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Regional Transportation Management Center

PROJECT RELATED INFORMATION PACKAGE
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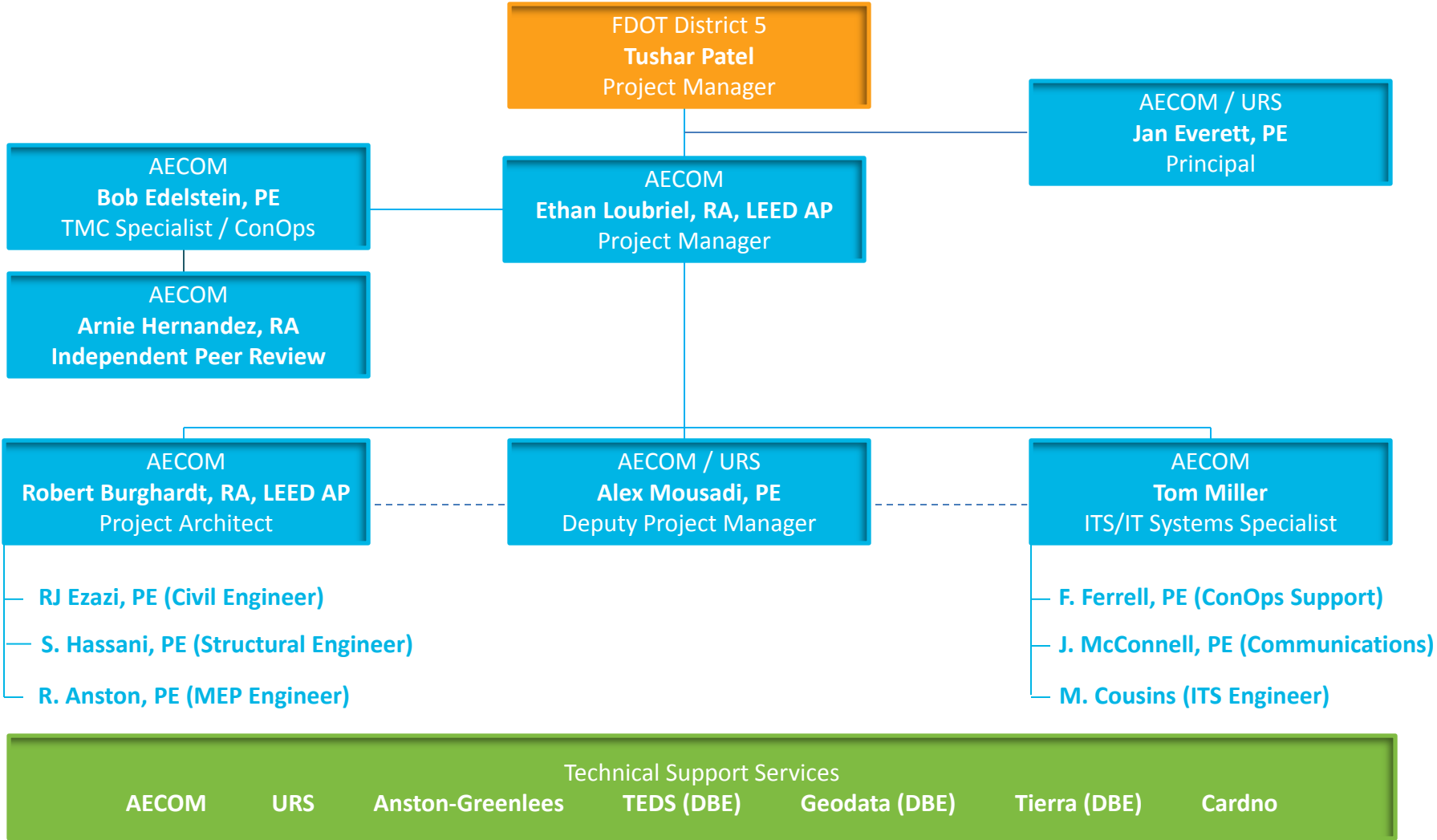
March 19, 2015

AECOM

Centennial
FDOT
1915 ★ 2015

TAB 1:
ORGANIZATION
CHART + RESUMES

Organization



Dr. Robert Edelstein, PE, PTOE

TMC Specialist / Concept of Operations

Experience: 41

Education:

PhD, Transportation Planning/Engineering, Polytechnic University of New York, 1978

MS, Transportation Planning, Polytechnic University of New York, 1973

BS, Civil Engineering, Polytechnic University of New York, 1972

Professional Registrations:

Professional Engineer licensed in the states of Florida (#25809), Texas, Louisiana

Professional Traffic Operations Engineer Certification (2006)

Dr. Edelstein is a Senior Vice President of AECOM serving as the firm's Practice Leader for Intelligent Transportation Systems. He has 41 years experience (of which 36 years have been with AECOM) having served as Project Director, Project Manager and Project Engineer of ITS, managed lanes, traffic engineering and transportation planning assignments. Responsibilities have included planning, research, training, technical analyses, preliminary and final engineering, construction engineering, operations, preparation of project reports and public presentations.

Relevant Experience

GDOT, TMC Redesign, Atlanta, GA. Project Director/Author of Concept of Operations for the reconfiguration of the TMC control room to accommodate the growing express lanes network, State Road and Tollway operations staff and other functions. In addition, serves as Technical Advisor for developing the Functional Requirements and design drawings, specifications and estimates.

Honolulu Joint Traffic Management Center, Honolulu, Hawaii: ITS Engineer having prepared the Concept of Operations for a new Joint Traffic Management Center that will accommodate HDOT (freeway management), City Department of Transportation Services (traffic signal system); Emergency Operations Center; Honolulu Police Department (9-1-1 dispatch operations); Honolulu Fire Department (dispatch operations); Emergency Medical Services Department; and Department of Information technology.

SMART SunGuide Traffic Management Center, Florida DOT District 4, Fort Lauderdale, Florida: Project manager for the development of the master plan and final design of the new regional transportation management center that serves as the control center for FDOT District 4 ITS operations and the Broward County Traffic Engineering Division signal system. Project manager during the final design phase, and currently project director overseeing the district-wide ITS operations contract over (2005 - 2015). Also, prepared the Concept of Operations (ConOps) for the I-595 Reversible Express Lanes operations.

South Jersey Traffic Operations and Public Safety Command & Control Center, Atlantic City, New Jersey. ITS Task Manager for the development of the Program Definition Report of this proposed facility. The control center will accommodate the South Jersey Transportation Authority (i.e., ITS operations along the Atlantic City Expressway and Airport Operations at the Atlantic City International Airport); Emergency Operations Center; and a 9-1-1 Center to accommodate up to 18 municipalities.

Chicago Traffic Management Center, City of Chicago - Department of Transportation, Chicago, Illinois: Project director for the design of the Chicago Traffic Management Center. Provided technical support for the development of functional and physical requirements; system architecture, concept design; institutional operations and maintenance plan; site selection; implementation planning; cost estimates and funding plan; and preliminary design of selected alternative.

US-74 Express Lanes, Charlotte, NC. Author of the Concept of Operations which defines the project expectations and describes the physical and operational characteristics of converting existing Bus Lanes and constructing new Express Lanes along four segments within the corridor. The recommendations provided in the ConOps are based on a collaborative effort among the project stakeholders. In addition, served as Technical Advisor for Traffic & Revenue, Preliminary Engineering and Constructability Analyses.

Central Ohio Regional TMC Master Plan, Columbus, OH. Project manager for development of a traffic management center master plan that will integrate the operations of the city traffic signal system, ODOT freeway traffic management system, Central Ohio Transit Authority buses, and the Emergency Operations Center. Responsible for development of the concept design, reports, and presentations.

I-95 Express Lanes Operations, FDOT District 6, Miami, FL. Project Director overseeing AECOM's role in the operations of the 95 Express Lanes. AECOM prepared the SOPs used by our TMC Operators after the turn-on of the Managed Lanes in December 2008. AECOM then hired and trained TMC Operations staff specifically assigned to the I-95 Managed Lanes system using a training program developed by our staff. AECOM also developed the dynamic pricing software which is used by our operators to monitor traffic conditions, calculate toll rates, identify incidents and provide performance reports.

CHART TMC Reconfiguration Study, Hanover, MD. Technical Advisor for the reconfiguration of the State Operations Center to provide additional workstations to accommodate increased functions as well as major incidents and emergencies.

VDOT Smart Traffic Center, Hampton Roads, VA. AECOM's Project Director during the Operations and Maintenance phase. System features include a build-out of 271 CCTV cameras, 196 dynamic message signs, five automatic gate systems, emergency vehicle access gates, 235 vehicle detectors, six highway advisory radio sites, and 550 miles of fiber-optic communications. AECOM provided staff for the traffic management center operations, field maintenance of ITS equipment and fiber-optic communications systems, IT management and support, and operations of the service patrol program.

Rhode Island Traffic Management Center Operational Support Services, RIDOT, Providence, Rhode Island: Project director responsible for development of the training program, ITS strategic deployment plan, standard operating guidelines, and diversionary routes.

Pennsylvania Statewide Emergency Operations Center- Traffic Management Center, Harrisburg, PA. Technical Advisor for the development of a Concept of Operations for the Pennsylvania Emergency Management Agency (PEMA) Headquarters Facility including the PEMA Statewide Emergency Operations Center (SEOC), PennDOT Area Command Center (ACC), PennDOT Statewide Traffic Management Center (STMC) and PennDOT District 8-0 Regional Traffic Management Center (RTMC).

Presentations / Publications

- Edelstein, Robert, "Staffing for NextGen ITS Operations", Penn State Technical Conference, 2014.
- Edelstein, Robert, "Future Trends in TMC Operations", ITS 3C Summit, Mobile, Alabama, 2014.
- Edelstein, Robert, "Smarter Transportation Through ITS", ITS World Congress, Detroit, Michigan, 2014.
- Edelstein, Robert, "Envisioning the TMC of the Future", ITE Journal, January 2014.
- Edelstein, Robert, "Dynamic Pricing in a Regional Network Environment", ITS California, 2013.
- Edelstein, Robert, "TMC of the Future", presented at ITS America Annual Conference, Nashville, TN, 2013
- Edelstein, Robert, "The Future of Managed Lanes", ARTBA P3 Conference, Washington, D.C., 2012
- Edelstein, Robert, "Active Traffic Management in Florida", presented at TRB, Washington, D.C., 2012
- Edelstein, Robert, "Evolution of TMCs", presented at ITS World Congress, Orlando, Florida, 2011
- Edelstein, Robert, "Growing Managed Lanes Projects into System Networks", presented at ITS World Congress, Orlando, FL, 2011
- Edelstein, Robert, "TMCs: The Next Generation", presented at ITS Texas, Dallas, Texas, 2010
- Edelstein, Robert, "UK ITS Best Practices", presented at ITS America Annual Conference, Houston, Texas, 2010
- Edelstein, Robert, "TMCs: The Next Generation", presented at ITS Texas, Fort Worth, Texas, 2010
- Edelstein, Robert, "Taking TMCs to the Next Level", presented at ITS America, Washington, DC, 2009.
- Edelstein, Robert, "ITS Strategic Business Planning", presented at ITS Massachusetts, Boston, Massachusetts, 2009
- Edelstein, Robert, "Taking TMCs to the Next Level", presented at ITS Tennessee, Nashville, Tennessee, 2009.
- Edelstein, Robert. "Integrating P3 Projects within an ITS O&M Framework," presented at the TRANSPO 2008 Conference, Orlando, FL, 2008
- Edelstein, Robert. "Trends in TMC Operations & Maintenance," ITS World Congress, London, 2006
- Edelstein, Robert. "Multimodal Transportation Management Center," ITS Massachusetts, Boston, Massachusetts, 2004
- Edelstein, Robert. "TMC Best Practices," Annual ITE Conference, Seattle, Washington, 2003

Ethan Loubriel, RA, LEED AP

Project Manager, Architect

Experience: 22

Education:

Bachelor of Architecture, 1992,
College of Architecture, Texas
Tech University

Professional Registrations:

Registered Architect Florida
#AR0015343

Certified Building Contractor
Florida # CBC056798

Professional Affiliations:

US Green Building Council

American Institute of Architects

National Council of
Architectural Registration
Boards

Ethan Loubriel has 22 years of diversified experience in architecture and interior design. Throughout his career, he has specialized in the design (and reconfiguration) of Transportation Management Centers in Florida, Georgia, Maryland, Texas, Ohio, Illinois and Pennsylvania. He has been responsible for the planning, design and construction phases services for TMCs that include a variety of functions (i.e., signal systems, freeway management systems, transit, emergency operations, traveler information, snow command, police, fire, rescue).

