was designed to provide treatment and attenuation to meet existing flow rates while maintaining peak stages with appropriate freeboard.

Temple Terrace Drainage and Sanitary Sewer Improvements Project, Pinellas County Public Works, Pinellas County, FL (2016-2017). Drainage Engineer of Record. Responsible for drainage design services to collect and convey runoff from the subdivision to an outfall connection at Alligator Creek. The surface water and storm drain system analysis included a complex time sensitive ICPR model to demonstrate that flooding would not occur in the subdivision or upstream or downstream of the project area.

Norfolk Southern Railroad Crossing on the Elkhart River, Millersburg, Indiana (2015-2016) (Date: February 2016). Drainage Engineer of Record. Responsible for Bridge Hydraulics Report using FHWA HECRAS to evaluate flows in the river and provide the necessary pipe sizes to meet base flow conditions during repairs of the Railroad Crossing. Coordination with Elkhart County Planning and permitting through Indiana Department of Natural Resources, Indiana Department of Environmental Management and USACOE were also a part of this project.

Norfolk Southern Railroad Crossing on the Elkhart River, Goshen, Indiana (2015-2016) (Date: February 2016). Drainage Engineer of Record. Responsible for Bridge Hydraulics Report using FHWA HECRAS to evaluate flows in the river and provide the necessary pipe sizes to meet base flow conditions during repairs of the Railroad Crossing. Coordination with Elkhart County Planning and permitting through Indiana Department of Natural Resources, Indiana Department of Environmental Management and USACE were also a part of this project.



CREDENTIALS

Bachelor of Science in Environmental Science and Policy, University of South Florida, 2019

SKILLS & EXPERTISE

AutoDesk
AutoCAD
Civil 3D
MicroStation
GEOPAK
OpenRoads Designer

PROFESSIONAL BACKGROUND

- 8 Years in Design
- Experienced in AutoDesk, AutoCAD, Civil 3D, MicroStation, GEOPAK, and OpenRoads Designer

Lucas W. Reynolds is a CADD technician supporting BES Inc's engineering design staff, and is currently responsible for plans production for engineering design projects. He is well-versed in plans production for minor and major improvement projects for municipal clients. Mr. Reynolds is based in BES's Tampa office.

PROJECT EXPERIENCE

SR 597-Dale Mabry, FDOT District Seven, Hillsborough County, Florida: Project Engineer responsible for plans production for this resurfacing, restoration and rehabilitation project that includes milling and resurfacing, median modification and safety improvements. SR 597/Dale Mabry Highway is a heavily travelled 6-lane urban corridor located in the north Tampa area of Carrollwood. The project is 4.3 miles long and consist of milling/resurfacing, replacing damaged sidewalks, upgrading ADA deficiencies, drainage and minor traffic safety improvements. Also included in this project is a major intersection re-design/upgrade for the Bearss Avenue intersection. Services include roadway design, intersection improvement design, drainage design, signalization, lighting, signing/pavement markings, pavement design, utility relocation/coordination and services during construction.

Goodland Drive Reconstruction, GradyMinor for Collier County, Florida: Project Engineer responsible for plans production and permit plans for reconstruction of the roadway and construction of two box culverts. Goodland Road is a landlocked road that provides ingress/egress to the town of Goodland, Florida. The road is subject to extreme tidal flooding and often creates safety concerns for the passing of vehicles and any potential emergency services. The project goal was to raise the road an average of 15-inch to improve safety and upgrade existing features to current standards. The reconstruction of the road also includes rebuilding the eight-foot multi-use path. Professional services include roadway reconstruction, pavement design, Full Depth Reclamation design, signing and pavement marking, environmental permitting, maintenance of traffic, drainage design, surveying, utility relocation, decorative brick design, FDOT coordination and services during construction.

SR 45/US 41/Broad Street, FDOT District Seven, Hernando County, Florida: Project Engineer responsible for a stretch of rigid pavement, sidewalk and intersection design for the Rigid Pavement Reconstruction at the SR 45 and Wiscon Road Intersection in Hernando County, Florida. In addition to scheduled pavement resurfacing the project also included the replacement of asphalt pavement with Rigid Concrete construction at the intersection of Wiscon Road. The limits of rigid pavement are both the north and southbound approaches to

Wiscon Boulevard. Rigid Pavement reconstruction also includes drainage improvements that provide new structure placement to retrofit into the existing drainage system. Professional services included Rigid Pavement/Concrete design, intersection design, constructability, maintenance of traffic, FDOT coordination and support during construction.

Interbay Boulevard Widening, City of Tampa, Hillsborough County, Florida: Project Engineer responsible for drafting drainage plans and proposed ditch cross sections. The City of Tampa in partnership with the MacDill Air Force Base in Tampa are adding an additional right-turn lane into the base. The existing right-turn lane off of Interbay Boulevard onto Tanker Way does not provide enough capacity to relieve congestion into the base. Services provided on the project include roadway widening, drainage design, utility relocation/coordination, intersection improvements, signing and pavement marking, maintenance of traffic, MacDill AFB coordination, survey and services during construction.

SR 595 (Seminole Boulevard) Resurfacing, Restoration and Rehabilitation Safety Improvements, FDOT District Seven, Pinellas County, Florida: Project Engineer responsible for corridor modeling and plans production. SR 595/Seminole Boulevard is a 6-lane Urban Corridor and Arterial Collector in Largo, Florida. The project is 3.4 miles long and consists of milling/resurfacing, safety upgrades, access management alteration, replacing damaged sidewalks, upgrading ADA deficiencies and minor traffic safety improvements. Also included in this project is a major intersection redesign at the Walsingham Road intersection. Services include roadway design, intersection improvement design, drainage design, signalization, signing/pavement markings, pavement design, utility relocation/coordination and services during construction.

SR 91 (Florida's Turnpike Mainline) Widening from SR 50 Interchange to Minneola Interchange (MP 273-279), Florida's Turnpike Enterprise, Orange and Lake Counties, Florida: Project Engineer responsible for engineering analysis for guardrail lengths and tabulating quantities for the widening of six miles of SR 91 from a 4-lane to 8-lane roadway. The project replaced bridge structures at five locations along SR 91, one pedestrian overpass structure and the addition of a new overpass structure. The project also included the design of two roundabouts adjacent to the CR 455 overpass structure. Plans included all electronic tolling facility toll gantries, roadway, drainage, utility coordination, signing and pavement markings, maintenance of traffic, structures, lighting, intelligent information systems, environmental permitting and surveying. The project also included the purchase of right-of-way for ponds only. This project is currently in construction.

SR 528 (Beachline) Orlando South Interchange Improvements (MP 4.5), Florida's Turnpike Enterprise, Orange County, Florida: Project Engineer responsible for plans preparation, quantities and cost estimates for this \$10.4 million construction project which included improvements to the Orlando South Interchange, including roadway resurfacing, ramp reconstruction and new bridge construction for the SR 528 Beachline and US 441 ramps serving the SR 91 (Florida's Turnpike) Mainline Toll Plaza. The plans included design for roadway, drainage, environmental and permitting, utilities, structures, signing and pavement markings, lighting and survey. Structural design elements included bridge design, existing bridge safety improvements, MSE retaining walls, sheet pile walls, bridge box culvert extension, load ratings and overhead span sign structure.

Pineda Causeway Grade Separation Overpass, Brevard County, Florida: Project Engineer responsible for preparing Maintenance of Traffic Plan Sheets and drafting roadway design changes for Pineda Causeway over the Florida East Coast Railway. The project begins just east of N. Wickham Road and ends just west of US 1. The bridge spans the entire FEC right-of-way with a single span cast-in-place composite reinforced concrete deck for a total bridge length of 114'-103/8" with Florida-I 45 Beams founded on 18-inch square PPC piles. Other design elements include roadway, intersections, interchanges, traffic control plans, lighting, utility relocation, right-of-way survey control maps, cost estimates and environmental permits and mitigation plans.

SR 686 Resurfacing, FDOT District Seven, Pinellas County, Florida: Project Engineer responsible for this resurfacing, restoration and rehabilitation project to extend the life of existing pavement and address multi-modal issues and safety upgrades. The project limits are from SR 686/East Bay Drive from SR 595/651/Missouri Avenue to East of Highland Avenue for a project length of 0.824 miles. The is a 4-lane and 6-lane divided urban curb and gutter arterial with raised medians and sidewalks on the outside. The project included video inspection and rehabilitation.



PROFESSIONAL BACKGROUND

- 6 Years in Transportation Engineering (3 years with BES)
- Bilingual (Arabic and English)
- Proficient in MicroStation and OpenRoads Designer
- Proficient in ITE Trip Generation
- Proficient in ArcGIS and Synchro
- Proficient in CITILABS's CUBE

Zuhair has experience in transportation and traffic engineering, transportation planning, GIS, transportation safety, statistics, PD&E Studies, and Travel Demand Modeling. She worked in FDOT District Five as a Roadway Designer and has prior experience as a Transportation Engineer.

CREDENTIALS

MS (Civil Engineering), University of Florida, 2018
 BS (Civil Engineering), Umm Al-Qura, 2014

AREAS OF EXPERTISE

Civil Engineering
 Urban Planning
 Traffic Safety
 Traffic Modeling
 Project Development &
 PD&E Studies

SR 44 from Norvell Bryant Hwy to West of N Lopp Pt in Citrus County – FDOT District Seven: This 2.34-mile RRR project involves resurfacing, ADA improvements, signal reconstruction, lighting, and drainage improvements. A near-perpendicular right-slip lane was designed to improve sight distance by rebuilding the channelized island. Served as Project Engineer.

I-4/SR 400 from W of Thonotosassa Road to E. of Thonotosassa Road Project, Hillsborough County – FDOT District Seven: The purpose of this project is to add a right-turn lane and install a traffic signal at the I-4 westbound off-ramp termini, widening Thonotosassa Road from two to four lanes, with an exclusive right-turn lane at the I-4 eastbound on-ramp intersection, with signal modification. Served as Project Engineer.

SR 14 from SW Sampala Lake Rd to SR 53, Madison County – FDOT District Two: This 4.05-mile project RRR project also involved ADA improvements, guardrail improvements, CR 360 widening and realignment, utility coordination, signing & striping, signalization, and safety improvements. Drainage improvements were coordinated with Perry Maintenance in the early stages of design; these were addressed by the Maintenance office resulting in significant cost savings to the project. Served as Project Engineer.

SR 527 at SR 438 E Princeton Street Intersection Project, Orange County – FDOT District Five: The purpose of this project was to reconstruct a mast arm signal and to make intersection improvements. This project included signal reconstruction, minor intersection improvements, and access management safety modifications. Served as Project Engineer.

Roadway Design, FDOT District Five. Zuhair was a Roadway Designer involved with designing roads, creating Typical Section packages, and developing plans for various projects. She was engaged with 3D detail modeling of roads with their Elements. Zuhair worked on the Resurfacing, Restoration, and Rehabilitation Project for State Road 415. She worked on Slope and Superelevation Correction tasks and used VR and AR to QC 3D designs.

Various Projects, David Plummer & Associates. As a Transportation engineer, Zuhair created ITE Trip Generation Tables for multiple projects. She performed modeling and analysis traffic in CUBE Citilabs and created traffic monitoring reports and participated in different PD&E Studies. Zuhair created traffic signal warrant analysis reports and created and analyzed maps and spatial data in ArcGIS. She also worked on various projects for Babcock Ranch in Florida.

Traffic Engineering Education. In a classroom context, students were tasked with identifying a location that is experiencing less than optimal traffic operating conditions. Zuhair participated in fieldwork, data collection, analyzing the existing condition, and recommending solutions that significantly improved the operating conditions.

Highway Safety Analysis. In a classroom context, students developed a regression equation to calculate the RAR (Relative Accident Risk) based on the facility characteristics such as ideal climate, urban/rural designation, and travel speed. In the class project, Zuhair used Florida's top 100 crash segments and the rain data for those segments. She calculated the percentage of crashes that occur during rain and collect hourly weather data for each day during the analysis period. They also calculated the rate of rainy hours within the analysis period. Zuhair derived the factor between these two percentages. The value encapsulated the impact of rain on crash frequencies.

Urban Streets Simulation and Control. In a classroom context, students coded a large corridor into CORSIM and TRANSYT-7F after collecting the geometry and traffic signal timing. In this course, Zuhair ran CORSIM with no errors and then ran TRANSYT-7F to optimize the signals in the corridor to improve the traffic condition.

Urban Transportation Planning. In a classroom context, students built a tour-generation model for a pair of FDOT Districts (District Four and District Six). The project required assessing whether the model developed for one District was transferable to the other. The class used SPSS as the main program. Students were provided the Florida samples from the recent National Household Travel Survey (NHTS). They then cleaned the data and split the cleansed data from each District into an "estimation" sample and a "validation" sample. The estimation was approximately 80% (drawn randomly) of all the data for the District. The validation sample comprised the remaining 20% of the data for each District. Using the estimation samples, students built a linear regression model for household tour generation for each of the two Districts. After analyzing and picking the best significant model, students transferred the model and ran it between Districts and recorded the outcomes.

Discrete Choice Analysis. In a classroom context, students looked at the shopping choices of Americans and what effect it had on traffic. Zuhair's project in this class was to study the variables typically used for transportation studies like age, gender, income, and more to help connect the dots. Then students evaluated those variables' outcomes and the results presented in a binary-choice-model with a critical analysis of the obtained model.

Planning Theory & History. In a classroom context, students learned about the history and fundamental theory of planning. Planning has evolved in the United States and Western Europe since the late 19th Century through a profession of people calling themselves city planners. They, too, have been very diverse, driven by many different motivations and seeing the profession in widely differing ways based upon, among other factors, the various theories of planning. These theories have been discussed within the context of the history of planning and their implications for planning practice.

Introduction to Planning Information Systems. In a classroom context, students performed two projects. Project one: In this project, using ArcGIS analyzing tools to recommended two sites within the state of Florida, students covered a list of specific criteria with vector type data. Project two: In this project using raster type data, students determined the location of the Florida Turnpike Extension and chose the Least Cost Path and Site location while covering a list of specific criteria.

Spatial Analysis for Urban Planners. In a classroom context, students learned about theoretical and practical knowledge about the structure, use, and architecture of georeferenced database systems. Students also learned about spatial relationships between the network and area- related systems, developing and maintaining geographic information systems as relevant to urban and regional planning.



PAT McCORMACK, PSM

SENIOR SURVEY/SUE MANAGER



EDUCATION:

B.S. in Geomatics, University of Florida

YEARS OF EXPERIENCE:

27

PROFESSIONAL LICENSURE:

Florida Registered Professional Land Surveyor & Mapper, No. LS6494

PROFESSIONAL MEMBERSHIP:

Member of FL Surveying and Mapping Society (FSMS)

Member of West Coast Land Surveyors Association (WCLSA)

SUMMARY

Mr. McCormack has 27 years of diversified Survey and Mapping experience. His Land Surveying and Mapping experience include Boundary Surveys, Topographic Surveys, Subsurface Utility Engineering, Right of Way Maps, Control Surveys, Wetland Jurisdictional Surveys, Construction Layout, and Route Surveys.

Mr. McCormack presently serves as Vice President and Senior Survey Manager for Cumbey & Fair. In this capacity, he develops and negotiates scope of services, establishes and maintains project budgets, generates schedules and quality assurance procedures. As Senior Survey Manager he is responsible for the management and oversight of all of our Survey and SUE-related projects and staff.

Pat is proficient in Survey & Mapping oriented software such as EFB, EFBP, VECTORS post-processing analysis, CAICE software, and MicroStation V8 XM (FDOT 2008) and V8i (FDOT 2010).

PROJECT EXPERIENCE

City of Dunedin Miscellaneous Survey & Mapping Services, Dunedin, Florida (2011/2016) - Miscellaneous Task Assignments to provide any combination of the following services on a Task Basis: Quality Control/Quality Assurance Reviews, Boundary, Right-of-Way, Topographical, Control, Hydrographic, Construction Control, Layout & As-built Surveys, Legal Descriptions & Sketches, Wetland Delineation & Mapping, Subsurface Utility Location & Mapping (SUE), Aerial Photography, Photogrammetric Mapping, Laser Scanning & CADD/Survey/GIS Related Services.

City of Clearwater Engineer & Surveyor of Record, Clearwater, Florida (2003/2019) - Task Assignments under Engineering Contracts included significant Topographic Survey and SUE for design purposes. Myrtle Avenue/Seminole Street comprised approximately 5,000 LF of Topographic Survey and SUE for Stormwater Pipe Replacement project within existing street right-of-ways. Smallwood Circle Drainage Improvement Project also included Topographic survey for approximately 3,600 LF of Street Right-of-Way, SUE for existing utilities including power, telephone, cable TV, and gas. Special purpose survey for Wetland Jurisdictional Area within an existing City Neighborhood Park.

Tampa Bay Water: As-Needed Professional Services Agreement for Surveying Services, Pinellas County, Florida – Provided Survey services such as Sketch/Descriptions, Horizontal/Vertical Control Survey, Asset management data collection, and topographic survey data for various projects under this contract.

City of Tampa Professional Engineering Services for Subsurface Utility Engineering (SUE), Tampa, Florida - Provide Quality Level A and B Subsurface Utility investigation techniques. Quality Level A involves the use of nondestructive digging equipment at critical points to determine the precise horizontal and vertical position of underground utilities, as well as the type, size, condition, material, and other characteristics. Quality Level B involves the use of surface geophysical techniques to determine the existence and horizontal position of underground utilities. Owner: City of Tampa, Start Date: March 2012, End Date: On Going.

City of Tampa: SUE Locates for City of Tampa Wastewater, Hillsborough County, Florida - Provide Quality Level A and B Subsurface Utility investigation techniques. Quality Level A involves the use of nondestructive digging equipment at critical points to determine the precise horizontal and vertical position of underground utilities, as well as the type, size, condition, material, and other characteristics. Quality Level B involves the use of surface geophysical techniques to determine the existence and horizontal position of underground utilities. Tasks were assigned on a project-by-project basis and are often classified as "Emergency Projects". C&F has performed several tasks including the following projects: Fowler Avenue force main replacement, Orient and Sligh wastewater maintenance, Tyson Avenue Force main emergency repair, 16th Avenue emergency locates, 21st Avenue blind flange "T" location and Gandy Boulevard/Clark Avenue force main location. The Services are assigned for a period of thirty-six (36 months). Owner: City of Tampa, Start Date 2012, End Date: On Going.

Hillsborough County: Miscellaneous Services for Geomatics, Hillsborough County, Florida - General Scope of Services Includes but not limited to the following: Land Surveying, Hydrographic Surveying, Photogrammetry, and Remote Sensing,



Subsurface Utility Engineering (SUE), Geographic Information Systems (GIS) Services and Asset Inventory. Projects include: ST Cloud – Reclaimed water, Misty Landings, and Bent Leaf Survey and SUE; Valrico Pump Stations Survey; Regents Park Pump Station Survey; and SCADA Group 7 (17 Sites) Pump Station Surveys.

Hillsborough County: Miscellaneous Survey & Mapping Services, Hillsborough County, Florida 2010/On-going - General Scope of Services Includes but not limited to the following: Boundary Surveys, Right-of-Way Surveys, Topographical Surveys, Legal Descriptions and Sketches, Control Surveys, Hydrographic Surveys, Construction Control, and Layout Surveys, As-Built Surveys, Wetland Delineation, and Mapping, Environmental Mapping, Subsurface Utility Location and Mapping (SUE), Aerial Photography, Photogrammetric Mapping, Laser Scanning and CADD services/Survey/GIS/Related Services. Owner: Hillsborough County, Contact: Tim Brown, 813.301.7261.

Hillsborough County: CR 672 Force Main (Balm Riverview Road to US 301), Riverview, Florida - This project includes the preparation of topographic survey and an existing right-of-way map for the southerly right-of-way line of CR 672 between US 301 and Balm-Riverview Road. Work including location and identification of all property lines with the limits of the survey including any discrepancy between the existing right-of-way line(s) and the abutting property's deeds, all of which were shown on the map; preparation of approximately 25 legal descriptions and sketches for a County utility easement estimated to be 35 feet south of the southerly right-of-way for CR 672. Said a 25' easement was included on the maps. Owner: Hillsborough County, Start Date: April 2008, End Date January 2009

Hillsborough County: Bruce B. Downs Mitigation Site, Tampa, Florida – This project included the performance of a boundary survey in accordance with Minimum Technical Standards for Land Surveying in the State of Florida and with Hillsborough County Survey and Mapping Manual. No interior improvements to be located; all roads, fences, and encroachments along the boundary to be located; survey is to be in Florida State Plan Coordinates, NAD 83. Owner: Hillsborough County, Richard Crate, P.S.M., 813.307.4773. Start Date September 2008, End Date August 2009.

FDOT District 7: Districtwide Survey Contract, Pinellas, Hillsborough, Pasco, Hernando, and Citrus Counties (2011/2016) - This \$1.5 Million contract includes Miscellaneous Task Order Assignments to provide any combination of the following Services on a Task Basis: Design Survey, Control Survey, Control Survey Mapping, Maintenance Mapping, Computer Mapping, Aerial Target Control Survey, Aerial Photogrammetry /Photography, Right-of-Way Mapping & Legal Descriptions. Owner: FDOT District 7, Alex Parnes, 813.975.6781.

FDOT District 7: SR 39/James L. Redman from N. of SR 60/Hopewell Rd. to N. of Charlie Griffin Rd, Plant City, Florida - The project is along SR 39/James L. Redman from N. of SR 60/Hopewell (MP 0.030) to N. of Charlie Griffin Rd. (MP 3.085), a Project Length of 3.055 miles. The project included Design Survey, LAMP photography, Right-of-Way, Photogrammetry, Mapping and check cross sections, and Subsurface Utility Engineering (SUE). Owner: FDOT District 7, Ashley Henzel, 813.975.6287, Start Date: 2012, End Date: 2013.