Relevant Experience

GDOT, TMC Redesign, Atlanta, GA. Project Architect for the reconfiguration of the TMC control room to accommodate the growing managed lanes network, State Road and Tollway operations staff and other functions.

SMART SunGuide Transportation Management Center Master Plan & Final Design, FDOT District 4, Fort Lauderdale, FL. Architect for the development and design of the new TMC that serves as the control center for the FDOT ITS and BCTED signal system. During the master plan phase, he was responsible for definition of facility minimum requirements; development of the conceptual design and cost estimates. Subsequently, he served as Lead Architect during the final design phase of the TMC as well as the design criteria package for the Sign and Signal Shop. Recently, he was responsible for the reconfiguration of the TMC control room to increase the number of workstations from 12 to 22.

Maryland State Highway Administration, CHART TMC Reconfiguration, Baltimore, MD. Architect for the reconfiguration conceptual design of the State Operations Center to provide additional workstations to accommodate increased functions as well as major incidents and emergencies.

FDOT District 6 TMC Reconfiguration, Miami, FL. Architect for the reconfiguration of the FDOT District 6 TMC control room to increase the number of workstations from 8 to 18. Developed various pod and linear workstation configurations without changes to the video wall or structural walls.

Chicago Transportation Management Center, CDOT, Chicago, IL. Architect for the preliminary design of a TMC. Provided technical support for the following activities: development of functional and physical requirements; concept design; cost estimates and preliminary design of selected alternative. The facility was designed to accommodate the City's Bureau of Traffic; Bureau of Electricity; Department of Streets and Sanitation Radio Main, Traffic Services and Snow Command; Chicago Police Department: Traffic Services Division; and provide spare workstations for the Chicago Transit Authority, Illinois DOT and Westwood One.

Delaware River Port Authority Transportation Management Center, NJ. Architect for the preliminary design of a TMC that will monitor and control the four bridge crossings over the Delaware River connecting New Jersey and Pennsylvania.

CORTRAN Transportation Management Center, MORPC, Columbus, Ohio. Architect for the preliminary design of a TMC that will integrate the following operations: City of Columbus Traffic Signal System, Ohio DOT Freeway Traffic Management System, Central Ohio Transit Authority Buses, and Emergency Management Center.

Palm Beach County Transportation Management Center, FDOT District 4, FL. Architect responsible for the preliminary design of a TMC in Palm Beach County. This TMC serves as the command and control center for the Palm Beach County Signal System and Advanced Traffic Management System. Also developed 3-D animation and renderings.

Tampa Bay SunGuide Transportation Management Center, FDOT District 7, FL. Architect during the preliminary design of this Transportation Management Center located adjacent to the existing FDOT District 7 Headquarters. The TMC was designed as a 19,000 sf facility accommodating FDOT District 7 ITS Operations, FHP and Florida Department of Law Enforcement.

Manatee County Transportation Management Center, Manatee County, FL. Architectural Manager for the development of a design criteria package for a TMC to support transportation, incident and emergency management operations. The design criteria package included a facility program, design plans, and other building design requirements to be used by the County to construct the building under a design build contract.

TransGuide Transportation Management Center, Texas DOT, San Antonio, TX. Architect developing the concept for a reconfigured control room to provide better synergy among the stakeholders including the TxDOT freeway management system, City signal system and local transit system.

Port of Miami Tunnel, Miami, FL (Design Build) Project Manager/Architect of Record overseeing the design and construction document phase for all facilities associated with a vehicular tunnel connecting Watson Island to the Port of Miami (Dodge Island). Facilities consist of two (2) flood gate enclosures at tunnel entrances/exits, two (2) operations buildings with control rooms, and a vehicle maintenance facility. Also responsible for managing other AECOM design tasks including utility relocations, highway lighting and Intelligent Transportation Systems (ITS).

Jacksonville Regional Transportation Center, Jacksonville, FL Project Manager/Architect of Record overseeing the design and construction document phase of a intermodal transportation center consisting of a Regional Transportation Management Center, JTA and Greyhound bus terminals, Bus Rapid Transit stations, Amtrak terminal, 2000 structured parking spaces, office complex, regional transportation management center, elevated concourse, retail space and a public plaza. The Jacksonville Transportation Center is a LEED registered project. The TMC included the following partners: FDOT, Jacksonville Transit Authority, City Signalization, Florida Highway Patrol, Jacksonville Sheriff Office, Fire and Rescue.

Lee Tran Administration, Operations, and Maintenance Facility, Fort Myers, FL (CM @ Risk) Project Manager/ Architect of Record overseeing the design and construction administration services for a new \$30 million LEED registered project on a 23 acre site for the Lee County's bus fleet that consists of a 33,000 SF administration and operations building, 45,000 SF vehicle maintenance facility, and associated bus wash and fueling facilities. Parking is provided for 132 buses, 90 ADA passport vehicles, and 296 employee and visitor parking spaces.

Golden Glades Multimodal Transportation Facility, FDOT District 6, Miami-Dade County, FL. Lead Architect responsible for the conceptual design of a multimodal transportation center to be designed and built in conjunction with Joint Development. The facility would provide travelers with a safe, secure, convenient and enjoyable experience in transferring between the following modes: MDT local and express buses; BCT buses; Tri Rail; Greyhound and park & ride lot users.

Port of Miami Program Management, Miami, FL Program management consultant assisting the Port of Miami Capital Development division in overseeing the design and construction of various building projects at the Port including temporary and permanent cruise facilities for Bimini Superfast day cruise operations, relocation of Port security personnel, and various planning projects. Currently have an active federal TWIC card.

Hialeah R.O. Water Treatment Plant, City of Hialeah, Florida (Design Build) Architectural Task Manager for the design of a 45,000 SF reverse osmosis process building which includes offices, a laboratory, control room, maintenance shop, R.O. process area and chemical containment rooms. A 2,800 SF emergency generator building with four (4) 2.0 MW diesel generators and multiple well buildings are included in the project. This design-build project received LEED Silver certification.

Robert Burghardt, RA, LEED AP

Architect

Experience: 16

Education:

Master of Architecture, 1998,
University of South Florida
Graduate School of
Architecture

B.S. Architectural Technology,
1994, Florida International
University

Professional Registrations:

Registered Architect Florida #
AR93500

Professional Affiliations:

US Green Building Council

Robert Burghardt has 16 years of experience in architectural services, landscape architectural services and construction. Specific experience includes presentation drawings, models, schematic design, design development, construction documents and construction administration for a variety of building types, particularly in transportation facilities. Throughout his career, he has specialized in the design (and reconfiguration) of Transportation Management Centers. He has supported the planning, design and construction phases services for TMCs that include a variety of functions (i.e., signal systems, freeway management systems, transit, emergency operations, traveler information, police, fire, rescue).

Relevant Experience

FDOT District 4, SMART SunGuide TMC Final Design, Fort Lauderdale, FL. Project Architect having assisted in preparation of construction documents, bidding, permitting and construction administration. Prepared revisions to construction documents, answered Request for Information, reviewed submittals and assisted in coordination of sub-consultants. Recently, he was responsible for the reconfiguration of the TMC control room to increase the number of workstations from 12 to 22.

Maryland State Highway Administration, CHART TMC Reconfiguration, Baltimore, MD. Architect for the planned reconfiguration of the State Operations Center to provide additional workstations to accommodate increased functions as well as major incidents and emergencies.

FDOT District 6 TMC Reconfiguration, Miami, FL. Architect for the reconfiguration of the FDOT District 6 TMC control room to increase the number of workstations from 8 to 18. Developed various pod and linear workstation configurations with and without changes to the video wall. Currently providing construction engineering & inspection services during the implementation phase.

FDOT District 2, Jacksonville Regional Transportation Management Center, Jacksonville, FL. Project Architect for the preliminary design of a Regional Transportation Management Center as part of a multimodal transit facility. The TMC was planned to include the following partners: FDOT, Jacksonville Transit Authority, City Signalization, Florida Highway Patrol, Jacksonville Sheriff Office, Fire and Rescue. Also, Project Architect for the preliminary design of the Jacksonville Multimodal Center including the adaptive re-use building and the addition of tenant space for Greyhound and Amtrak. This included detailed building analysis, site design and community planning adjacent to this downtown location.

FDOT District 7, Tampa Bay SunGuide Transportation Management Center, FL. Project Architect during the preliminary design of this Transportation Management Center located adjacent to the existing FDOT District 7 Headquarters. The TMC was designed as a 19,000 sf facility accommodating FDOT District 7 ITS Operations, FHP and Florida Department of Law Enforcement.

GDOT, TMC Redesign, Atlanta, GA. Project Architect for the reconfiguration of the TMC control room to accommodate the growing managed lanes network, State Road and Tollway operations staff and other functions.

TXDOT, TMC Reconfiguration, San Antonio, TX. Project Architect for the reconfiguration of the TMC control room to relocate the City Traffic operations staff with TXDOT TMC Operations staff.

Port of Miami Dept. of Homeland Security Immigration and Citizenship Services, Miami, FL. Project Architect for construction administration.

Pittsburgh International Airport Transportation Security Administration, Pittsburgh, PA. Project Architect having assisted in preparation of design documents for placement of security equipment and queuing areas in existing airport terminals.

Texas State Highway 130 Toll Facilities, Austin, TX. Project Architect having assisted in preparation of design documents.

Port of Miami Immigration and Naturalization Servicing Center at Passenger Cruise Terminal 12, Miami, FL. Project Architect having prepared schematic design of an INS servicing center within an existing seaport cruise terminal.

Greyhound Downtown Station, Brickell Station and Overtown Station, Miami, FL. Project Architect having designed the new building underneath the existing Metrorail Guideway. Prepared construction documents, presentation materials, specifications, bidding documents and assisted in coordination of sub-consultants.

Port of Miami, Miami, FL. Project Architect having assisted in the design of the overall planning of the transportation system and miscellaneous design and planning projects including planning of roadways, building placement, lease line alterations, and addition of port property. Played a major role in the development of the graphics and model work.

Metrorail Extension to Palmetto Expressway, Miami, FL. Project Architect having assisted in organization of computer files, bidding documents, permitting and construction administration.

Delaware River Tram, Camden, NJ and Philadelphia, PA. Project Architect having assisted in Schematic Design and Design Development of two facilities: A stand-alone building in Camden and interior tenant space in Philadelphia. Work included graphics, design, computer-aided drafting and specifications.

Tom Miller

ITS / IT Systems Specialist

Experience: 27

Education:

Enrolled in Information Technology, BS degree program at Barry University

Completed company training program for Project Management

Alcatel 1603/12 SONET Multiplexer Operations / Maintenance Course

Completed examinations by the Institute for Certification of Computing Professionals in Communications and Micro Computer Networks

US Army/Air Force Maintenance Course in Communication Security Equipment

US Army Radio Maintenance Course

Department of Defense Course in Secure Video Transmission

BICSI Telecommunications Association Member

US Army Primary and Technical Leadership Courses

Tom Miller has 27 years of experience in telecommunication systems design and electronics maintenance, field engineering, and technical systems design. He specializes in communication and computer systems hardware design and operational maintenance. Specifically, he has design/construction experience for network infrastructure consisting of Ethernet/IP/TCP/UDP, Frame Relay, T-1, T-3, ISDN, SONET, fiber optics, and spread spectrum radio. He has design, construction and maintenance experience with all elements of ITS; TMC video walls, SunGuide Software integration of field devices, CCTV, RTMS, DMS, etc. His design/construct/maintenance experience illustrates abilities in providing tactical and strategic network planning, recommending conceptual design requirements, determining final design specifications and implementation needs.