FDOT District 7: US 92 (SR 600/Baker Street) from Reynolds Street to Mobley Street, Hillsborough County, Florida - 1.6-mile RRR project which includes roadway design, structures, intersection modifications, survey, right-of-way, mapping, SUE, drainage, signing and pavement markings, signalization, ITS, roadway lighting, ADA improvements, multi-modal/bicycle improvements, utility relocation, maintenance of traffic, cost estimating, environmental permits, quantity computation books, project management, coordination, Bicycle, pedestrian sidewalks, and Transit need generators. The existing conditions inventory included environmental and drainage potential challenges, Safety Analysis of Crash Data, Transit Facility Coordination, and a Summary of findings and recommendations. Owner: FDOT District 7, Greg Reynolds 813.975.6287. Start Date: 2009, End Date: 2011.

FDOT District 7: SR 583 (56th Street) from Southeast of 23rd. Avenue to South of Fowler Avenue, Tampa, Florida - Project for establishing horizontal and vertical control, establish alignment, complete full design survey (topographic /DTD), drainage survey, Right of Way survey, Right-of-Way control survey, SUE services including Quality Levels D through A. Owner: FDOT District 7, Greg Reynolds, 813.975.6000. Start Date: 2009, End Date: On Going. Date: 2009, End Date: 2011.

FDOT District 7: Hillsborough Avenue (SR 580) from West of Benjamin to East of West Shore, Hillsborough County, Florida - 2 miles of Right-of-Way Control Survey– Owner: FDOT District 7, Prime: T. Y. Linn International, Dino Lucarelli, 813.775.7057. Start Date November 2010, End Date: On Going.

FDOT District 7: I-275 Section 2A Design Services, Tampa, Florida - Provide topographic survey data for the design of I-275 (Section 2A - Himes Avenue to East of the Hillsborough River). Provided base map and QA/QCT for topographic base map and survey location for temporary lane shifts.

SECTION E: PAST EXPERIENCE

1. HARLEM COMMUNITY SIDEWALKS LAP, HENDRY COUNTY

This is a LAP-funded 5-foot sidewalk on the south side of Florida Avenue and Carolina Avenue, including a mid-block crossing at 7th, 10th, and 11th Streets. Beyond sidewalk construction, this project involved signing and pavement markings, drainage improvements, geotechnical investigations, and utility coordination. The sidewalk was being placed at the right-of-way line and required some driveway modifications and drainage upgrades.

BES's technical expertise, familiarity with drainage conditions along the corridor, and local knowledge of this area were useful to Hendry County in the development of this project including minimizing flood impacts to adjacent property owners, reducing permit requirements, and optimizing project costs. The project implemented best management practices (BMPs) for erosion and pollution control to minimize exposure and impacts to the environment. The primary stakeholders included adjacent property owners, FDEP, FDOT, Hendry County, SDD, SFWMD, and USSC.

Primary Point of Contact:

R. Shane Parker, PE, Hendry County Public Works Director

99 East Cowboy Way, LaBelle, FL 33975

(863) 675-5222 / sparker@hendryfla.net

Estimated Cost: \$139,839

Actual Cost: \$144,839

Original Construction Budget: \$899,000 Final Construction Budget: Under Construction

Reason for Difference: Additional tree had to be relocated (Within Budget: Yes)

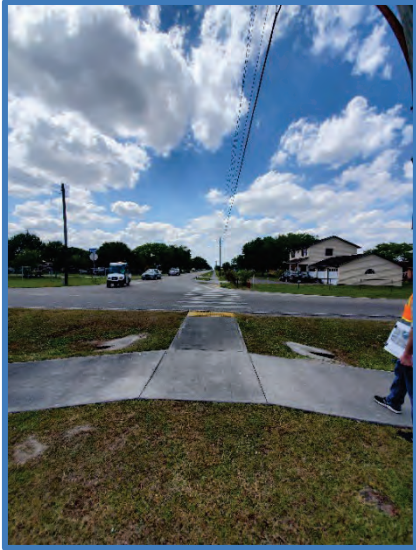
Key Staff:

Dilip Mundkur, PE – Principal-in-Charge

Thomas Ward, PE – Drainage

Julie Decker – Utilities

Date Project Completed: Construction Ongoing (On Time: N/A)



SECTION E: PAST EXPERIENCE

2. ARCHER ROAD TRAIL, ALACHUA COUNTY, FDOT DISTRICT TWO

BES provided roadway analysis, roadway plans, drainage analysis, drainage plans, utility coordination, environmental permitting, signing and pavement marking analysis/plans, and signalization analysis for a multi-use trail along Archer Road from SW 75th Terrace to SW 41st Boulevard. The SR 24 Multi-Use Path was to function as a 2.41-mile bi-directional shared use path (SUP) consisting of a 10'-wide asphalt pavement with 1'-wide unpaved shoulders that meets ADA criteria. The SUP was planned to cross three (3) signalized intersections, six (6) paved side streets, seven (7) paved driveways, fifteen (15) unpaved driveways, and a recently constructed Dollar General sidewalk. This SUP was designed within the Gainesville Regional Utility (GRU) easement that parallels SR 24. BES maintained communication with the three major stakeholders (FDOT, Alachua County, and GRU) and resolved conflicting comments.

Primary Point of Contact:

Leigh Ann Bennett, FDOT District Two

1109 South Marion Ave., Lake City, FL 32025-5874

(386) 961-7451 / leigh.bennett@dot.state.fl.us

Estimated Cost: \$387,856

Actual Cost: \$387,856

Original Construction Budget: \$1.5 million

Final Construction Budget: \$1.0 million

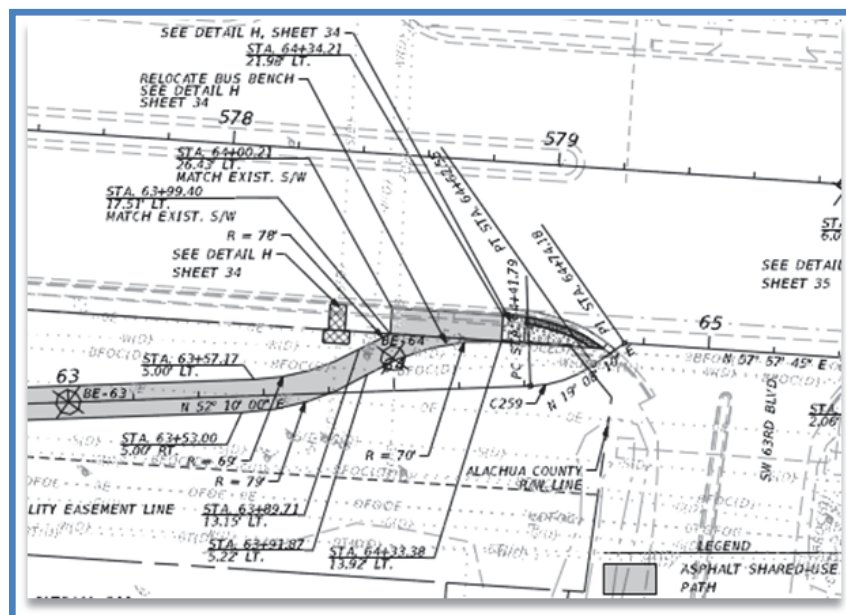
Reason for Difference: Our design eliminated the need for retaining walls and used black base at numerous locations. (Within Budget: Yes)

Key Staff:

Dilip Mundkur, PE – Project Manager

Doug Buchanan – Senior Designer

Date Project Completed: June 2019 (On Time: Yes)



SECTION E: PAST EXPERIENCE

3. US 41 FROM RIVERVIEW DRIVE TO DENVER STREET, FDOT DISTRICT SEVEN

This is a 5-mile milling and resurfacing project. BES provided the pavement design, Traffic Control Plans, lighting design, and signal design. Concrete pavement was constructed at two signalized intersections (US 41/Pendola Point Rd. and US41/Port Sutton Rd.) near the Port of Tampa. Significant detours and lane shifts were associated with the intersection reconstruction. LED street lighting was provided from Riverview Drive to Denver Street. Crosswalk lighting was upgraded to 2016 FDOT Standards. The signal at Gibsonton was reconstructed.

Primary Point of Contact:

Pia Cormier, FDOT District Seven

11201 N. Malcolm McKinley Dr., Tampa, FL 33612-6403

(813) 975-6000 / pia.cormier@dot.state.fl.us

Estimated Design Cost: \$1,400,000

Actual Design Cost: \$1,600,000

Original Construction Budget: \$9,000,000

Final Construction Budget: \$9,400,000

Reason for Difference: Added utility work by highway contractor. (Within Budget: Yes)

Key Staff:

Dilip Munkdur, PE – Principal-in-Charge, Project Manager

Charles Chiappone, PE – Constructability Reviewer

Doug Buchanan – Senior Designer

Date Project Completed: 2021



SECTION E: PAST EXPERIENCE

4. CRYSTAL LAKE ELEMENTARY SIDEWALKS LAP, POLK COUNTY

This LAP project includes construction of 5-foot-wide concrete sidewalk along five roadways surrounding Crystal Lake Elementary School, signing and pavement markings, a mid-block crossing, school zone upgrades, and new street lighting throughout the project. The project includes close coordination with Lakeland Electric for the placement of the new street lighting on existing and new wood power poles and Polk County Roads & Drainage for their drainage improvement project that is on one of the roadways with new sidewalk. BES is completing the roadway, lighting design analysis report, signing and marking, and utility coordination.

Primary Point of Contact:

Angela Spieler, PE, Polk County Board of County Commissioners, Project Manager

3000 Sheffield Road, Bldg 2864, Winter Haven, FL 33880

(863) 535-2726 / AngelaSpieler@polk-county.net

Estimated Design Cost: \$101,000

Actual Design Cost: \$94,000

Original Construction Budget: \$459,410

Current Construction Budget: Under construction

Reason for Difference: Lighting design was reduced as utility was to install poles based on our photometric analysis. (Within Budget: Yes)

Key Staff:

Dilip Mundkur, PE – Principal-in-Charge

Thomas Ward, PE – Drainage

Doug Buchanan – Senior Designer

Julie Decker – Utilities

Date Project Completed: Ongoing (On Time: Project On Schedule)



SECTION E: PAST EXPERIENCE

5. ELGIN BOULEVARD SIDEWALKS FROM DELTONA BOULEVARD TO MARINER BOULEVARD (LAP), HERNANDO COUNTY

This is a LAP-funded 2.5-mile-long 5-ft-wide concrete sidewalk that included signing and pavement markings, utility coordination, and permitting. The sidewalk traversed hilly terrain passing through three flood zones and required reconstruction of over 20 residential driveways. The driveway reconstruction required drainage modifications to avoid impacts to the existing swales. Gravity wall was added to the project to avoid major drainage impacts and a permit from SWFWMD. This project also required coordination with FDEP due to gopher tortoises located near the project.

Primary Point of Contact:

Scott Nelson, Project Manager, Hernando County

1525 East Jefferson Street, Brooksville, FL 34601

(352) 540-6570 / scottn@hernandocounty.us

Estimated Design Cost: \$301,468

Actual Design Cost: \$320,109

Original Construction Budget: \$809,382

Final Construction Budget: Under Construction

Reason for Difference: Gravity Wall, Handrail Design, TCE Negotiations (Within Budget: Yes)

Key Staff:

Dilip Mundkur, PE – Principal-in-Charge

Thomas Ward, PE – Drainage

Lucas Reynolds – Project Engineer

Doug Buchanan – Senior Designer

Julie Decker – Utilities

Date Project Completed: Ongoing (On Time: Yes)



SECTION F: QUALITY/ COST CONTROLS

Producing a quality work product is ingrained in our staff. Nevertheless, we prepare a Quality Control (QC) Plan specifically for the projects that we work on for any contract. The Plan emphasizes that any staff member working on any task is responsible for its quality. To aid in a superior product, we utilize Checklists, define reference material, and ensure that appropriate criteria and guidelines are discussed. A formal QC is performed on all calculations, reports, and submittals. We allow adequate time for this process. We include a "Plans in Hand" Field Review to verify accuracy. Our formal QC entails a fresh set of eyes, designated color-coding per the Quality Control Plan, and signature blocks that will require approval. This includes yellow highlights for good areas, red markups where corrections are needed, notes by the QC reviewer in blue, concurrence or other comments in green by the originator, and finally orange for back checks. Our subconsultants will submit their QC Plan to **BES** or adopt our Plan. **BES** and its subconsultants will submit color-coded QC sets with submittals; responses to comments are back checked before submittals for compliance. Finally, Quality Assurance is provided by a Principal who reviews and ensures that the QC has been performed per the Quality Control Plan.

Quality and cost controls will be implemented in **close coordination with the Hernando County Project Manager and staff**. The **BES** Team will identify, monitor, and inform the County of any out-of-scope work. Progress meetings and close adherence to the Scope of Services, while maintaining the project schedule, will help to ensure quality and control costs. If for any reason undesirable or unacceptable work products are being produced, our Project Manager, and all other pertinent design personnel, will **immediately schedule** a meeting for discussion with the County Project Manager and pertinent staff. We will also reemphasize the standard expected to the team working on that product. Experienced staff will guide them to rectify any deficiency; however, if the problem persists, we will bring in additional resources to complete the task. The **BES** Team has provided services on numerous projects and **will work with the County to resolve any and all issues in an expeditious fashion** to satisfy all parties. **BES** understands that this project is an opportunity to show our capabilities, and will satisfy the County to ensure future work.

BES is committed to meet if not beat the County's schedule while staying within the budget requirements when delivering these projects with the highest quality. The experience of our team gives us the ability to fulfill this commitment. **BES** and our subconsultants have staff ready for additional backup staff in the event of unforeseen circumstances. Our Project Manager, **Dilip**, will utilize the following guidelines to ensure delivery of a successful project:

- Identify the appropriate team members to efficiently deliver each assignment
- Maintain the same team members on each project assignment from start to finish
- Conduct weekly progress team meetings
- Proactively anticipate potential schedule or budget challenges and resolve them in advance

A clearly defined scope is essential to accurately estimate the task assignment budget and establish the project schedule. Upon being selected, we will assist the County in refining the scope of work. We will develop a detailed Project Work Plan for this project that describes the scope, schedule with milestones, and Quality Control Plan. **Dilip** will be involved in these discussions with the County and our internal design team. Minutes of the discussions will be recorded and circulated amongst participants of the discussion. This will not only facilitate a clear understanding of the schedule and budget requirements, but will also inform external project reviewers regarding the parameters of the project. As soon as the schedule and budget are approved and provided, **Dilip** will allocate appropriate resources to meet the schedule. This includes buy-in from our subconsultants, ensuring applicable software is used and appropriate levels of production staff are utilized. Typically, all our subconsultants have accommodated the schedules and budget asked of them in the past. If for any reason additional resources are needed to stay on schedule, we will add other staff as needed after obtaining necessary approval from the County.

SECTION F: QUALITY/ COST CONTROLS

Accuracy is the key to cost-effective work. Avoiding errors or repetition of work will enable us to meet both the schedule and the budgetary requirements of the project. **BES** is committed to maintaining meticulous control of the schedule using Microsoft Project Critical Path Method. **Dilip** will be tracking progress made on a project and comparing it to the baseline schedule periodically. Each project schedule will be broken down into appropriate tasks, aligned with the project's work breakdown structure, updated at least biweekly to depict actual progress, and reviewed at each project team meeting.

Similarly, at each predetermined critical phase submittal of an assignment, **cost estimates will be prepared** to ensure that it is in line with the County budget to minimize scope creep and ensure the project can be delivered within budget. The **most recent cost data from reliable sources will be utilized to estimate construction costs**. Deviations from budgeted construction costs will be immediately reported to the County Project Manager so appropriate action can be taken.

For each assignment, we will develop an appropriate scope to satisfy the budget constraints. Our project managers input each Project Plan that identifies each task and its budgeted man-hours. Staff timesheets are input electronically on a weekly basis, so up-to-date project costs are available. We will provide comprehensive project reports that include hours spent vs. budgeted and job costs incurred vs. budgeted. We are committed to consistently maintaining precise budgets on all assignments.

CAPES Evaluation Information			
Evaluation Date:	August 28, 2009		
Project:	TTF 3a Signalization Traffic Engineering Reports, Group 3a4		
Firm:	Baslee Engineering Solutions, Inc		
Work Order Number:	SBE-03-06-0755		
Phase:	Design/Other	Evaluation Type:	Final
RATING: UNACCEPTABLE (0-15) MARGINAL (16-18) ACCEPTABLE (19-22) SUPERIOR (23-25)			
Was Firm's initial fee proposal commensurate with the project's scope of services?			
Rating:	25		
Was Firm responsive to its contractual obligations and County's requirements by providing adequate staff and resources to respond to the project and prosecute the work without delay?			
Rating:	23		
Did Firm provide qualified technical/professional staff?			
Rating:	23		
Did Firm provide a work product or service in conformance with contract requirements?			
Were reports and recommendation clear and concise?			
Rating:	23		
Did Firm communicate adequately with County including any unforeseen conditions and problems?			
Rating:	25		

The success of any project depends on utilizing the right personnel for each assignment who possess the required technical knowledge, successful project experience, and collaboration skills. **BES** has assigned personnel with a good blend of experience and skills in various disciplines. Our engineers have delivered efficient service on past assignments. This has allowed **BES** to earn superior grades on these tasks.

BES is committed to close collaboration from the start of each assignment to enhance efficiency and minimize delays. Our focus is always on the end result to be concise and have clear communications with the County staff, internal and external project team members, and contractors. **BES** has weekly in-house staff meetings to address project progress and resource requirements.

Our work with other governmental agencies will show that we have repeatedly demonstrated our ability to complete assignments on time and within budget, and to be proactively aware of and promptly responsive to their needs.

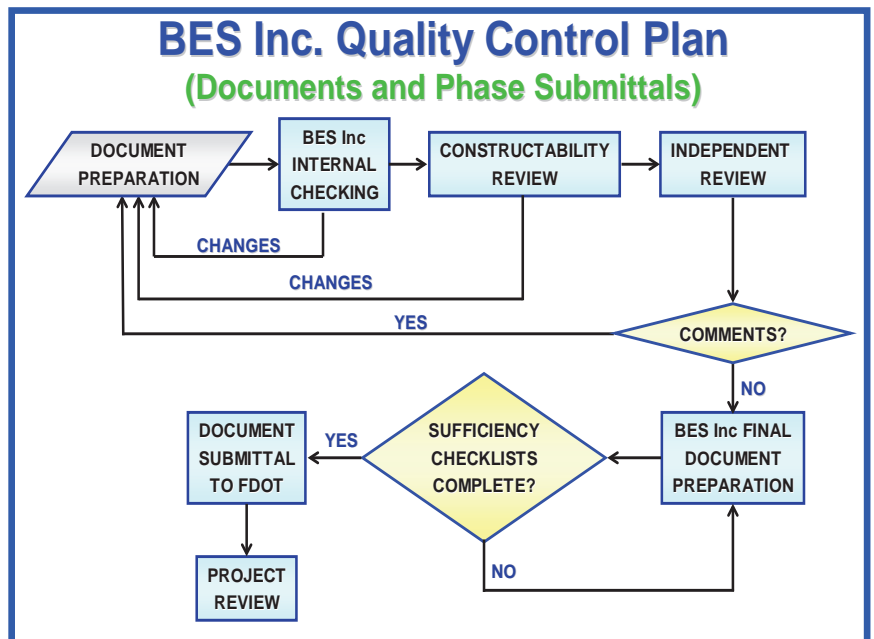
SECTION F: QUALITY/ COST CONTROLS

OUR QA/QC PROCESS

Robert Woods, PE will be heading up our QA/QC for this project. Our rigorous adherence to quality control not only ensures the client receives quality plans and reduced construction claims but reduces the liability of errors and omissions. As a result of the mutual benefits of a good quality control/quality assurance program, **BES** has been implementing its QC program on all of its deliverables. Our quality control begins with well trained, experienced engineers and staff who utilize checklists and design aids. **BES** will provide a specific Quality Control document for each project or task assigning various staff members to their Quality Control roles.

Three separate steps then follow: **Internal Check, External Check, and Quality Assurance.**

INTERNAL CHECK: The designer or engineer creates the plan, document, or calculation. Prior to embossing the document with the Quality Control Tracking stamp as shown below, the designer/engineer reviews their own work with the checklists and design aids. Corrections are made as required. The document is then stamped and signed in the Document Ready box.



EXTERNAL CHECK: This is performed by an experienced engineer who has little or no day-to-day involvement with the project. This allows for perspective and basic questioning. The checker will **yellow** out all items on the plans if correct, provide notes in **blue**, and use **red** for corrections. Again, checklists and design aids are used in this stage. Often this stage consists of a dual review: one for basic format and spelling and the second for adherence to engineering standards. The document is then returned to the Engineer-of-Record for concurrence of correction, additional information, and/or discussion. The designer makes the changes using a **yellow check (✓)**. Another staff member confirms that the changes have been made and uses an **orange check (✓)**. A new print or plot is made and is given back to the checker with the marked-up set to verify that the changes were made and it has plotted correctly. Another thorough check is performed and the QC stamp is completed with signatures and dates.

The document is then returned to the Engineer-of-Record for concurrence of correction, additional information, and/or discussion. The designer makes the changes using a **yellow check (✓)**. Another staff member confirms that the changes have been made and uses an **orange check (✓)**. A new print or plot is made and is given back to the checker with the marked-up set to verify that the changes were made and it has plotted correctly. Another thorough check is performed and the QC stamp is completed with signatures and dates.