Relevant Experience

District Wide ITS Operations Support Services Contract, FDOT District 6, Miami-Dade County, FL. Responsible for filling three roles on the support contract; IT Manager, ITS Field Equipment Maintenance Manager, and Utility Locate Manager. As IT Manager, responsible for the deployment and maintenance of all IT equipment inside the TMC to include over all servers, workstations, SAN, video wall, network core switch and associated VLAN network switches. Additional responsibilities include managing the SunGuide TMC software including all upgrades, and managing software personnel developing customer FDOT TMC software such as OTM. Managed a staff of seven IT professionals. As ITS Field Equipment Maintenance Manager, responsible for assisting the Department with ITS field equipment maintenance budget planning and monthly reviews, recommending special projects to enhance field reliability, conducting field reviews and QA/QC checks of Express Lanes and general purpose lane equipment repairs. As Utility Locate Manager, responsible for managing over 14,000 Sunshine One Call ticket requests per year and managing two field technicians.

District 6 SunGuide ITS GEC, Miami-Dade County, FL. Conducted an ITS Maintenance Assessment and assisted with the reorganization of the District's ITS field and TMC maintenance requirements by training new maintenance staff and implementing new maintenance procedures. Developed scope, engineering and budget plans for integration of Package B ITS devices (Ramp Metering, RTMS Detectors, DMS and Trailblazer signs) into existing SunGuide Software. Developed special projects lists and assisted with identifying budget and manpower requirements. Systems engineer for the preparation of plans for the relocation of ITS devices along the I-95 corridor. Developed the District's Hurricane Response Action Plan. Designed the relocation of ITS devices along I-95. Prepared the Design-Build Criteria Package for the Video Wall Display System, Communications Equipment and Console Work stations for the new RTMC. Currently providing IT management services as well as contract management of ITS maintenance.

SMART SunGuide Transportation Management Center, District 4, Fort Lauderdale, FL. Systems engineer during the design and construction of the new RTMC that serves as the control center for the FDOT ITS and BCTED signal system. Responsible for designing system modifications and developing associated test criteria; reviewing ITS and radio system submittals by the Contractor; reviewing test plans and witnessing all systems testing; and drafting technical responses to Contractor Requests For Information. Systems engineer responsible for developing system design for the expansion of the existing BARCO video wall that included complete parts lists, budget, and specifications. Assisted with cost estimating and RFP development for ITS Design-Build contracts for Palm Beach County and Northern Counties in FDOT District 4.

Northern Counties Incident Management, Support Project, FDOT District 4, Fort Pierce, FL. Project Manager for the development of a white paper assessing the need for a RTMC serving St. Lucie, Indian River and Martin Counties. This project also included a site assessment to determine a feasible location, as well as the preliminary design of the RTMC.

Jacksonville Transportation Management Center, FDOT District 2, Jacksonville, FL. Systems engineer for the development of the RTMC to include JTA, FDOT, FHP, 511, Fire/Rescue, and Jacksonville/County Signals. Responsible for development of the Concept of Operations and Functional Requirements. Participated in the recent District 2 Regional ITS Architecture workshop.

Chicago Transportation Management Center, CDOT, Chicago, IL. Systems engineer for the design of a new RTMC. Provided technical support for the following activities: development of functional requirements; concept design; cost estimates and preliminary design.

CCTV Design / Build, Washington, DC. Project engineer for the design phase for the design / build of a 119 camera CCTV system for the DDOT in Washington, D.C. System design included utilizing DSL technology communicating over existing twisted pair cable to transmit MPEG 4 video (30 frames per second) up to 30,000 cable feet.

MTA Bridges & Tunnels Dynamic Message Signs / Variable Speed Limit Signs, New York City, NY. Telecommunications engineer for the design of Dynamic Message Signs and Variable Speed Limit Signs for nine bridge and tunnel facilities in New York City. Project includes 64 DMSs, 92 variable speed limit signs, CDPD communication network for the VSLS facilities and fiber optic cable for the DMSs.

MVRPC ITS Deployment Plan, Dayton, OH. Systems engineer having provided technical support in the development of an ITS Deployment Plan for the Miami Valley Region. Analyzed communication requirements as well as trade-off analyses.

Joe Snyder

TMC Operations Manager

Experience: 16

Education:

Sam Houston State University,
Finance, Huntsville, TX (Not
yet Completed with BS Degree)

TMC Operations Academy,
2009, Baltimore, MD

Joe Snyder has 16 years of experience with the regional Traffic Management Center (TMC) of Houston TranStar and 7 years of experience with the SunGuide TMC in Miami, FL. As a former Freeway Operations ITS Supervisor for Texas DOT and currently TMC Manager under Operations Contract for Florida DOT, his experience includes control room operations, traffic incident management, traveler information, data collection, report management, quality control quality assurance, and software development. These experiences assisted him with the creation of training material and standard operation procedures for the centers. By coming from one the busiest metropolitan areas within our country; he provides a unique insight for traffic management practices, techniques, and ITS equipment.

Relevant Experience

FDOT District 6 TMC Operations, Miami, FL. TMC Manager responsible for the following:

- Operator Management. Manages 30 operational staff with their day to day operations at the SunGuide TMC. Oversees the operations and maintenance concerns of all ITS field equipment which included DMS, CCTV, Express Lanes, and Ramp Metering for freeway incidents and preplanned events. Managed a two county region for customer support for incidents, road construction, motorist's assistance, and 511.
- Policies and Procedures. Developed and implemented policies, procedures, and regulations within the control center. Performances job evolutions and performance measures for current employees. Developed all shift schedules and approved employee's request for leave.
- Reports. Reviewed and developed daily, month, quarterly, and annual reports using Crystal Reports, MS Word, and MS Excel. Included giving tours, software demos as well.
- Assists with all Traffic Incident Management activities as acting TIM Coordinator for District 6. Conducts Meetings and Post Incident Debriefings.
- Ensures QAQC and Operators are achieving performance measures and contract requirement.
- Software Requirements and Testing. Reviewed and made recommendations on new software requirements for ITS equipment. Performed acceptance testing and training on ITS software.
- TMC Control Room reconfiguration to increase the number of workstations from 8 to 18.

Maryland State Highway Administration, CHART TMC Reconfiguration, Baltimore, MD. Participated in the reconfiguration of the State Operations Center to provide additional workstations to accommodate increased functions as well as major incidents and emergencies.

MDX TMC Operations, Miami, FL. Interim TMC Manager for the Miami Dade Expressway (MDX), assisted in the operational start-up of the MDX ITS Operations and Road Ranger Management contracts.

TxDOT, Houston TranStar, Texas. Freeway Operations ITS Supervisor responsible for overseeing the day to day traffic management operations for TxDOT within the Houston TranStar control room. Includes management of the following programs: Regional Incident Management System (RIMS); Motorist Assistance Program (MAP); Personal On Call Electronic Transfer (POCET) system; Automated Vehicle Identification (AVI); Incident Management System; Traveler Information including Automated Travel Times and Special Events; Dynamic Message Signs (DMS); Close Circuit Television (CCTV); Ramp Metering; Centralized Traffic Signal Complaints; Centralize Traffic Management System (CTMS) Maintenance; Configuration Management. His responsibilities also include the following:

- Project Lead for the RIMS, MIMS, TIMS, and POCET. Coordinated meetings, set software requirements, assisted with application and database schema development, and set deployment schedules.
- Houston TranStar Website Committee (A monthly meeting to discuss new ideas for the Houston TranStar Website). Initiated or assisted with new website projects such as automated travel times, Harris County Toll Road Authority (HCTRA) construction application, Web Header Manager, and various other webpages. Monitored the Houston TranStar website to make sure real time traffic data was updated.
- Priority Corridor Committee. Provided quarterly status updates on Priority Corridor Projects such as Dissemination of Traveler Information and Automated Incident Management Strategies and Support Systems.
- Roadway Weather Information. Initiated the integration of the RWIS data into the Houston TranStar ORACLE Database for the creation of weather alarms within RIMS. This project provides real time weather data to all RIMS users.
- Texas Traffic Institute (TTI) Assisted TTI with research projects and reports. Included annual and end of fiscal year reports.
- Operator Management. Managed 14 operators with their day to day operations at the Houston TranStar. Oversaw the operations and maintenance concerns of all ITS field equipment which included DMS, CCTV, HAR, Truck Roll Over, and Ramp Metering for freeway incidents and preplanned events. Managed a six county region for customer support for incidents, road construction, motorist's assistance, and roadway deficiencies. Staff included two (2) shift supervisors, two (2) senior operators, two (2) motorist assistance dispatchers, and eight (8) control room operators.
- Oracle Database. Managed the logging of data into a centralized ORACLE Database. Reviewed and made recommendations on ORACLE database table structure for ITS applications. Initiated the population of data for all ITS devices within the ORACLE database.
- Reports. Reviewed and developed reports using Crystal Reports, MS Word, and MS Excel. Included giving tours and software demos to local, state, and federal entities.
- Traffic Management. Reviewed and developed emergency response plans for freeway emergencies. Assisted with the creation of the Incident Management System which provides automated emergency response plans within RIMS for DMS and HAR.
- Software Requirements. Reviewed and made recommendations on new software requirements for ITS equipment. Performed training and demos to multiple agencies on all ITS software.
- Policies and Procedures. Developed and implemented policies, procedures, and regulations within the control center. Assisted with the creation of job evolutions and performance measures for current employees. Developed all shift schedules and approved employee's request for leave.

RJ Eazazi, PE

Civil Engineer

Experience: 33

Education:

BS, Civil Engineering,
University of
Oklahoma, 1981

Professional Registrations:

Professional Engineer, FL,
#40109

Professional Affiliations:

American Water Works
Association

American Society of Civil
Engineers

Mr. Eazazi has more than 33 years of experience in management, design, permitting, and construction of various public and private improvements projects. His work includes design of stormwater retrofit projects in urban settings, large and small flood control projects, canal and waterway dredge projects, water quality improvement projects, roadway design, intersection improvements, utility relocations, utility extensions, design of parks, fire stations, institutional facilities, and residential/commercial projects.

Relevant Experience

Lee Tran Facilities, City of Fort Myers, FL. Civil Design Lead – Site civil engineer in charge of stormwater, paving and grading, utilities, and permitting through SWFWMD, FDOT, FDEP, and the City of Fort Myers for construction of 80,000 sf administration and repair facilities for Lee County Transit Authority within a 25- acre parcel in the City of Fort Myers. Project included close co-ordination with FDOT during the design development and construction of Metro Parkway Extension as the main point of project access and utilities.

Peace River Manasota Regional Water Supply Authority – Water Quality Building, Desoto County, FL. Civil Design Lead – Site civil engineer in charge of stormwater, paving and grading, utilities, and permitting through SWFWMD, FDEP, and Desoto County for construction of a 6,000± sf water quality testing and administration building as an annex to the existing building.

East County Library, Sarasota, FL. Project Manager for development of a 6,000 sf public library on a 4 acre site along Fruitville Road. Work included design of water and sewer line extensions, stormwater design, and permitting through Sarasota County and Southwest Florida Water Management District.

SWFWMD Service Office, Sarasota, Florida. Project Manager for development of a 20,000 sf permitting center for Southwest Florida Water Management District on a 5+/- acre property. Work included extension of water and sewer services, co-ordination with Sarasota County for stormwater and flood compensation volumes within Celery Fields Regional Storm Water Facilities. Project was also coordinated with Fruitville Road improvements by Sarasota County for access.

Town of Longboat Key, Town Hall, Longboat Key, Florida. Project manager responsible for development of 10,000 sf town hall building, including renovation of an existing annex and construction of a new hall. Work included stormwater permitting through Florida Department of Environmental Protection, and utilities extension.

Van Wezel Performing Arts Hall Renovations, City of Sarasota, FL. Civil Design Lead responsible for re-configuration of parking lot, extension of the performing arts hall, and extension and upgrading of site utilities.

Manatee County School Board Administration Building, Manatee County, FL. Project Manager responsible for paving, drainage, water, and sewer improvements. The proposed five (5) story building contained more than 40,000± sf of office and administrative facilities on a 5 acre site located in the City of Bradenton. Permitting included SWFWMD, FDEP, and City of Bradenton.

M. Janet Everett, PE

Principal-In-Charge



Overview

Ms. Everett's experience includes a variety of transportation engineering, planning, design, and multi-disciplinary assignments involving area-wide transportation studies, corridor studies, project development studies, arterial and controlled access facility design, and interchange justification reports, as well as access, circulation, and parking studies. Her widely varied expertise extends to project management for large-scale transportation projects, general consulting services and program management. Typical projects are described below.