QUALITY ASSURANCE: Prior to any submittal, all plans and documents are again reviewed in respect that all quality control procedures have been followed, that subconsultant work matches **BES** plans, and that all quantities and estimates are updated and match the plans. A triple check of plan quantities, engineer's estimate, and computation book is made to verify consistency.

QUALITY CONTROL TRACKING STAMP			
ACTIVITY	DATE	PRINT NAME	SIGNATURE
READY FOR QC			
QC REVIEW Red = Corrections Blue = Notes			
CONCURRENCE/NON CONCURRENCE Green			
CHANGES MADE Yellow			
CHANGES VERIFIED Orange			
BES Inc (www.besinceng.com)			

SECTION G: QUALIFICATION SUMMARY

WHY BES?

Our team has designed over 10 miles of sidewalks the last six years. We are aware of challenges related to meeting ADA requirements while minimizing drainage, utility, and R/W impacts. Our staff has multiple Engineers of Record that have designed sidewalk/trail projects. We use the latest software to accurately design/calculate transportation elements involved with sidewalks such as curb ramps, pedestrian safety features, and the earthwork impacts. We also have a meticulous QC plan to eliminate errors. Our proven coordination and communication processes have helped projects meet our clients' quality, budget, and schedule expectations on projects. We have delivered projects that have been built with very few Requests for Information (RFIs) from Contractors.

Project Management is the application of knowledge, skills, tools, and techniques to project activities to meet or exceed stakeholder needs and expectations for the project. Our goal is to implement consistent and efficient Project Management practices that deliver safe transportation projects. Our Project Managers have the skills to track and implement changes in policies and procedures of the Local Governments, South Florida Water Management District (SFWMD), and the Florida Department of Transportation (FDOT), as well as the local businesses and stakeholders of the region. **BES** has served the industry for over 19 years and our professionals have successfully completed many projects that included plan production, permitting, and construction administration.

LAP PROCESS

Our staff has taken all the LAP trainings offered by the FDOT and are well versed in the requirements to successfully complete the LAP Construction Checklist and provide Design and Post Design Services. The Construction Checklist is a requirement by FDOT to ensure that all FHWA and State rules and regulations are followed. The checklist defines the required documents and/or information needed for the project, the Local Agency responsibilities, the District responsibilities, and where the requirements can be found. We will create the required LAP Construction Checklist.

BES will review the local agency's project and boilerplate construction bid package and contract, bringing those documents into compliance with the applicable federal requirements. This process involves removing conflicting language from the bid package and contract and then combining the documents with either the LAP specifications package developed by Central Office or building a package that is acceptable to the local agency that also meets the federal requirements. This often involves a review and presentation of our proposed package to local agency staff to educate and obtain their concurrence.

We will attend and participate in the LAP project kick-off meetings, providing LAP process guidance to the local agency. Additionally, we will guide the local agency through the LAP project development process and explain requirements that make changes to their standard project development process and bid package template necessary.

We will utilize vast LAPIT (Local Agency Program Information Tool) experience to enter all required project documents into that system, thus meeting the requirement and ensuring that each project is prepared for the state and/or federal audits that may occur. We will also ensure that all project documents are loaded to LAPIT prior to the beginning of the pass-the-torch process to ensure a smooth transition from design to construction.

SECTION G: QUALIFICATION SUMMARY

WHAT MAKES US UNIQUE?

Scheduling

Our team has experience with Microsoft Project as well as Oracle Primavera to create and track schedules. It is important to establish a reasonable schedule immediately after the contract has been executed. The schedule must include all the activities that are not only essential to the design, but to the permitting and utility coordination processes. A schedule will be tracked daily and is a living document that will be available to the County when requested.

Coordination

Weekly teleconferences will be held with all of the **BES** staff and subconsultant staff to ensure the project is on schedule, and we will invite the County's Project Manager to participate in those meetings to ensure that we are meeting the County's needs and their concerns are addressed early in the design. Progress reports will be supplied to the County monthly. Reports will include the activities completed within that month, but also those activities that are anticipated to be completed the next month. We will keep records of every telephone conversation and email for the project to ensure that the needs of all are addressed and documented.

Project Resources & Staff Availability

Our proposed professional staff will be more than 75% available to this Hernando County project. With our current workload and staffing, we can increase resources at any time during the projected schedule.

Training

BES continually strives to stay up to date on the latest Design Trends and Technology within the civil engineering industry. We annually provide training to all staff members through various design conferences, expos, professional organizational meetings, and hands-on CADD Training.

Technology

BES continually invests in significant upgrades to our computer equipment and related software in order to efficiently produce engineering documents. **BES** has over 15 networked Engineering and CADD workstations supported by a Windows server. Our networked system features a dedicated high-speed internet connection that supports large file transfers, a website (www.besinceng.com), and company-wide email services.

SECTION H: LICENSES

BES INC Company Licenses

Licensee

Name:	BASLEE ENGINEERING SOLUTIONS (BES), INC.	License Number:	9835
Rank:	Registry	License Expiration Date:	
Primary Status:	Current	Original License Date:	10/03/2003

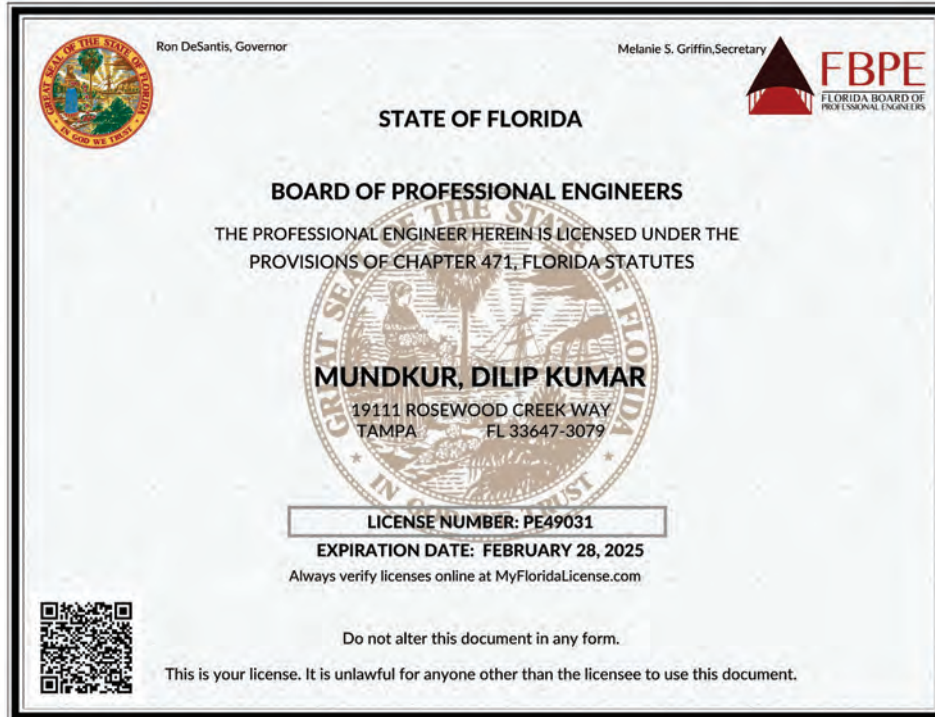
Related License Information

License Number	Status	Related Party	Relationship Type	Relation Effective Date	Rank	Expiration Date
49031	Current, Active	MUNDKUR, DILIP KUMAR	Registry		Professional Engineer	02/28/2025



SECTION H: LICENSES

BES INC Individual Licenses



This is a professional engineer license for Dilip Kumar Mundkur. The license is issued by the Florida Board of Professional Engineers (FBPE) under the State of Florida. It includes the license number PE49031 and an expiration date of February 28, 2025. The licensee's address is 19111 Rosewood Creek Way, Tampa, FL 33647-3079. The license features the state seal of Florida, the FBPE logo, and a QR code for verification.

Ron DeSantis, Governor

Melanie S. Griffin, Secretary

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

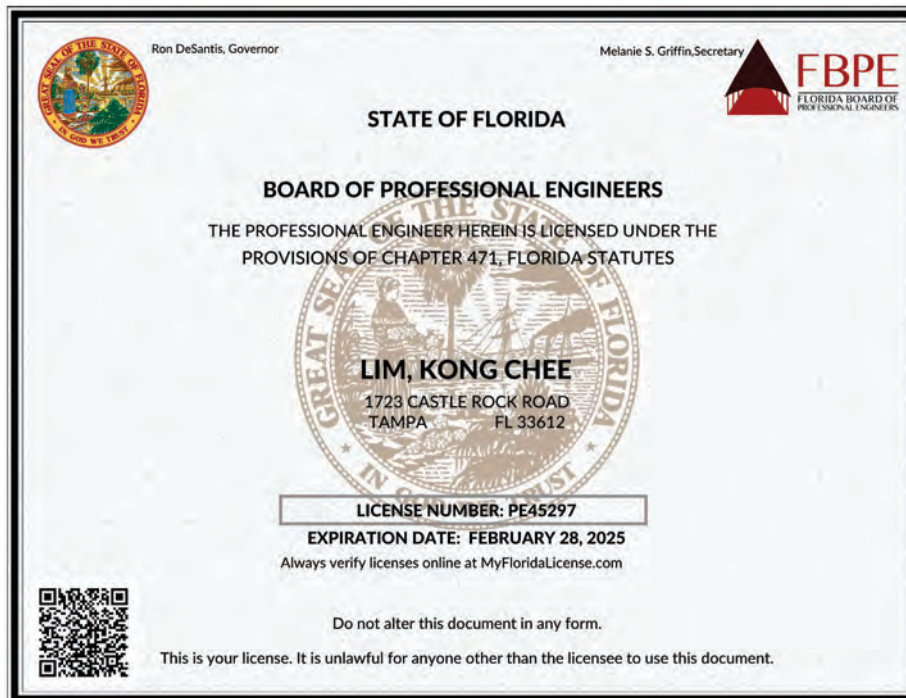
MUNDKUR, DILIP KUMAR
19111 ROSEWOOD CREEK WAY
TAMPA FL 33647-3079

LICENSE NUMBER: PE49031
EXPIRATION DATE: FEBRUARY 28, 2025

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.



This is a professional engineer license for Kong Chee Lim. The license is issued by the Florida Board of Professional Engineers (FBPE) under the State of Florida. It includes the license number PE45297 and an expiration date of February 28, 2025. The licensee's address is 1723 Castle Rock Road, Tampa, FL 33612. The license features the state seal of Florida, the FBPE logo, and a QR code for verification.