Project Specific Experience

Project Manager, General Consultant for District Five of the Florida Department of Transportation, Florida (1999-Present):

Project Manager for this General Engineering Consultant contract with the Florida Department of Transportation, District Five. URS is serving for the third consecutive selection term as an extension of the District's staff providing: on-call services by supplying the manpower to complete assignments during peak workload periods; assistance in the long-range programming of work efforts; and support in administration, planning, production and operations efforts. **Facilities/RFP Support:** Prepared plans and specifications for existing District facilities including: renovations to the existing District Headquarters office in DeLand, new entrances for the District Headquarters and the replacement of the stairways for the pedestrian bridge serving the Maintenance office in DeLand. Prepared site plans and building plans for the construction of a new storage facility at the District office in DeLand. The building was permitted through the City of DeLand and let for construction. Construction is complete and the building is now occupied. Prepared a Design/Build RFP for the renovations of existing buildings at the Leesburg Operations Center for the Florida Department of Transportation. RFP was advertised and subsequently the project was completed. Prepared a Design/Build RFP for the reconstruction and replacement of all facilities (buildings, maintenance shops, vehicle wash, fueling areas, etc) for the Brevard Operations Center. The legislature did not fund this project, so URS updated the RFP and plans to be a LEEDS certified building complex.

Project Manager, Central Florida Commuter Rail Design, Maitland Station, Maitland, Florida (2011-2014): Project Manager for the final design plans for the SunRail commuter rail station in Maitland, Florida. Under the GEC Contract, and as a member of the Program Management Team (PMT) for SunRail, URS was tasked with designing the Maitland Station, including the parking area, bus access, and circulation system. URS worked with the District Right-of-Way and Legal staff to acquire the right-of-way for the station and developed cures for the right-of-way remaining parcel. The cures were presented to the property owner as part of the negotiated settlement for the station site acquisition. The station design, in addition to the right-of-way acquisition assistance, included complete parking lot design, access roadway design, bus bay design, landscaping, drainage, and lighting.

Project Manager, Veterans Expressway Widening PD&E Study, Hillsborough County, Florida (2005-2007): URS is working with Florida's Turnpike Enterprise to complete a Project Development and Environmental (PD&E) study for widening this existing four-lane facility to an ultimate eight-lane facility from Memorial Highway to Van Dyke Road. The Veterans Expressway serves as a primary commuter route in the Tampa Bay area with 10 interchanges in the 12-mile corridor. The project also includes the 3-mile spur alignment (SR 568) of the Veterans Expressway connecting to Dale Mabry Highway. Since the opening of the Veterans Expressway in October 1994 the area has grown such that there is little undeveloped property adjacent to the corridor. To provide acceptable traffic operations is a challenge due to the close ramp spacing and short weaving sections. This is compounded by the original roadway alignment that included numerous horizontal and vertical curves and limited right-of-way to either avoid or minimize impacts to adjacent neighborhoods, development and the natural environment. The project involves the development and evaluation of alternatives, environmental assessments and an extensive public involvement program with community organizations, neighborhood associations, local jurisdictions and the general public. The project recommended all electronic toll collection to minimize the impacts of the proposed widening. The project includes a State Environmental Impact Report. The project is currently under construction.

Areas of Expertise

Project Management Transportation Studies

PD&E Studies

Highway Design

Years of Experience

With URS: 27 Years

With Other Firms: 10 Years

Education

MSCE / 1978 / Civil Engineering / Purdue University

BSCE / 1976 / Civil Engineering / Purdue University

Registration/Certification

Professional Engineer

1986/Florida #36973

1992/Michigan #38982

1992/Arizona #26084

1992/Washington #28690

1983/Illinois #062-041282

Project Manager, Sawgrass Expressway Widening PD&E Study, Broward County, Florida (2003-2004): Project Manager for the widening of a 12-mile segment of the Sawgrass Expressway from Atlantic Boulevard to Florida's Turnpike. The project involves an interim widening of the existing four-lane expressway to six lanes and includes complete engineering analysis, a State Environmental Impact Report (SEIR), and public involvement for the corridor. There are six full interchanges and 17 existing bridges in the corridor including one water crossing over the C-5 Canal. The project was completed within an aggressive three-month schedule with no right-of-way acquisition so that a portion could be let as a design/build project in 2004. This project was completed on schedule.

URS Project Manager, I-4 PD&E Study- Section 2, Orange, Seminole and Volusia Counties, Florida (1996-2004): URS Project Manager for this 43-mile Project Development and Environmental Study on I-4 from SR 528 in Orange County to east of SR 472 in Volusia County. This project involves the engineering and environmental analyses, as well as public involvement efforts to complete an Environmental Impact Statement (EIS). The I-4 EIS is the largest in the State of Florida covering 43 miles with 26 interchanges including three system-to-system interchanges. The project involved extensive environmental evaluations including a Memorandum of Agreement and a Section 4(f) evaluation for two historic districts and one historic site. The proposed improvements include the provision of Special Use Lanes to manage the demand.

PD&E Liaison, I-4 Ultimate Design, Section 4, Orange County, Florida (2003-2012): PD&E Liaison for commitment compliance Interchange configurations for section 106 impacts and section 4(f) impacts for the final design of I-4 from south of Orange Blossom Trail to south of Ivanhoe Boulevard. This reconstruction project improves four miles of interstate to six general use lanes and four express lanes. The project also includes roadway improvements along two miles of SR 408. The project has major interchanges along I-4 at OBT, Kaley/Michigan, SR 408 and SR 50. The SR 408 / I-4 Interchange is a complex four-level system-to-system interchange with extensive ramp reconstruction. There are also four local access interchanges within the limits of this system-to-system interchange.

URS Project Manager, I-4 Special Use Lanes Evaluations, Orange, Seminole and Volusia Counties, Florida (2003-2011): URS Project Manager for the evaluation of Special Use Lanes on I-4 from SR 528 in Orange County to east of SR 472 in Volusia County. This project evolved from an Environmental Impact Statement (EIS) prepared for the 43-mile I-4 corridor to provide potential funding mechanisms for the project. Various alternatives including HOT and Toll Only lanes were evaluated. The work effort was completed for FDOT, Florida's Turnpike Enterprise and Orlando-Orange County Expressway Authority. FDOT is currently pursuing development of a P3 project to implement the toll lanes.

Project Manager, Viera Interchange PD&E Study, Brevard County, Florida (2012-2014): Project Manager for a PD&E Study for Viera Boulevard, a two- and four-lane arterial from Sawmill Grade Road to US 1, including a four-lane overpass of I-95. Brevard County built the overpass in 2007 as the first phase of a new interchange with I-95. As part of the Viera DRI, FDOT recognized the potential for increased traffic congestion at the Fiske Boulevard interchange to the north and the Wickham Road interchange to the south, as well as on Fiske Boulevard. This led to a proportionate share agreement with FDOT in which The Viera Company (TVC) is committed to funding the PD&E Study, final design and permitting and construction phases of the project. As a funding partner and primary landowner, TVC is a major project stakeholder, requiring an additional level of coordination. Services provided on this contract include: Preliminary Engineering, Constructability/MOT, Cost Estimates, Traffic Operations, Interchange Concepts, Structural, Drainage, Floodplains, Geotechnical, Threatened and Endangered Species, Wetlands, and Public Involvement.

URS Project Manager, I-4 Systems Access Modifications Report Updates for Downtown Orlando and US 192, Orange County, Florida (2003): As the I-4 interchanges moved through the design process, URS Corporation prepared updates to the I-4 SAMR to reflect the design changes and receive approval from FHWA for modifications for these access locations to the Interstate system. Updates were prepared for the I-4 interchanges with US 192, SR 408 (East-West Expressway), SR 50 (Colonial Drive) and SR 472. The traffic projections and analyses were updated to reflect the design changes and subsequently approved by FHWA.

Project Manager, I-4 Interim Auxiliary Lane Project, Orange and Seminole Counties, Florida (2000-2003): Project Manager for the completion of a feasibility study and PD&E study for the addition of auxiliary lanes along a 13-mile segment of I-4 through the core of the Orlando metropolitan area. The project involved the engineering and environmental evaluations for auxiliary lanes within the existing right-of-way. Innovative drainage solutions and design exceptions were approved for the project to move forward. This project also included preparation of proposal requirements, design and construction criteria, as well as design reviews for a design/build construction project. The project opened to traffic in 2003.

Alexis Mousadi, PE

Deputy Project Manager



Overview

Mr. Mousadi has broad based expertise in the planning, design, construction, integration, and testing of Intelligent Transportation Systems (ITS). As Senior ITS Engineer in the Orlando Office, he has experience serving as lead systems integrator on major multi-million dollar projects throughout the U.S. These projects required both construction management skills and extensive system integration knowledge. Specific system experience includes the analysis, design, specifications, and inspection of DMS, digital CCTV, and Vehicle Detectors, including the use of NTCIP protocols, for communications systems. He also provides construction inspection services of both indoor and outdoor fiber optics cable plans.

Project Specific Experience

Engineer of Record (EOR), Central Florida Expressway Authority (CFX) (Formerly OOCEA) Headquarters Building ITS Control Room, Florida (2011):

This ITS Control Room provides the Authority with a centralized solution for accessing and displaying ITS systems while providing an office setting to the Assistant Manager of Expressway Operations. The system provides connectivity, control, and visibility to the Authority's and other agencies' ITS systems including CCTV video feeds, DMSs, TMSs, Data Server Maps, and SunGuide, as well as access to cable television feeds. Mr. Cousins responsibilities include: electrical and communications system planning, design, and plans development. System components include: 8 LED monitors, stereo system, video conference equipment, operator PC workstation, video processor, Ethernet switches, video encoder, and video media converters.

Senior ITS Engineer, Memphis SmartWay ITS and New RTMC Design, Tennessee DOT, Tennessee (2004-2006): Mr. Mousadi served as lead URS design engineer providing design support including Plan Details, Technical Special Provisions, and New RTMC design of the server room and work stations. The project will provide traffic management, emergency and incident management services and support for emergency evacuation/homeland security. The project includes approximately 60 miles of fiber optics communications, microwave/wireless design, 39 DMSs, 90 CCTV video cameras, 332 radar detection sensors, 20 video detection sensors, 16 Highway Advisory Radio stations, 42 HAR signs with beacon flashers with pager control, and five (5) overheight vehicle detection system. Also, designed requirements of the 600-sq-ft computer room, including equipment racks, network equipment, servers, and work stations.

CEI Engineer, Memphis ITS and New RTMC Deployment Project, Memphis Tennessee (2005-2008): Mr. Mousadi is responsible for providing system CEI services for this project including the RTMC. This project includes a fiber optic and wireless Gigabit Ethernet communication for 83 miles of ITS devices, 90 CCTVs, 39 DMSs, 334 Radar Vehicle detectors, 20 Video Vehicle Detectors, 16 HAR, 42 HAR Signs, 5 Over Height Vehicle Detection System, and a TMC. Mr. Mousadi responsibilities include: equipment submittal review and approval, test submittal review and participation, which include factory, installation, and integration testing. Additional testing was performed on the DMSs to verify NTCIP compliance. The test included detail protocol analysis to verify compliance with NTCIP standards. Also, provided construction inspection of the 600-sq-ft computer room, including equipment racks, servers, and work stations. In addition performed full redundancy network testing.

ITS Inspector, I-75 FMS Sarasota and Manatee Counties and Satellite TMC Project (FDOT FPID No. 414730-1-52-01, 414732-1-52-01 & 414736-1-52-01), (2012 - 2013): Mr. Mousadi is the lead system inspector providing CEI services for this project. The project includes closed-circuit television (CCTV) cameras, dynamic message signs (DMS), road weather information systems (RWIS), highway advisory radio (HAR), non-intrusive microwave vehicle detectors, an emergency generator back-up system and fiber optics communications cable and transmission equipment along approximately 56 miles of I-75 starting just north of the Charlotte/Sarasota County Line near Mile Marker 172 and ending at the I-275 interchange in Manatee County near Mile Marker 228. Also included with this project is the integration of the FMS field elements into the Sarasota/Manatee County Satellite Transportation Management Center (STMC) in Manatee County and into the Southwest Interagency Facility for Transportation (SWIFT) SunGuide® Regional Transportation Management Center (RTMC) in Lee County. Upgrades include incorporating additional video feeds into the video wall currently in operation at the SWIFT Center and installation of a new video wall at the Satellite TMC facility. Mr. Mousadi's services include review of the design plans, field inspection of equipment installations such as cabinets, fiber cable, fiber termination, electrical services, and distribution. In addition, detailed multistage

Areas of Expertise

Intelligent Transportation Systems
Communication Systems Design
Traffic Signal Systems

Years of Experience

With URS: 11 Years
With Other Firms: 14 Years

Education

BS / 1989 / Electrical Engineering /
University of Central Florida

Registration/Certification

1996 / Professional Engineer / Florida
#50764



testing will be performed such as factory acceptance tests, installation acceptance tests, system acceptance tests and the final acceptance test.

Design Engineer, I-95, Advanced Traffic Management System and Traffic Operations Center, Rhode Island (1997-1998):

Mr. Mousadi was involved in the designing and specifications of portable variable message signs (VMS), Traffic Operations Center (TOC), and CCTV surveillance system for I-95 in Providence, Rhode Island. Mr. Mousadi was responsible for design and specification of the portable VMS with a central control computer at TOC, expansion of the phone and data network at the TOC, the CCTV communication system, and conduit replacement.

Engineer of Record, SR 417/SR 408 Systems Interchange, Orange County, Florida (2011-Present): This project includes the ultimate design of the SR 417/SR 408 Interchange for the Central Florida Expressway Authority (CFX). Mr. Mousadi is serving as engineer of record for a continuous roadway lighting system including underdeck lighting and box girder lighting for two bridges within the corridor. He is responsible for overseeing the lighting and electrical system design including review of photometric analysis, voltage drop calculations and plans for lighting, power and the control system.

Project Manager, Central Florida Expressway Authority (CFX) (formerly OOCEA) Systemwide Data Collection Sensor Upgrade Project 599-520, Orange County, FL (7/2013-Present): URS was selected to upgrade the Data Collection Sensor (DCS) system to improve maintainability, reliability and functional redundancy in ITS Operations. The project also includes four related upgrade tasks: Cabinet Upgrades, Fiber Optic Cable Upgrades, Fiber Modem Upgrades, and Uninterruptible Power Supply (UPS) Upgrades. In addition, this project includes evaluation of the existing grounding conditions and design of appropriate improvements. Specific system upgrades include the following: replace approximately 120 existing DCS sites with new 6204 Sirit Multi-protocol Readers, replace approximately 50 existing single-door Type III NEMA Cabinets with dual-door Type 336S Cabinets, replace 28 legacy point-to-point fiber modems with new Ethernet switches and modify the fiber connections at these locations to allow Layer 2 ring topology, install new UPSs and rewire approximately 190 existing cabinets, install approximately 10 miles of fiber optic feeder cable and add translateral fiber connections at key interchanges, and perform ground measurement and visual inspection of ground connections.

EOR for ITS Design, Veterans Expressway Widening from Memorial Highway to Gunn Highway, Hillsborough County, Florida (2008-2015): Roadway, Drainage, Signing and Pavement Marking, Signalization Lighting, and ITS design of widening the Veterans Expressway from four lanes to eight lanes in each direction with the inside lane being designated as an Express Lane. Also includes the conversion of the existing conventional cash toll collection system to an all-electronic toll collection system. Mr. Mousadi is the lead systems designer and is responsible for field evaluations and design support for Florida's Turnpike Enterprise Improvements project which includes specific ITS design elements that includes design of a new fiber optic backbone, new cameras and vehicle detectors and new DMS signs for the Express Lane facility. Work also included the installation of 4 Travel Time Sensor sites at interchange locations.

EOR for ITS Design, Suncoast Parkway All Electronic Toll Conversion, Florida's Turnpike Enterprise, Hillsborough, Pasco, and Hernando Counties, Florida (2012-Present) (Post Design Services through 2016): Roadway, Drainage, Signing and Pavement Marking, Signalization Lighting, and ITS design to accommodate the conversion from traditional cash tolling systems to all-electronic toll (AET) systems. Mr. Mousadi served as Engineer of Record for the ITS components with responsibilities that include field evaluations and design support for Florida's Turnpike Enterprise Improvements project which includes specific ITS design elements for relocation of all ITS infrastructure on the mainline and ramps in areas where toll plazas are being removed and toll gantries are being installed.

EOR for ITS Design, Homestead Extension of Florida's Turnpike (HEFT) Widening from South of 117th Street to South of Kendall Drive, Florida's Turnpike Enterprise, Miami-Dade County, Florida (2008-2010): Includes ITS design due to the widening the Homestead Extension of Florida's Turnpike from six lanes to ten lanes in each direction as well as from six to eight lanes in some areas of the project. Mr. Mousadi is the lead systems designer and is responsible for field evaluations and design support for Florida's Turnpike Enterprise Improvements project which includes specific ITS design elements that includes maintaining the existing fiber optic backbone in some areas of the project and also the installation of a new fiber optic backbone in locations where the original could not be salvaged. Relocation of existing devices is accommodated as well along the corridor. New infrastructure is being installed to accommodate a future Express Lane as well. Design includes 3 new and 1 relocated Travel Time Sensor site at interchange locations.

Saeed B. Hassani, PE

Structural Engineer



Mr. Hassani has a wealth of experience in structural design for a wide variety of buildings and is the discipline leader of URS' building structural group. He has been active in establishing project scope, schedule and budget as well as conceptual design development coordination and checking of structural design and documentation, final design calculations and drawings, and assisting in providing construction administration services. Typical projects are described below.

Structural Engineer, Pompano Beach Service Plaza Operations Center Expansion, Florida's Turnpike Enterprise, Pompano Beach, Florida (2006): Provided structural design for a new 25,000-square-foot, two-story operations center to house the traffic management center and toll operations audit group. The facility is located on the expressway.

Structural Engineer, FDOT State Materials Research Park, Gainesville, Florida (2002-2003): Provided structural design for phased development of this new \$21 million testing/research facility on a 25-acre site. Project involved site master planning, site design and permitting, landscaping, and multiple buildings including 78,000-square-foot of laboratory buildings, the 18,000-square-foot pavement systems evaluation facility, and a 24,500-square-foot administration/central receiving and distribution building. Client criteria included severe sound isolation demands between laboratory and office spaces as well as superior energy efficiency within tight budget constraints. Other requirements included flexibility of all utility systems in laboratories for future reconfigurations, and long-term leak-free roof warranties through minimization of roof penetrations on this mechanically complex facility.

Structural Engineer, Tampa Bay Water Administration Office Building, Clearwater, Florida (2003-2005): Provided structural design of this new \$8.7M, three-story, 37,000-square-foot administrative office building on a four-acre site. Facility provides conference and meeting facilities plus space for information systems requirements, staff offices, work rooms, public records management, and storage. Design criteria emphasized functional efficiency in the physical configuration as well as energy efficiency (designed to LEED standards), durability, low maintenance, environmental responsiveness, and security. Attention was given to allow for easy reconfiguration of interior spaces in the future.

Structural Engineer, City Hall Building Remodeling, Mt. Dora, Florida (2002): Provided structural input to the feasibility analysis of various proposed changes in space utilization, as well as design for remodeling for the expansion of the existing City Hall building.

Structural Engineer, C.W. Young Armed Forces Reserve Center, Pinellas County, Florida (2002-2004): Provided structural design for this new 216,424-square-foot two- and one-story facility on a 58.41-acre business park site. To accommodate the special needs of the Florida National Guard and the Army Reserve, the building has space for each branch of the armed services plus common-use areas available to both. Project also includes extensive military parking, maintenance and fueling facilities, a secured perimeter, and landscaping. The project is being designed to meet the new ATRF standards.

Structural Engineer, University of Florida and Shands Orthopaedics and Sports Medicine Institute, Gainesville, Florida (2003-2004): Provided structural design for this new LEED Certified state-of-the-art 126,000-square-foot, "world-class" orthopaedic care facility utilizing a true design/build approach to maximize the quality of design while completing the project on a fast-track schedule within budget.

Structural Engineer, Western Beltway Ramp "B" and "C" over I-4 (2001): Provided structural design for this 2,200-foot ramp that consisted of curved steel box girder supported by hammerhead pier.

Structural Engineer, SR 386 Cable Stay Roof Canopy, Florida (1998-1999): Responsible for 110-foot roof canopy over SR 386. This project consisted of 110-foot long steel girder supported by pylon and cable stay over six-lane toll plaza.

Structural Engineer, New Air Traffic Control Tower, NAVSTA Rota, Spain (design completed 2011): Project structural engineer for design of a new 98-foot-high, 38,000-square-foot Air Traffic Control Tower. The tower itself is reinforced cast-in-place concrete with a steel frame cab. The facility also includes a base building. Structural system has reinforced concrete walls and columns with steel roof framing.

Areas of Expertise

Design and Analysis of Buildings, Bridges and Miscellaneous Structures

Years of Experience

With URS: 17 | With Other Firms: 15

Education

MSE/1986/Civil Engineering & Mechanics/University of South Florida

BSE/1986/Civil Engineering & Mechanics/University of South Florida

Registration/Certification

1990/Professional Engineer/
Florida #42590

Structural Engineer, Cypress Youth Sports Complex, Lakeland, Florida (2007-2008): Prepared structural design for the picnic shelters, maintenance facility, and restroom/concession facility at this 32-acre complex with six soccer/football fields in Lakeland. Unique soil stabilizing methods were used to deal with the very poor soils on this old phosphate mine site that was never reclaimed.

Structural Engineer, Cypress Point Park, City of Tampa, Florida (2002-2009): Provided structural design services for the boardwalk facilities, picnic pavilions, signs and other miscellaneous elements at this 43-acre park located on an abandoned landfill in Tampa.

Structural Engineer, Tampa Riverwalk, City of Tampa, Florida (2002-2008): Provided structural design services for three different segments of the Tampa Riverwalk, located in the downtown area. The riverwalk entails seawall design, pedestrian bridges, hardscaping, plaza designs, and other miscellaneous structures.

Structural Engineer, Mosaic Peace River Park Boardwalk, Polk County, Florida (2006-2009): Provided structural design of the boardwalk and seating, sign structures, shelters, and restroom facilities associated with this 3,000 feet trail located within the Peace River floodplain.

Structural Engineer, Cyril E. King Airport, St. Thomas, US Virgin Islands (2010-Present): Structural engineer for URS' on-call services to the airport. Within the past 3 years, has been responsible for structural design for two projects in the terminal – a 1,200-square-foot expansion of the existing electrical room and installation of a new emergency generator (2012), and expansion of the baggage make-up area (2010).

Structural Engineer, On-Call Services, St. Petersburg-Clearwater International Airport, Clearwater, Florida (Present): Structural engineer for URS' on-call services to the airport for the past 15 years. Most recent work has included terminal renovations and the airlines' operations facility expansion. Earlier work included structural design for terminal expansion to accommodate a new bag claim area. Project also involved significant drainage and site improvements.

Structural Engineer, Training & Simulator Facility, MCAS Beaufort, South Carolina (2010): Provided structural design for a new \$38M, 101,350-square-foot facility to provide pilot training for the new F-35 aircraft. The facility was designed to LEED Silver standards and houses flight simulators, technical support facilities to maintain and program the simulators, classrooms, student learning centers, instructor offices, security and administrative offices. Building has concrete walls, steel-framed metal roof with thin film solar voltaic collectors, and exterior finishes to further the established "campus" architectural atmosphere. Special Access Program Facilities (SAPF) and non-SAPF areas are segregated. Project required strict SAPF security compliance, full fire protection, acoustic control, and design to withstand hurricane wind loads. Project also included a loading dock/receiving area, parking and entry road.

Structural Engineer, Aircraft Hangar and Apron, MCAS Beaufort, South Carolina (2010): Provided structural design oversight services for all phases of construction submittal for a new 61,000-square-foot hangar building with hangar bay space for seven aircraft and adjacent two-story building space for the maintenance shops and administration spaces for this new training squadron. Building will have a pile-supported steel superstructure with masonry and metal panel walls plus a standing seam metal roof. A large steel 300-foot-long box truss and vertical lift fabric doors will provide full unobstructed access. Involved design to withstand hurricane-force winds and meet some of the highest seismic design requirements in the Southeast.