Ron DeSantis, Governor

Melanie S. Griffin, Secretary

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

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LIM, KONG CHEE
1723 CASTLE ROCK ROAD
TAMPA FL 33612

LICENSE NUMBER: PE45297
EXPIRATION DATE: FEBRUARY 28, 2025

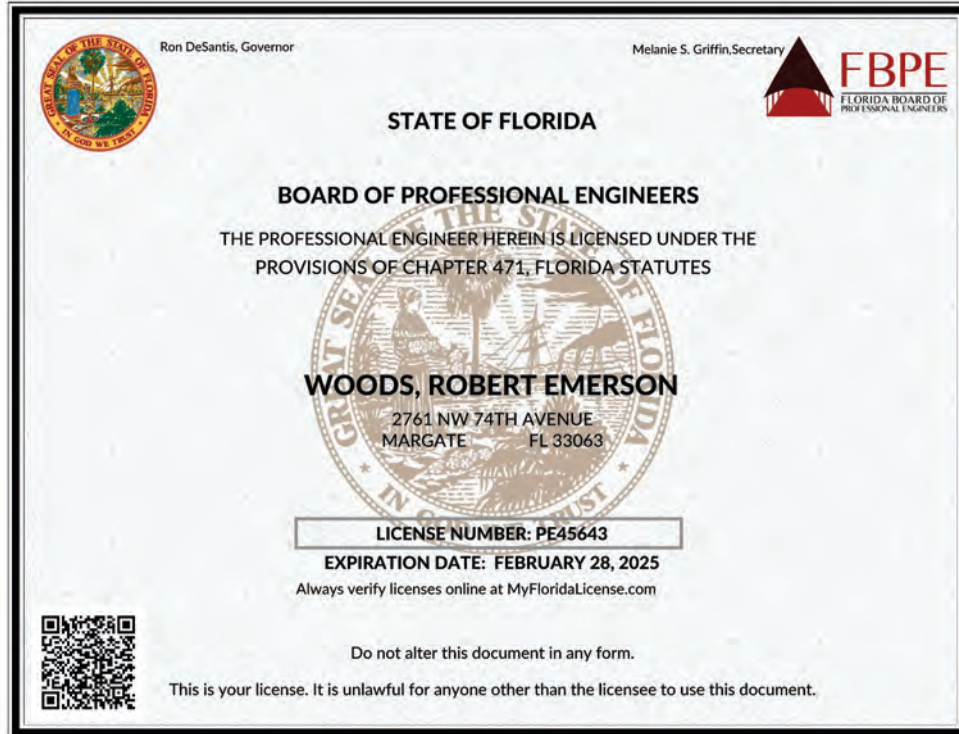
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SECTION H: LICENSES

BES INC Individual Licenses



This is a professional engineer license for Robert Emerson Woods. The license is issued by the Florida Board of Professional Engineers (FBPE) under the State of Florida. It includes the license number PE45643 and an expiration date of February 28, 2025. The licensee's address is 2761 NW 74th Avenue, Margate, FL 33063. The license features the state seal of Florida, the FBPE logo, and a QR code for verification.

Ron DeSantis, Governor

Melanie S. Griffin, Secretary

STATE OF FLORIDA

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

WOODS, ROBERT EMERSON
2761 NW 74TH AVENUE
MARGATE FL 33063

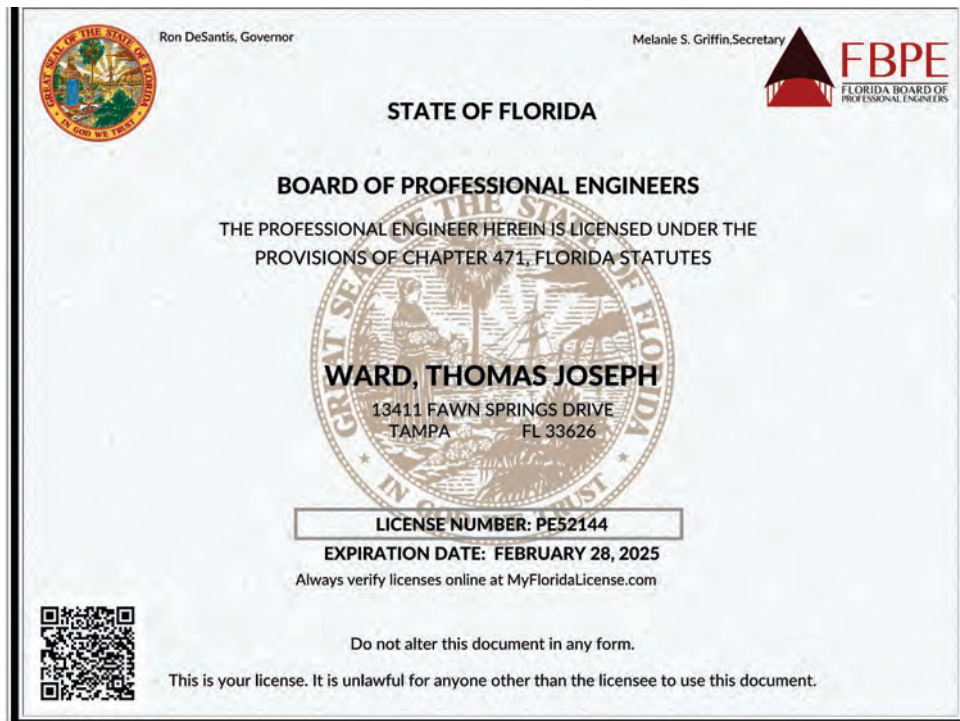
LICENSE NUMBER: PE45643

EXPIRATION DATE: FEBRUARY 28, 2025

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Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.



This is a professional engineer license for Thomas Joseph Ward. The license is issued by the Florida Board of Professional Engineers (FBPE) under the State of Florida. It includes the license number PE52144 and an expiration date of February 28, 2025. The licensee's address is 13411 Fawn Springs Drive, Tampa, FL 33626. The license features the state seal of Florida, the FBPE logo, and a QR code for verification.

Ron DeSantis, Governor

Melanie S. Griffin, Secretary

STATE OF FLORIDA

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BOARD OF PROFESSIONAL ENGINEERS

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WARD, THOMAS JOSEPH
13411 FAWN SPRINGS DRIVE
TAMPA FL 33626

LICENSE NUMBER: PE52144

EXPIRATION DATE: FEBRUARY 28, 2025


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SECTION H: LICENSES

Cumbey & Fair Licenses



Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

License No.: **LB2168**
Expiration Date: February 28, 2023


Professional Surveyor and Mapper Business License
Under the provisions of Chapter 472, Florida Statutes

CUMBey & FAIR, INC
2463 ENTERPRISE RD
CLEARWATER, FL 34623-1702

Nicole Fried

NICOLE "NIKKI" FRIED
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.



Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

License No.: **LS6494**
Expiration Date: February 28, 2023

Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes

PATRICK MCCORMACK
2463 ENTERPRISE RD
CLEARWATER, FL 33763-1702

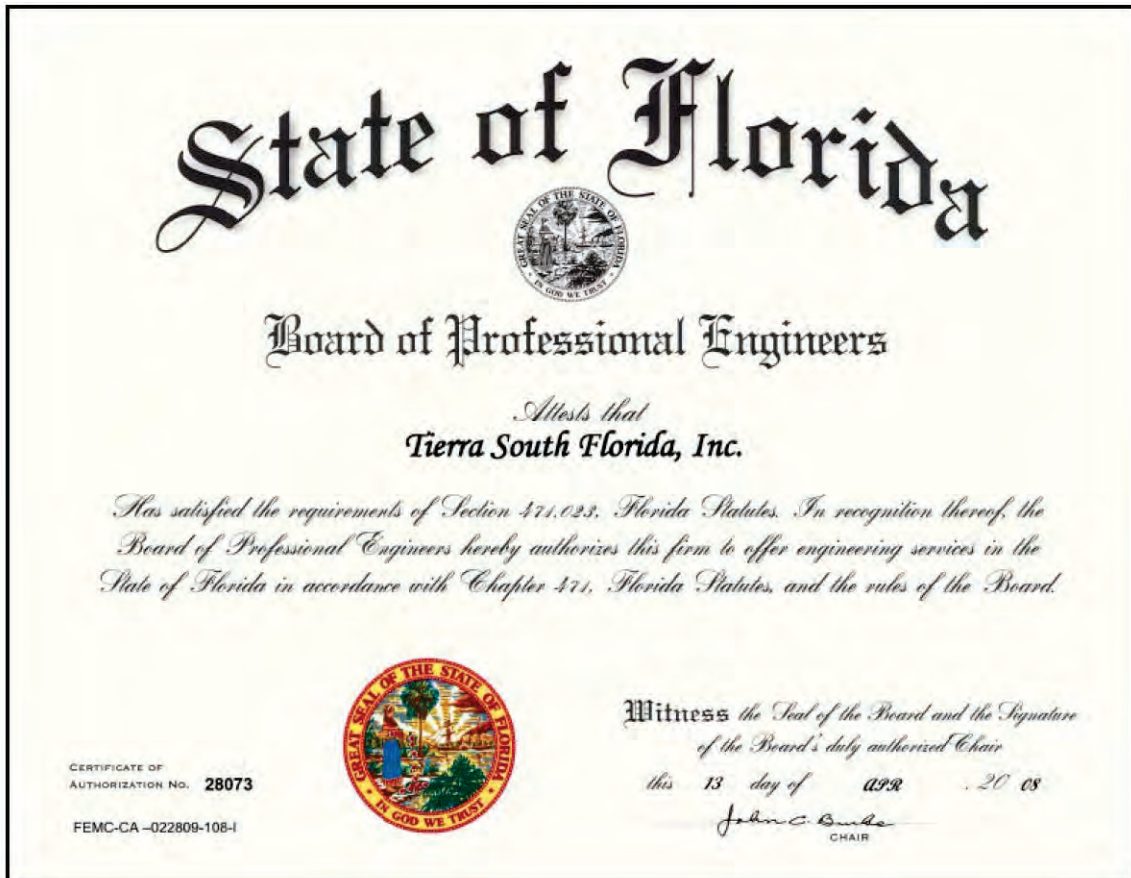
Nicole Fried

NICOLE "NIKKI" FRIED
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.