Structural Engineer, Hangar 1552 Rehabilitation, Naval Station Mayport, Jacksonville, Florida (design completed: 2009): Project structural engineer for investigation, seismic design analysis per ASCE/SEI 41-06, wind load/hurricane-resistance and other analyses, and design for major repairs. Involved structural inspection/analysis, wind analysis and conceptual shoring design, design-build RFP #1 for immediate repairs to heavily corroded external roof trusses and stairwells that had settled, and RFP #2 for replacing HVAC, plumbing and lighting plus replacing doors and windows, and interior and exterior repairs. Work included visual inspection, historical information interviews with tenants and PWD personnel, computational analyses, and recommendations for repair including safety considerations. Also, wind analysis and conceptual temporary shoring scheme to support the roof while the external roof trusses are being repaired. Also performed a RISA-3D wind load analysis and 2D gravity load analysis. Provided an opinion as to the current safe wind speed the hangar can withstand, and devised an external cable-stayed shoring system that would not interfere with squadron operations. Project totaled over \$20M of improvements.

Arnaldo “Arnie” Hernandez, RA, NCARB, LEED AP

Quality Control



Overview

Mr. Hernandez' experience includes architectural design and programming, master planning, site planning, construction documents, construction administration and technical reports. Clients have included most local and state agencies as well as the private sector. Project types have consisted of office buildings, communication buildings, correctional facilities, educational facilities, tolls facilities, warehouses and multi-family complexes. Typical project experience is provided below.

Project Specific Experience

Quality Control Reviewer, Pompano Beach Service Plaza Operations Center Expansion, Florida's Turnpike Enterprise, Broward County, Florida (2006-2009):

Provided quality control review of architectural documents and coordinated work of engineering disciplines for the 25,000-square-foot expansion at the Pompano Beach service plaza. This facility houses the traffic management center and was operational during construction.

Project Manager, Brevard Operations Center Design-Build RFP, FDOT District Five, Brevard County, Florida (2006-2007):

Prepared RFP document that included an administration building, vehicle/sign/ warehouse building, fuel island, and storage buildings. In addition, the RFP included LEED requirements and provided guidelines and benchmarks for the Design-Build team. Prior to its development services conducted included surveying existing Operations Center to determine needs and prepare the design program.

Project Manager, FDOT Facilities Capital Outlay (FCO) Program, FDOT Central Office, Florida (2006-Present): Managed the design of various projects under our on-call services contract that included:

- **Manatee Operations Center, District One:** Providing assistance to the Department in assembling a Design-Build RFP for this facility. Services include RFP document preparation as well as serving as liaison with permitting agencies. Services also included status verification of previously obtained zoning status.
- **Data Room Modifications** at State Materials Office.
- **Training Room Renovation at Brooksville Maintenance Yard, District Seven:** Services consisted of converting a test lab facility into a meeting/training facility with new interior finishes, kitchen and ADA restrooms.

Project Architect, All Electronic Tolling (AET) Conversion for Several Sections of Florida's Turnpike Enterprise, Hillsborough, Pasco, and Hernando Counties, Florida (2011-Present):

Project Architect for design of a new building to house tolling computer and recording equipment for highway system that included sections 4B, 5A, 5B, 6A, 6B, 6C, 7A. New building was designed to be fabricated off-site in order to minimize on-site construction time and was site-adapted at multiple locations. Systems redundancy included dual HVAC system and emergency power generator. Services also include demolition of most existing tolling buildings and repurposing certain plaza buildings.

Project Manager, New Airport Operations Control Center (AOCC), Miami International Airport, Miami-Dade Aviation Department, Florida (3/2010-12/2010):

Managed the evaluation and design program assessment for relocation and expansion of the AOCC. Phase 1, which has been completed, involved the evaluation of six sites and the selection of a site for the new facility. In Phase 2, he lead the team of architects and structural, communication, mechanical and electrical engineers in visiting the site, meeting with MADD mechanical/electrical/communication (IT) staff, and reviewing all available as-built drawings including IT infrastructure and condition reports. Subsequent responsibilities will be overseeing development of the design program that will include a design narrative, project cost, project schedule and 15% architectural, electrical, and mechanical and IT design drawings.

Peer Reviewer, Riverine Facility, Stennis Space Center, Mississippi (2008-Present): Review of contractor design submittals for permanent riverine operations space that will contribute to upgrading training capability and mission readiness. Involved with submittals related to the new 12,000-square-foot riverine operations building and the 16,500-square-foot combatant craft

Areas of Expertise

Architectural Design

Master Planning

Years of Experience

With URS: 7 Years

With Other Firms: 30 Years

Education

BArch/1978/Architecture/

University of Miami

Registration/Certification

1980/Registered Architect/

Florida #AR0009893

1980/ NCARB #30346 (National Council of Architectural Registration Boards)

1985/Class A General

Contractor/#CGC034826

1992/Southern Building Code

Inspector

2009/LEED Accredited Professional



maintenance/storage buildings. Project incorporates operational equipment areas, office and planning areas, classrooms, and personnel support areas for training requirements.

Project Manager, Miramar Toll Plaza, Florida's Turnpike Enterprise, Florida (2007-2009): Managed the design of the 2,500-square-foot addition and 1,300-square-foot building modification and toll island retrofit to meet current design standards.

Polk County Parkway Toll Facilities, Florida's Turnpike Enterprise, Florida (2001): Developed contract documents of standard toll facilities for the Department for the new Polk County Parkway.

Project Manager, City of Orlando Train Station (Amtrak), Orlando Florida (2012-Present): The Station is a historical building that serves as the Orlando Amtrak Train Station. Due to the historical nature of the building, all proposed work needed to be coordinated with the City of Orlando Historical Preservation Board and must be in compliance with the Architectural Review Commission. This historical structure is part of the 61-mile commuter rail transit project from DeLand to Ponciana in Central Florida. The Florida Department of Transportation (FDOT) has selected a Design-Build firm to design and construct the 32-mile Initial Operating Segment (from Ft. Florida Road to Sand Lake Road), including 12 station platforms. Under the GEC Contract, and as a member of the Program Management Team (PMT) for SunRail, URS was tasked with providing services to restore the facility. The services included surveying the existing structure to develop a list of deficiencies that were later prioritized and assigned a specific project phase to be undertaken as funding becomes available. Design documents for Phase I were prepared and work consisted of envelope stabilization and exterior ADA and Life Safety upgrades. Future phases will include interior ADA and Life Safety upgrades as well as repurposing of portions of the first floor and second floor.

Project Manager (Design Team), Closed Circuit Television Enhancement and Expansion, Tampa International Airport, Hillsborough County, Florida (2010): The goal of this design-build project was to deliver a functional system that meet the needs of all stakeholder departments of Tampa International Airport and the Transportation Security Administration. The challenge included meeting and not exceed the established all inclusive program budget of \$8,122,000 while delivering the maximum systems functionality and value for dollar. This work included implementation of a fault tolerant infrastructure and compliant network architecture to achieve redundancy in the area of systems transport.

Contract Manager, Air Force Special Operations Command (AFSOC) Environmental Planning, Programming and Architect-Engineer, Nationwide: Managed production of various task orders (TO) under our Indefinite Delivery, Indefinite Quantity (IDIQ) contract (EP2AE) that included the following assignments:

- **Develop URD for Special Tactics Operations Facility (21 STS) (TO3007), Pope Airfield, North Carolina:** Services included programing charrette, detailed project description, preliminary drawings, cost estimate and completing form DD1391.
- **Develop URD for Special Tactics Operations Facility (22 STS) (TO3008), Joint Base Lewis-McChord, Washington:** Services included programing charrette, detailed project description, preliminary drawings, cost estimate and completing form DD1391.
- **Develop URD for Special Tactics Operations Facility (26 STS) (TO3009):** Services included programing charrette, detailed project description, preliminary drawings, cost estimate and completing form DD1391.
- **Develop URD for SOF ADAL Simulator Facility for NSAv (TO3010), Cannon AFB, New Mexico:** Services included programing charrette, detailed project description, preliminary drawings, cost estimate and completing form DD1391.

Peer Review, New Air Traffic Control Tower (ATCT), Naval Station (NS) Rota, Spain (2010-Present): Providing architectural design services for a new 98-foot-high, 38,000-square-foot ATCT. The structural system consists of reinforced concrete walls and columns with steel framing. The tower is reinforced cast-in-place concrete with a steel frame cab. The facility also includes a base building that houses the instrument flight rules (IFR) control and equipment rooms, an Air Operations Center/US Air Force Command Center, a suite for Spanish Naval operations, a new airfield lighting vault, an arresting gear shop, and the Ground Electronics Maintenance Department's offices and workspaces. The facility is designed to match the aesthetics prescribed by the Base Exterior Architecture Plan, which includes stucco walls and clay tile roofs. Construction budget is \$19,250,000.

Project Manager, P-913 Explosives Handling Wharf - Security Force Facility, Naval Base Kitsap – Bangor, Silverdale (2010-Present): Services consist of design and providing construction administration services for a \$26,210,000 security facility. The facility is intended to achieve LEED silver certification. Due to the nature of the facility, detailed information is prohibited by DoD Unclassified Controlled Nuclear Information (UCNI) regulations.

Joe McConnell

Senior ITS Telecommunications Engineer



Overview

Joe McConnell has 30 years of experience in the areas of ATMS, ATIS, Transit (bus, rail), ETC/ETTM, managed/express/HOT lanes, TMC/TOC facilities, security systems, electronic-control systems, video display systems, and communications networks. He has provided both project and technical management of ITS and communications projects in multiple states and routinely leads ITS and communications tasks and consults on projects throughout the U.S. He is well versed and experienced in all aspects of ITS and systems engineering services including planning, design, integration, testing and CE&I.

Project Specific Experience

Orange County ATMS System Manager Project, Orange County, FL: Responsible for engineering services for the design and implementation of the Orange County ATMS. Services included design of traffic signal controller upgrades, approximately 40 miles of fiber optic facilities, network design using Gigabit Ethernet, multicast MPEG-2 video at various intersections, arterial DMSs, and a renovated TMC. Project included the development of Design-Build criteria and RFP for final design and build services.

Tampa Bay SunGuide Phase 1 FMS System Manager, FDOT District 7, Florida: Provided engineering support which included design, deployment and integration of multiple system and communications technologies in several stages. Responsibilities included system communications and design of Tampa Bay SunGuide Center systems and equipment including video wall, security access subsystems, network servers, routers, racks, conference room A/V systems, and structured cabling system for the TMC.

I-4 Surveillance Motorist Information System (SMIS) Expansions and Design FDOT District 5, Florida: Provided technical design services for the Phase IV I-4 SMIS design expansion project to extend the existing system (9 miles of fiber optic comm.), CCTV cameras, DMSs, and vehicle detection stations).

Communications Design Requirements, Seminole County, Florida: Responsible for detailed design criteria/requirements and a RFP to support the Seminole County ATMS. This design included approximately 25 miles of fiber optic communications, provisions for digital video transport and sharing of video and data with the FDOT D 5 RTMC. Project tasks included a detailed evaluation and development of design concepts including traffic control sections, hybrid analog/digital communications platform, and a fully digital system with IP traffic control to the intersection using Gigabit Ethernet for a backbone.

FDOT iFlorida Central Florida Field Components Design/Build, FDOT District 5, Florida: Responsible for design which included Gigabit Ethernet communications, wireless links, CCTV surveillance and security, and Automatic Vehicle Identification (AVI) detection equipment. The project included the deployment of AVI transponder readers at locations along Florida Turnpike-operated facilities using SunPass transponders to provide travel-time information for over 128 miles of coverage. Communications to these readers occur through fiber communications, dedicated dial-up, and wireless links depending on location. Interface requirements for the Travel-Time Data Server.

Integrate ITS in Volusia County Design-Build FDOT District 5 & Volusia County, Florida: Provided design and planning services which included design of fiber optic communications, network components, operator computer workstations, control software, etc. The design provided connectivity to share video and data between the Volusia County Transit Operations/Control Center, Daytona Beach TMC, Volusia County TMC, Volusia Emergency Operations Center and the FDOT District Five Office.

PennDOT District 6-0 TMC Upgrade, PA: As part of the I-95 GR3 Segment ITS Design project, Mr. McConnell provided design of the replacement and design of a new Digital Display System including IP video to the video wall and collaboration and distribution among stakeholders.

City of Philadelphia Emergency Operations Center (EOC) Upgrade, PA: Provided design of upgrades to the City EOC to provide video sharing capabilities with the PennDOT TMC. Design includes; video wall / displays, mounting details, electrical services, structured cabling, rack elevations, network equipment and connectivity, and operator workstations.