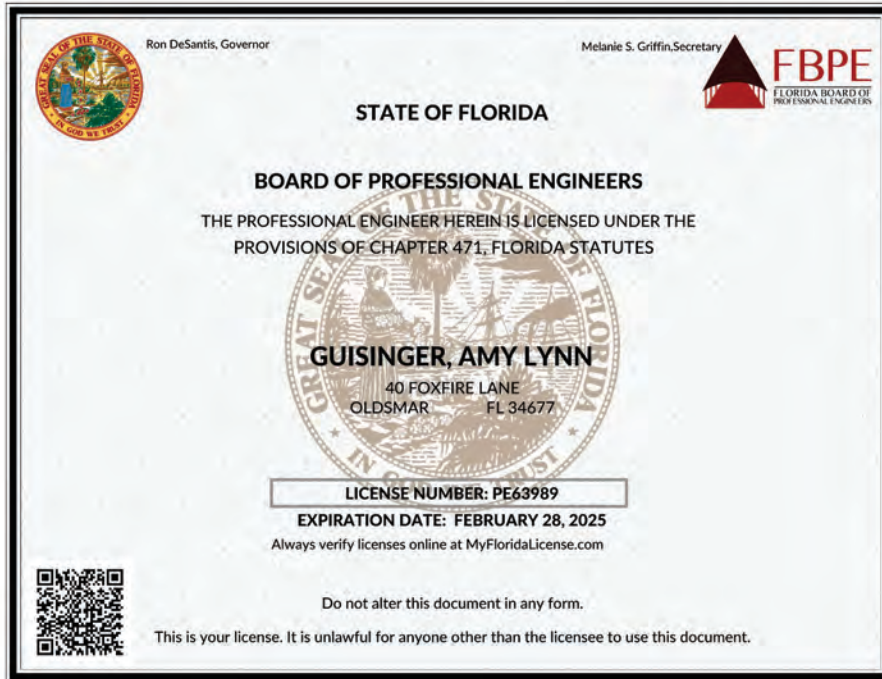
SECTION H: LICENSES

Tierra Company License



SECTION H: LICENSES

Tierra Individual Licenses



This is a professional engineer license for Amy Lynn Guisinger. The license is issued by the Florida Board of Professional Engineers (FBPE) under the State of Florida. It includes the license number PE63989 and an expiration date of February 28, 2025. The licensee's address is 40 Foxfire Lane, Oldsmar, FL 34677. The license features the state seal of Florida, the FBPE logo, and a QR code for verification.

Ron DeSantis, Governor

Melanie S. Griffin, Secretary

STATE OF FLORIDA

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

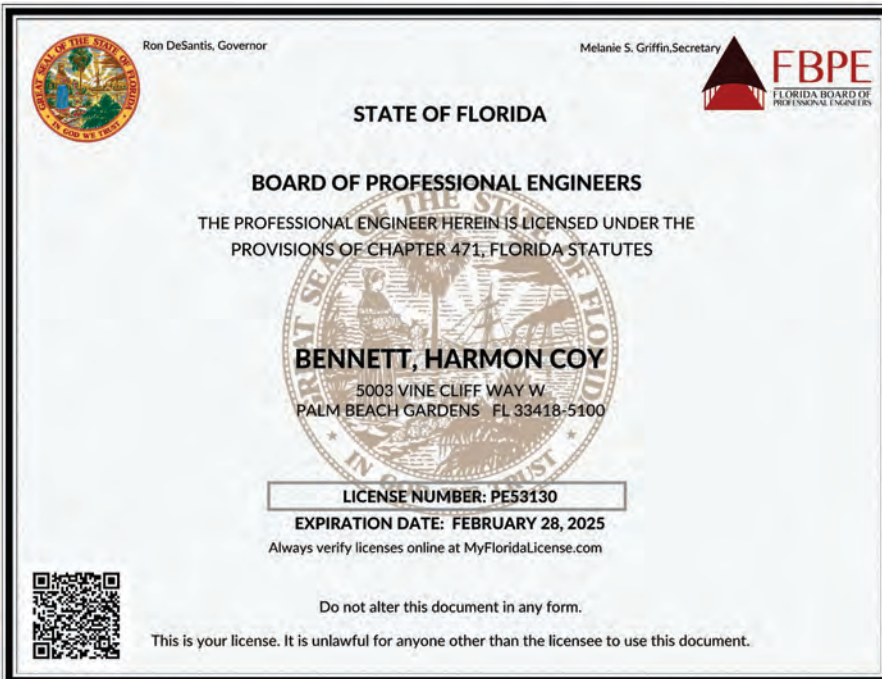
GUISINGER, AMY LYNN
40 FOXFIRE LANE
OLDSMAR FL 34677

LICENSE NUMBER: PE63989
EXPIRATION DATE: FEBRUARY 28, 2025

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

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This is a professional engineer license for Harmon Coy Bennett. The license is issued by the Florida Board of Professional Engineers (FBPE) under the State of Florida. It includes the license number PE53130 and an expiration date of February 28, 2025. The licensee's address is 5003 Vine Cliff Way W, Palm Beach Gardens, FL 33418-5100. The license features the state seal of Florida, the FBPE logo, and a QR code for verification.

Ron DeSantis, Governor

Melanie S. Griffin, Secretary

STATE OF FLORIDA

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

BENNETT, HARMON COY
5003 VINE CLIFF WAY W
PALM BEACH GARDENS FL 33418-5100

LICENSE NUMBER: PE53130
EXPIRATION DATE: FEBRUARY 28, 2025

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SECTION H: LICENSES

Earth Resources Company License

Detail by Entity Name
Florida Profit Corporation
EARTH RESOURCES, INC.

Filing Information
Document Number P05000121938
FEI/EIN Number 20-3422039
Date Filed 09/02/2005
State FL
Status ACTIVE

Principal Address
3411 W. DORCHESTER ST.
TAMPA, FL 33611

Changed: 01/31/2012

Mailing Address
3411 W. DORCHESTER ST.
TAMPA, FL 33611

Changed: 01/31/2012

Registered Agent Name & Address
SCOTT, NANCY
3411 DORCHESTER ST.
TAMPA, FL 33611

Officer/Director Detail
Name & Address

Title P

SCOTT, NANCY
3411 DORCHESTER ST.
TAMPA, FL 33611



CORPORATE AFFIDAVIT

(To be filled in and executed if the Vendor/Contractor is a Corporation)

STATE OF FLORIDA]

COUNTY OF HERNANDO]

Dilip K. Mundkur being duly sworn, deposes and says that he is secretary of

Baslee Engineering Solutions (BES), Inc., a corporation organized and existing under and by

virtues of the laws of the State of Florida, and having its principal office at:

19108 Wood Sage Drive, Tampa, FL 33647 (Address)

Affiant further says that he is familiar with the records, minute books and bylaws of

Baslee Engineering Solutions (BES), Inc. (Name of Corporation) of the

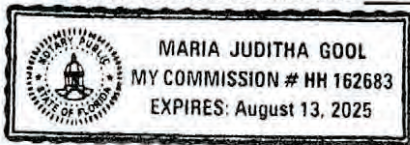
corporation, is duly authorized to sign President (Title)

the Bid for Hernando County Two (2) LAP Projects, 22RG0018/PH for said corporation by virtues of:
bylaws of the corporation.

(State whether a provision of bylaws or a Resolution of the Board of Directors. If by Resolution, give date of adoption).


Affiant

Sworn to before me this 15 day of FEBRUARY, 2023.




Notary Public

This document should be completed and returned with your submittal.

Request for Taxpayer Identification Number and Certification

**Give Form to the
 requester. Do not
 send to the IRS.**

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type. See Specific Instructions on page 3.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. Baslee Engineering Solutions (BES), Inc.		
	2 Business name/disregarded entity name, if different from above BES Inc		
	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.		4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
	<input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input checked="" type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate		
	<input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____ Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.		
	<input type="checkbox"/> Other (see instructions) ▶ _____		
	5 Address (number, street, and apt. or suite no.) See instructions. 19108 Wood Sage Drive		Requester's name and address (optional)
6 City, state, and ZIP code Tampa, FL 33647			
7 List account number(s) here (optional)			

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number								
or								
Employer identification number								
2	0	-	0	2	4	2	0	2 8

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of U.S. person ▶	Date ▶ 1/11/2023
------------------	----------------------------	------------------

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

**CERTIFICATION FOR DISCLOSURE OF LOBBYING ACTIVITIES
ON FEDERAL-AID CONTRACTS
(Compliance with 49CFR, Section 20.100 (b))**

The prospective participant certifies, by signing this certification, that to the best of his or her knowledge and belief:

(1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities", in accordance with its instructions. (Standard Form-LLL can be obtained from the Florida Department of Transportation's Professional Services Administrator or Procurement Office.)

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

Name of Consultant:

By: Dilip K. Mundkur Date: 2/21/2023 Authorized Signature



Title: President

ATTACHMENT 12


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DISCLOSURE OF LOBBYING ACTIVITIES

375-030-34
PROCUREMENT
02/16

Is this form applicable to your firm?

YES NO

If *no*, then please complete section 4 below for "Prime"

1. Type of Federal Action: a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	2. Status of Federal Action: a. bid/offer/application b. initial award c. post-award	3. Report Type: a. initial filing b. material change For Material Change Only: Year: _____ Quarter: _____ Date of last report: _____ (mm/dd/yyyy)
4. Name and Address of Reporting Entity: <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, <i>if known:</i> <u>Baslee Engineering Solutions (BES), Inc.</u> <u>19108 Wood Sage Drive</u> <u>Tampa, FL 33647</u> Congressional District, <i>if known:</i> 4c _____		5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: _____ _____ _____ Congressional District, <i>if known:</i> _____
6. Federal Department/Agency: _____ _____	7. Federal Program Name/Description: _____ _____ CFDA Number, <i>if applicable:</i> _____	
8. Federal Action Number, if known: _____	9. Award Amount, if known: \$ _____	
10. a. Name and Address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i> _____ _____ _____	b. Individuals Performing Services <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i> _____ _____ _____	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: <u></u> Print Name: <u>Dilip K. Mundkur</u> Title: <u>President</u> Telephone No.: <u>(813) 985-7800</u> Date (mm/dd/yyyy): <u>02/21/2023</u>	
Federal Use Only:		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

ATTACHMENT 14

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
TRUTH IN NEGOTIATION CERTIFICATION

375-030-30
PROCUREMENT
05/14

Pursuant to Section 287.055(5)(a), Florida Statutes, for any lump-sum or cost-plus-a-fixed fee professional services contract over the threshold amount provided in Section 287.017, Florida Statutes for CATEGORY FOUR, the Department of Transportation (Department) requires the Consultant to execute this certificate and include it with the submittal of the Technical Proposal, or as prescribed in the contract advertisement.

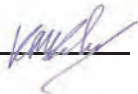
The Consultant hereby certifies, covenants, and warrants that wage rates and other factual unit costs supporting the compensation for this project's agreement are accurate, complete, and current at the time of contracting.

The Consultant further agrees that the original agreement price and any additions thereto shall be adjusted to exclude any significant sums by which the Department determines the agreement price was increased due to inaccurate, incomplete, or noncurrent wage rates and other factual unit costs. All such agreement adjustments shall be made within (1) year following the end of the contract. For purposes of this certificate, the end of the agreement shall be deemed to be the date of final billing or acceptance of the work by the Department, whichever is later.

Baslee Engineering Solutions (BES), Inc.

Name of Consultant

By: Dilip K. Mundkur, President



2/13/2023

Date

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION,
INELIGIBILITY AND VOLUNTARY EXCLUSION-
LOWER TIER COVERED TRANSACTIONS FOR FEDERAL AID CONTRACTS**
(Compliance with 2 CFR Parts 180 and 1200)

It is certified that neither the below identified firm nor its principals are presently suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

Name of Consultant/Contractor: Baslee Engineering Solutions (BES), Inc.

By: Dilip K. Mundkur

Date: 2/13/2023

Title: President

Instructions for Certification

Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.



Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwanee Street
Tallahassee, FL 32399-0450

KEVIN J. THIBAUT, P.E.
SECRETARY

12/29/2020

RE: DBE AFFIRMATIVE ACTION PLAN APPROVAL

The Disadvantaged Business Enterprise Affirmative Action Plan submitted by:

BASLEE ENGINEERING SOLUTIONS (BES) INC

has been approved for a period of three years. Please update and submit a new plan before the expiration date shown below. If you do not plan to work on any Florida Department of Transportation Projects, it will not be necessary for you to submit a new plan.

If you need any additional information, please contact me at (850) 414-4747.

Sincerely,

A handwritten signature in black ink, appearing to read "Stefan Kulakowski". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Stefan Kulakowski
State Contract Compliance Administrator
Equal Opportunity Office

AFFIRMATIVE ACTION PLAN EXPIRATION: 12/29/2023

This plan is one of the requirements to bid on contracts for the Florida Department of Transportation. This is not approval for Unified Certification Program Disadvantaged Business Enterprise (UCP/DBE) Certification. For additional information in becoming a DBE, contact the Certification Section at (850)414-4747.

Baslee Engineering Solutions, Inc. (BES) hereafter referred to as “the Company” or “this Company” has adopted this policy and plan.

Date: 12/29/2020 By:  Signature
 Corporate FEID No.: 200242028 Dilip K. Mundkur / President Printed name & title

DISADVANTAGED BUSINESS ENTERPRISE (‘DBE’) AFFIRMATIVE ACTION PLAN

POLICY STATEMENT

It is the policy of this Company that disadvantaged businesses, as defined by 49 CFR Part 26, Subpart D and implemented under Rule Chapter 14-78, F.A.C., shall have the opportunity to participate as subcontractors and suppliers on all contracts awarded by the Florida Department of Transportation (FDOT).

The requirements of Rule Chapter 14-78, F.A.C., shall apply to all contracts entered into between FDOT and the Company. Subcontractors and/or suppliers to the Company will also be bound by the requirements of Rule Chapter 14-78 F.A.C. and its subcontractors shall take all necessary and reasonable steps in accordance with Chapter 14-78, F.A.C., to ensure that disadvantaged businesses have the opportunity to compete and perform work contracted with FDOT. The Company and its subcontractors shall not discriminate on the basis of race, color, religion, national origin, disability, sex, or age in the administration of contracts with FDOT. The Company has designated and appointed a Liaison Officer to develop, maintain, and monitor the DBE Affirmative Action Plan implementation. The Liaison Officer will be responsible for disseminating this policy statement throughout the Company and to disadvantaged controlled businesses. This statement is posted on notice boards of the Company.

I. DESIGNATION OF LIAISON OFFICER

The Company will aggressively recruit disadvantaged businesses as subcontractors and suppliers for all contracts with FDOT. The Company has appointed a Liaison Officer to develop and maintain this Affirmative Action Plan in accordance with the requirements of Rule Chapter 14-78, F.A.C. The Liaison Officer will have primary responsibility for developing, maintaining, and monitoring the Company's utilization of disadvantaged subcontractors in addition to the following specific duties:

- (1) The Liaison Officer shall aggressively solicit bids from disadvantaged business subcontractors for all FDOT contracts;
- (2) The Liaison Officer will submit all records, reports, and documents required by FDOT, and shall maintain such records for a period of not less than three years, or as directed by any specific contractual requirements of FDOT.

The following individual has been designated Liaison Officer with responsibility for implementing the Company's affirmative action program in accordance with the requirements of FDOT.

DBE LIAISON OFFICER:

NAME: Dilip K. Mundkur
TITLE: President
EMAIL: dilip@besinceng.com
ADDRESS: 5328 Primrose Lake Dr./ Ste B / Tampa, FL 33647

II. AFFIRMATIVE ACTION METHODS

In order to formulate a realistic Affirmative Action Plan, the Company has identified the following known barriers to participation by disadvantaged subcontractors, before describing its proposed affirmative action methods:

1. Lack of qualified disadvantaged subcontractors in our specific geographical areas of work;
2. Lack of certified disadvantaged subcontractors who seek to perform FDOT work;
3. Lack of interest in performing on FDOT contracts;
4. Lack of response when requested to bid;
5. Limited knowledge of FDOT plans and specifications to prepare a responsible bid.

In view of the barriers to disadvantaged businesses stated above, it shall be the policy of the Company to provide opportunity by utilizing the following affirmative action methods to ensure participation on the contracts with FDOT will:

1. Provide written notice to all certified DBE subcontractors in the geographical area where the work is to be subcontracted by the Company;
2. Advertise in minority focused media concerning subcontract opportunities with the Company;
3. Select portions of work to be performed by DBEs in order to increase the likelihood of meeting the state's goals (including, where appropriate, breaking down contracts into economically feasible units to facilitate DBE participation);
4. Provide adequate information about the plans, specifications, and requirements of the contract, not rejecting subcontractors without sound reasons based on a thorough investigation of their capabilities;
5. Waive requirements of performance bonds where it is practical to do so;
6. Attend pre-bid meetings held by FDOT to apprise disadvantaged subcontractors of opportunities with the Company;
7. Follow up on initial solicitations of interest to DBE subcontractors to determine with certainty whether the DBE company is interested in the subcontract opportunity.
8. Utilize FDOT's DBE Supportive Services providers for assistance in identifying and notifying DBE's of contracting opportunities.

The Company understands that this list of affirmative action methods is not exhaustive and will include additional approaches after having established familiarity with the disadvantaged subcontracting community and/or determined the stated approaches to be ineffective.

III. IMPLEMENTATION

The Company will make every effort to

1. Meet state goals by utilizing its affirmative action methods.
2. Express good faith by seeking to utilize DBE subcontractors where work is to be subcontracted.
3. Ensuring that contracted DBE's perform a commercially useful function as evidenced by their execution of a distinct element of work with its own workforce and the carrying out responsibilities by actually performing, managing and supervising the work involved.

IV. REPORTING

The Company shall keep and maintain such records as are necessary to determine the Company's compliance with its DBE Affirmative Action Plan. The Company will design its record keeping system to indicate:

1. The number of DBE subcontractors and suppliers used by the Company, identifying the items of work, materials and services provided;
2. The efforts and progress being made in obtaining DBE subcontractors through local and community sources;
3. Documentation of all contracts, to include correspondence, telephone calls, newspaper advertisements, etc., to obtain DBE participation on all FDOT projects;
4. The Company shall comply with FDOT's requirements regarding payments to subcontractors including DBEs for each month (estimate period) in which the companies have worked.

V. DBE DIRECTORY

The Company will utilize the DBE Directory published by the FDOT.

ADDENDUM NO. ONE (1)

TO
THE CONTRACT DOCUMENTS FOR

**PROFESSIONAL ENGINEERING SERVICES TWO (2) LAP PROJECTS, FREEPORT DRIVE
SIDEWALKS AND EASTSIDE ELEMENTARY SIDEWALKS**

IN
HERNANDO COUNTY, FLORIDA

SOLICITATION NO. 22-RG0018/PH

PROPOSAL DUE DATE: FEBRUARY 22, 2023 AT 3:00 PM

NOTICE

PROPOSERS ARE REQUIRED TO ACKNOWLEDGE RECEIPT OF THIS ADDENDUM BY SIGNATURE AT THE BOTTOM OF THIS ADDENDUM IN THE SPACE PROVIDED AND RETURNED AT THE TIME OF THE PROPOSAL DUE DATE.

QUESTIONS AND ANSWERS

1. **Question:** The Corporate Affidavit has some language we'd like clarification on. One section of the form reads as follows: "Affiant further says that he is familiar with the records, minute books and bylaws of ____ (Name of Corporation) of the corporation, is duly authorized to sign ____ (Title) the bid for ____ for said corporation by virtues of ____." Is "Title" referring to the Affiant's title in the firm? If so it looks like the order of the language is scrambled. If "Title" refers to something else, can you clarify?

Answer: "Title" refers to the authorized signer's personnel title.

2. **Question:** The instructions for "Section D Project Team" indicate that we should have a maximum of 7 team members with a maximum of 3 pages devoted to each. Is this to be understood that Section D has a 21-page maximum overall?

Answer: No, just the resumes and work experience for each of the seven (7) team members are limited to three (3) pages each.

3. **Question:** Will a graphic be provided to confirm the sidewalk routes?

Answer: See attached.

4. **Question:** Does the prime consultant need to qualify in all three FDOT Work Groups (3.1, 8.1, and 8.2) that will be used for the project?

Answer: Sub-Contractors can be utilized to meet the FDOT Work Group Classifications.

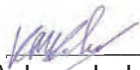
5. **Question:** Are there any preliminary plans or concepts available for the project?

Answer: No.

6. Question: Are there any Roadway As-Built Plans available for the project corridor?

Answer: No.

BOARD OF COUNTY COMMISSIONERS
HERNANDO COUNTY



Acknowledged
Dilip K. Mundkur, President, BES



for Carla Rossifer-Smith
Purchasing and Grants Manager

Issued: February 3, 2023

ADDENDUM NO. TWO (2)

TO
THE CONTRACT DOCUMENTS FOR

**PROFESSIONAL ENGINEERING SERVICES TWO (2) LAP PROJECTS, FREEPORT DRIVE
SIDEWALKS AND EASTSIDE ELEMENTARY SIDEWALKS**

IN
HERNANDO COUNTY, FLORIDA

SOLICITATION NO. 22-RG0018/PH

PROPOSAL DUE DATE: FEBRUARY 22, 2023 AT 3:00 PM

NOTICE


PROPOSERS ARE REQUIRED TO ACKNOWLEDGE RECEIPT OF
THIS ADDENDUM BY SIGNATURE AT THE BOTTOM OF
THIS ADDENDUM IN THE SPACE PROVIDED AND
RETURNED AT THE TIME OF THE PROPOSAL DUE DATE.

QUESTIONS AND ANSWERS

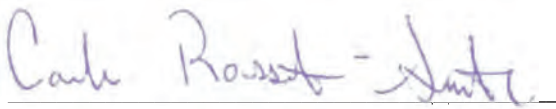
1. **Question:** We had a question about the FDOT workgroups 8.1 – Control Surveying and 8.2 – Design, Right of Way & Construction Surveying requirement on the referenced sidewalk job and were wondering if you can provide some education for us. We have participated in these types of LAP projects in the past and they did not require the workgroups 8.1 and 8.2 prequalification.

Answer: We are requiring FDOT prequalified consultants on this RFQ. As part of the design process, survey services are expected and the workgroups were added to this RFQ to be all-inclusive of the work to complete the project.

BOARD OF COUNTY COMMISSIONERS
HERNANDO COUNTY



 Acknowledged
 Dilip K. Mundkur, President, BES



 Carla Rossiter-Smith
 Purchasing and Grants Manager

Issued: February 9, 2023