Areas of Expertise

ITS Systems
Communications

Years of Experience

30 Years

Education

BS / 1984 / Electrical Engineering /
University of Central Florida

Fiber Optic System Design
Certification, 1996

City of Birmingham TMC Design Modifications, AL: Provided design upgrades and modifications as well as CEI services of TMC upgrades to hardware (video wall, servers, workstations, network 10 equipment, UPSs, electrical upgrades, video encoders, security firewall, etc.), software including Milestone-based video management software platform, and raised floor panel upgrades as well as providing video sharing with outside agencies.

Orange County TMC, Orange County, Florida: As part of the ATMS system manager deployment project provided the design and implementation of an updated and renovated County TMC, including a video wall/display subsystem with automated control subsystem, central infrastructure including network servers, workstations, structured cabling, racks, UPS subsystem, and central control software selection.

City of Sandy Springs TMC Upgrade, GA: Provided TMC design upgrades and modifications to include; operator workstations, video displays, structured cabling, network equipment (core switch, routers, firewalls), servers (video, system, display), fiber termination, broadcast play-out server, T-1 CSU/DSU, DVRs, interface to an existing Vicon analog video switch, video encoder/decoder rack, equipment rack design, electrical services, and connectivity to the GDOT TMC and other centers to share video and data.

City of Alpharetta Traffic Engineering TMC Upgrade, GA: As part of the SR-9 ATMS project provided TMC design upgrades and modifications to include; operator workstations, video displays, structured cabling, network equipment (core switch, routers, firewalls), servers (video, system, display), fiber termination, CATV splitter and cable TV interface, DSL modems, equipment rack design, electrical services, and connectivity to the GDOT TMC and other centers for sharing of video and data.

City of Roswell TMC Upgrade, GA: As part of the SR-9 ATMS project provided TMC design upgrades and modifications to include; operator workstations, video displays, structured cabling, network equipment (core switch, routers, firewalls), servers (video, system, display), fiber termination, broadcast play-out server, video distribution amp, CATV splitter and cable TV interface, equipment rack 12 design, electrical services, and connectivity to the GDOT TMC and other centers for sharing of video and data.

Matthew Cousins

ITS Engineer



Overview

Mathew Cousins has 11 years of experience in ITS planning and design, traffic operations analysis and design, highway capacity analysis, modeling and simulation, fiber optic networking, electrical engineering, and geographic information systems. He has provided traffic engineering design for Florida's Turnpike and supports our ITS group with technical specification production, GIS mapping, and design support for fiber optic communications, microwave/wireless systems, DMS subsystems, CCTV video surveillance subsystems, radar detection sensors and other ITS applications on major transportation projects throughout the United States. His software skills are extensive and include: HCS, Synchro, CORSIM, ArcMap, Microstation, AutoCad, Microsoft Visio, PhotoModeler, Arena, PSpice, MaxPlus II, Protel, Matlab, CLIPS, C, C++, Java, VHDL, Assembly Language, and PIC Basic.

Project Specific Experience

ITS Engineer, Central Florida Expressway Authority (CFX), Systemwide Data Collection Sensor Upgrade Project, Orlando, FL. The project included the upgrade of the Data Collection Sensor (DCS) system to improve maintainability, reliability and functional redundancy in ITS Operations. The project also includes four related upgrade tasks: Cabinet Upgrades, Fiber Optic Cable Upgrades, Fiber Modem Upgrades, and Uninterruptible Power Supply (UPS) Upgrades. In addition, this project includes evaluation of the existing grounding conditions and design of appropriate improvements. Specific system upgrades include the following: replace approximately 120 existing DCS sites with new 6204 Sirit Multi-protocol Readers, replace approximately 50 existing single-door Type III NEMA Cabinets with dual-door Type 336S Cabinets, replace 28 legacy point-to-point fiber modems with new Ethernet switches and modify the fiber connections at these locations to allow Layer 2 ring topology, install new UPSs and rewire approximately 190 existing cabinets, install approximately 10 miles of fiber optic feeder cable and add translateral fiber connections at key interchanges, and perform ground measurement and visual inspection of ground connections.

CEI Services, Sarasota / Manatee County I-75 Freeway Management System (FMS), FDOT District 1, Southwest FL. Conducted reviews of the plans during production, shop drawing submittals, device and communications system testing and training procedures; Post-construction inspection of power systems and device/subsystem installations, along with their associated testing; Subsystems deployed in this approximately 60 mile long project include a fiber optic communication network, CCTV cameras, Dynamic Message Signs (DMSs), a Highway Advisory Radio (HAR) system, a Road Weather Information System (RWIS), a Vehicle Detection System (VDS), and the upgrades needed to incorporate video feeds into the video wall at the TMC in Sarasota, FL

ITS Engineer, Central Florida Expressway Authority (CFX) Headquarters Building ITS Control Room, Orlando, FL. This ITS Control Room Control room provides the Authority with a centralized solution for accessing and displaying ITS systems while providing an office setting to the Assistant Manager of Expressway Operations. The system provides connectivity, control, and visibility to the Authority's and other agencies' ITS systems including CCTV video feeds, DMSs, TMSs, Data Server Maps, and SunGuide, as well as access to cable television feeds. His responsibilities include: electrical and communications system planning, design, and plans development. System components include: 8 LED monitors, stereo system, video conference equipment, operator PC workstation, video processor, Ethernet switches, video encoder, and video media converters. Reference:

ITS Designer, Suncoast Parkway All Electronic Toll Conversion, Florida's Turnpike Enterprise, Hillsborough, Pasco and Hernando Counties, FL. Responsible for field evaluations and design support for Florida's Turnpike Enterprise Improvements project which includes specific ITS design elements that includes the relocation of all infrastructure on the mainline and ramps in areas where toll plazas are being removed and toll gantries are being installed.

ITS Engineer, ITS Engineer, Tampa Bay SunGuide Phase 3 FMS System Manager, FDOT District 7, FL. Providing system support for the Tampa Bay SunGuide Phase 3 project. This project is an expansion to the existing system in which He is responsible for the configuration, deployment, integration, testing and maintenance of the MVDS, CCTV, DMS, electrical, and fiber optic network communications system for approximately 50 miles of interstate facilities within the Tampa Bay region. He is also responsible for the field data collection and data entry of the systems into the FDOT ITS-FM database, as well as shop drawing submittal reviews.

Areas of Expertise

ITS Planning and Design
Traffic Operations
Fiber Optic Networking
Electrical Engineering
GIS

Years of Experience

11 Years

Education

BS / 2007 / Civil Engineering /
University of Central Florida

BS / 2003 / Electrical Engineering /
University of Central Florida

ITS Consultant, I-75 Reversible Lanes PD&E, Miami-Dade County, FL. Responsible for assessment and recommendations for Intelligent Transportation Systems (ITS) and communications infrastructure for the I-75 corridor from SR 826/Palmetto Expressway to the Miami-Dade County Line for approximately 5.5 miles. The project includes the assessment and evaluation of ITS and communications technologies and alternatives to support elevated reversible lanes within the median of I-75, separated from the existing mainline lanes and was completed for FDOT, District 6.

ITS Engineer, I-75 Intelligent Curve Advisory Systems, Detroit, MI. Developed an intelligent curve advisory system for two highway curves on I-75 in Detroit in which there are a consistently high rate of automobile accidents. The system uses the speed, weight, and classification of a vehicle, along with the curve's physical geometric conditions (superelevation, curve radius, etc), visibility (fog, blowing snow, etc), road surface conditions (wet, ice, etc), and oncoming congestion conditions to calculate a speed threshold to safely traverse the curves. If the vehicle is above this threshold, an individualized message is displayed on a DMS warning the vehicle to slow down. Otherwise the sign is blank, reducing the amount of false warnings to drivers which in turn increases the frequency that a driver will obey such a warning.

ITS Engineer, Memphis SmartWay ITS Design, Tennessee DOT, TN. Provided design support for 60 miles of fiber optics communications, microwave/wireless design, 39 DMSs, 90 CCTV video cameras, 332 radar detection sensors, 20 video detection sensors, 16 Highway Advisory Radio stations, 42 HAR signs with beacon flashers with pager control, and five (5) overheight vehicle detection system. This project provides traffic management, emergency and incident management services and support for emergency evacuation/homeland security.



OVERVIEW:

Mr. Fred D. Ferrell, PE is the Chief Engineer for Traffic Engineering Data Solutions, Inc. (TEDS) and has over 28 years of engineering experience developing and providing cost-effective solutions to client transportation needs. His professional experience includes transportation engineering and management with the Florida Department of Transportation (FDOT) District 5 along with the private sector. His transportation engineering experience includes expertise in access management, traffic operational studies, traffic engineering design, special events coordination and intelligent transportation system development and operations. His management experience includes oversight and direction of the Operations Department at FDOT, including the offices of Traffic Operations, Construction, Maintenance, Materials and Research, Traffic Safety and Occupational Safety/Emergency Management. The following are a general overview of areas of expertise Fred has been involved with or responsible for their successful implementation:

TRAFFIC OPERATIONAL STUDIES: Prepared or been responsible for more than 2,500 traffic operational studies including spot-speed studies, mid-block pedestrian crossings, signal warrant analyses, intersection analyses, corridor analyses, highway lighting justification analyses and various safety studies for FDOT, Volusia County, Volusia TPO, and numerous cities in Central Florida. Fred has been called to lead unique projects that are challenging from not only the technical aspects, but also the institutional aspects.

ACCESS MANAGEMENT: Fred was instrumental in implementation of the Access Management process within FDOT, participating in numerous statewide workshops and implementing / applying access management guidelines along the state highway system in FDOT District 5. Fred completed specific access management studies on state highways in Central Florida that compared before and after statistics of safety and traffic operations improvements. Additionally, Fred has completed access management studies of existing roadways and developed future plans for median access control.

TRAFFIC ENGINEERING DESIGN: Prepared and reviewed a significant number of traffic signal, signing / pavement marking (S&PM) and lighting plans in the Central Florida area on State, County and City roadways. Fred's experience includes the design of span wire and mast arm signals, pedestrian signals, S&PM plans for interstate projects, plans for a road-diet, LAP-funded projects, roadway and pedestrian lighting plans and design-build projects. Clients include FDOT, Volusia County, Brevard County, Holly Hill, Port Orange, Melbourne, South Daytona, DeBary, Cape Canaveral, Satellite Beach, Daytona Beach Shores and Daytona Beach.

ITS: Fred has been involved in planning, design, operation and maintenance of ITS systems in Central Florida since conception. Fred's experience includes the original FDOT District 5 ITS Master plan, I-4 Surveillance design and construction of early phases, RTMC concept / design / implementation / operation, I-4 expansion into FDOT District 1 in Polk County, I-10 License Plate Reader design in Tallahassee, OOCEA ITS design on SR 408 at SR 50 and CFX ITS design on Wekiva Parkway Section 1A..



AREAS OF EXPERTISE:

- Project Management
- Transportation Engineering
- Traffic Operational Studies
- Access Management
- Traffic Engineering Design
- ITS

YEARS OF EXPERIENCE:

Over 28 Years

EDUCATION:

BSCE / 1985 / West Virginia
Institute of Technology

REGISTRATION:

Professional Engineer/ Florida
#41902

CERTIFICATIONS:

Advanced Maintenance of Traffic
FDOT Approved Course

FRED D. FERRELL, PE – Projects Continued

Florida Department of Transportation – District 5: Traffic Operations Continuing Services Contract, November 2009 – Present

Project Manager overseeing traffic operations studies, designs and data collection along with coordination with various sub-consultants (130 +/- work orders). In addition to being Project Manager, also part of Quality Assurance process on studies and designs along with being the Engineer of Record on the following studies and designs:

- State Road 50 at Hickory Hill qualitative assessment study and corridor review
- US 17/92 Access Management study between Orange City and DeLand
- State Road 430 at Halifax Avenue qualitative assessment study
- State Road 19 at Cassidy Street pushbutton turn lane design
- State Road 434 at State Road 436 qualitative assessment study
- State Road 19 at Clifford Avenue Traffic Signal Warrant study
- US 27 at NW 49th Avenue Left Turn Phase Warrant study
- US 441 at Bradshaw Road Left Turn Phase Warrant study
- Interstate 95 northbound and southbound off ramps at State Road 524 Traffic Signal Warrant studies
- State Road 514 at Corey Road and Weber Road Conceptual Design study for left turn lanes
- State Road 436 at University Boulevard qualitative assessment study
- Interstate 4 exits at Lake Ivanhoe and State Road 50 lane assignment qualitative assessment study
- State Road 50 Lighting Justification Report between Avalon Road and State Road 420
- State Road 50 at Vila City Road Traffic Signal design (strain pole)

Florida Department of Transportation – District 5: Districtwide Community Traffic Safety Contract, September 2012 – Present

Project Manager overseeing traffic safety studies and minor roadway design (audible pavement marking projects) on and off the state highway system. In addition to being Project Manager, also part of Quality Assurance process on studies and designs on the following task work orders:

- CR 42 at SE 182nd Street intersection study and conceptual design
- State Road 436 Access Management study and conceptual design from north of State Road 50 to north of Old Cheney
- State Road 482 Skid Hazard Safety study and conceptual design
- CR 476 Safety study and conceptual design
- Amelia Avenue Road Diet Safety study and conceptual design
- Osceola County Public Schools (2) Safe Routes to School Funding Conversion studies
- State Road 551 Access Management study and conceptual design
- State Road 50 at CR 455 Safety study and conceptual design

River to Sea Transportation Planning Organization (aka Volusia TPO): Traffic Ops / ITS / Safety Studies, July 2009 – Present

Project Manager overseeing and completing traffic studies on and off the state highway system. In addition to being Project Manager, also part of Quality Assurance process on studies on the following task work orders:

- Old Mission Road and Park Avenue Intersection study and conceptual design
- Big Tree Road and Golf Avenue Intersection study and conceptual design
- Reed Canal Road and Sauls Avenue Intersection study and conceptual design
- State Road 421 Pedestrian Lighting study and conceptual design



OVERVIEW:

Mr. Chris Walsh is Senior Project Manager for TEDS, with 19 years of diverse experience in both transportation planning and traffic engineering projects within Florida, including detailed operational assessments of roadways, intersections and interchanges, safety evaluations, and traffic operation design. He has served as project manager on a significant number of continuing contracts and has a proven ability to lead and integrate multiple disciplines, leading projects from the initial planning stages, developing real-world implementable solutions, and ultimately directing a team of design engineers during plans preparation. Chris also provides public and private sector perspectives which have been beneficial to public clients when long range planning, operational needs and funding considerations are addressed.

TRAFFIC OPERATIONAL STUDIES: Prepared more than 150 traffic operational studies including spot-speed studies, mid-block pedestrian crossings, signal warrant analyses, and roadway safety audits for such agencies as Orange County, Seminole County, Lake County, FDOT Districts 5, along with numerous cities. Chris has been called to lead unique projects like the Volusia County Beach Safety Study, and was responsible for the Traffic Calming Program Handbook in the City of Ormond Beach.

GROWTH MANAGEMENT/LAND DEVELOPMENT: Under continuing contracts with FDOT Districts 1, 4, and 5, Chris provided review assistance for large DRIs and comprehensive plan amendments. He led an analysis on behalf of FDOT's central office to evaluate implications of legislative changes under HB 7207. He has assisted numerous communities with their concurrency management systems, development of TIA guidelines, mitigation negotiations, and application of proportionate share. His traffic operations and design experience enable him to identify projects that address deficiencies created by development. Chris has also provided comprehensive transportation planning/engineering services for more than 20 DRIs and provided expert witness services related to growth management.

TRAFFIC ENGINEERING DESIGN: Prepared and reviewed a significant number of traffic signal, roadway lighting and signing/pavement marking (S&PM) plans in the central Florida area. His experience includes the design of traditional signals, emergency signals, interchange signals, S&PM plans for interstate projects, plans for a road-diet, parking plans for a CRA, LAP-funded projects, and design-build projects. Clients have included FDOT, Eastern Federal Lands (FHWA), Port Orange, Melbourne and Ormond Beach, along with a number of private developers.

TRANSPORTATION PLANNING: From design traffic, to long-range evaluations, to interchange simulation, Chris has a demonstrated ability to effectively analyze future transportation needs on a wide-array of projects. Given his unique ability to quickly identify creative solutions that work, he is called upon for unique projects like the lane-reduction streetscape project in Daytona Beach Shores, and the US 41 projects in Sarasota where he utilized pedestrian-bicycle level-of-service assessments to evaluate the benefits between roundabout and signalized control. With his common-sense approach, vast volume forecasting expertise, modeling



AREAS OF EXPERTISE:

- Project Management
- Transportation Engineering
- Traffic Operational Studies
- Traffic Engineering Design
- Transportation Planning

YEARS OF EXPERIENCE:

Over 19 Years

EDUCATION:

BSCPE / 1994 / Vanderbilt University

REGISTRATION:

Professional Engineer/ Florida #57626

CERTIFICATIONS:

Advanced Maintenance of Traffic FDOT Approved Course

CHRIS J.WALSH, PE – Projects Continued

FDOT-5 Traffic Operations Continuing Services Contract

- SR 436 at Montgomery, Essex, and Hattaway – *Signal Design (Mast Arm conversion)*
- US 17/92 at Packwood and Park - *Signal Design (Mast Arm conversion)*
- US 92 at Midway and Adams , Current – *Signal Design (Mast Arm conversion)*
- US 1 at 3rd Street and Venture, Current – *Signal Design (Mast Arm conversion)*
- Leesburg School Zone, 2013 –*Signing/pavement marking plans*
- US 27 at Tally Road, 2012 – *Signal Warrant Analysis*
- State Road A1A at Camino Del Mar, 2014 – *Signal Warrant Analysis*
- State Road 519 at Levitt, 2012 - *Signal Warrant Analysis*
- State Road 100 at Old Kings, 2012 - *Left-Turn Phase Warrant Analysis*
- State Road 526 at Mills, 2013 – *Left-Turn Phase Warrant Analysis*
- State Road 40 from Magnolia to SE 1st , 2013 - *Qualitative Assessment*
- State Road 44 at Airport, 2013 – *Signal Warrant Analysis*
- State Road 50 at Max Hooks Road, 2013 – *Qualitative Assessment*
- State Road 100 at CR 305, 2013 – *Qualitative Assessment*
- I-4, I-75, and State Road 528 Contra-flow Plan, 2013 – *Traffic Control Plans for Contra-Flow*

Wekiva Parkway Section 7A

- Engineer of Record for following component plan sets:
 - Approach and Underdeck Lighting on State Road 46 frontage roads (*conventional roadway lighting*)
 - Signal Design on State Road 46 at Orange Boulevard (*mast arm signal*)
 - Signing and Pavement Marking Design on State Road 429 and State Road 46

Interstate 75 from Hernando County Line to State Road 48 (Design-Build Project)

- Engineer of Record for following component plan sets:
 - Interchange Lighting at State Road 48 and County Road 476 (*conventional roadway lighting*)
 - Signal Design on northbound off ramp of Interstate 75 at State Road 48 (*strain pole*)
 - Signal Design on State Road 48 at Lowry Street (*strain pole*)

FDOT Continuing Safety Contract

- SR 436 Access Management Study, 2013 –*Safety study for installing a raised median on this 7-lane section (included evaluation of crash data, qualitative assessments, and improvement concepts/costs)*
- SR 482 Skid Hazard Study, 2013 – *safety study for milling and resurfacing this section of six-lane roadway due to wet-weather crashes (included evaluation of crash data, qualitative assessments, and improvement concepts/costs)*
- State Road 50/State Road 520 Audible Pavement Markings, 2013 –*Signing/pavement marking plans*
- US 1 Audible Pavement Markings (Brevard/Volusia), Current – *Signing/pavement marking plans*

Volusia County Continuing Traffic Engineering

- Williamson Blvd at Midway, 2013 – *Signal Design (Mast Arm conversion)*
- Beach Parking Management System Feasibility Study, 2013 – *Prepared feasibility study to evaluate DMS signs.*
- Pioneer Trail at Turnbull Bay Road Horizontal Curve Sight Distance Analysis, 2012 – *Evaluated sight distance*
- Pedestrian Signals for S. Atlantic at 7th and 24th, 2013 – *Signal Design (pedestrian signals)*

Lake County Continuing Transportation Engineering

- Hancock Road at Fosgate, 2014 – *Signal Design (new signal)*
- Micro Racetrack Road, 2013 – *Speed Study*
- County Road 44A from State Road 19 to State Road 44, 2013 – *Truck Evaluation and Speed Study*
- Waycross at Abrams , 2013 – *All-Way STOP Warrant Analysis*



OVERVIEW

Mr. Alexander T. Mims is the lead ITS Engineer for TEDS. He has been involved in various engineering designs, from the ground up, for the last seven years. Alex brings great ability to TEDS with his subject knowledge and design. His diverse experience brings abilities for leading design efforts completing Intelligent Transportation System (ITS) design plans, civil site plans, minor roadway plans, signal plans and specifications related to the project(s).

The following is a representative listing of Alex's diverse experience over the past seven years:

Intelligent Transportation Systems (ITS):

INTERSTATE 4 ITS EXPANSION IN POLK COUNTY (FDOT-5): Alex was the lead designer completing design plans for Central Florida ITS project along Interstate 4 from CR 532 to west of US 27. Design completed as part of design/build team and included CCTV, MVDS, mainline DMS, fiber optic communications, power service(s) and extension of existing underground conduit infrastructure.

INTERSTATE 75 ITS IN SUMTER AND MARION COUNTIES (FDOT-5): Alex was the lead designer and engineer of record completing design plans for design-build ITS project along Interstate 75 from south of Florida's Turnpike to north of US 27. Design included approximately 27 miles of freeway ITS design and deployment, including CCTV, MVDS, DMS, fiber optic communications, power services and underground conduit infrastructure. Coordination and permitting with water management districts (SJRWMD and SWFWMD) and Marion County completed as part of design.

INTERSTATE 75 ITS FROM HERNANDO COUNTY LINE TO STATE ROAD 48 (FDOT-5): Alex is the lead designer and engineer of record completing design plans (currently at 90%) for design-build ITS project along Interstate 75 from Hernando County Line north to State Road 48. Design included approximately 9 miles of freeway ITS design and deployment, including CCTV, MVDS, fiber optic communications, power services and underground conduit infrastructure.

INTERSTATE 75 ITS FROM STATE ROAD 48 TO SOUTH OF TURNPIKE (FDOT-5): Alex is the lead designer and engineer of record completing design plans (currently at 90%) for design-build ITS project along Interstate 75 from north of State Road 48 to south of Florida's Turnpike. Design included approximately 11 miles of freeway ITS design and deployment, including CCTV, MVDS, fiber optic communications, power services and underground conduit infrastructure.

WEKIVA PARKWAY SECTION 7A (FDOT-5): Alex is the lead designer and engineer of record completing design plans (currently at 60%) for project along the Wekiva Parkway (State Road 429) from the Wekiva River east to Orange Boulevard. Design included approximately 3 1/2 miles of freeway ITS design and deployment, including CCTV, MVDS, DMS, fiber optic communications, power services and underground conduit infrastructure.

US 92 ADAPTIVE SIGNAL SYSTEM DESIGN (FDOT-5): Alex was the lead designer completing design plans for project on US 92 from Tomoka Farms Road east to Beach Street (22 intersections). Design included deployment of an adaptive signal system (In-Sync) along with blue tooth readers (Blue Mac) and modifications of fiber optic communication network. Coordination was completed with FDOT, Volusia County and the City of Daytona Beach on the design of the project.



AREAS OF EXPERTISE:

Transportation Engineering
Intelligent Transportation (ITS)
Civil/Roadway Engineering

YEARS OF EXPERIENCE:

Over 7 Years

EDUCATION:

BSCE / 2009/ University of
Central Florida

REGISTRATION:

Professional Engineer / Florida
77095

ALEXANDER T. MIMS, PE – Projects Continued

Studies and Minor Roadway Design:

FLORIDA DEPARTMENT OF TRANSPORTATION - General Engineering & Continuing Services Consultant Contract for Traffic Operations (FDOT-5): On-going contract(s) completing traffic operational studies and designs on the state highway system in the nine county district. Studies included:

- Interstate 4 Rest Area Closure Study (Volusia County)
- State Road 514 Intersection Design Concepts
- State Road 19 Left Turn Lane Designs

CITY OF DAYTONA BEACH SHORES - Professional Engineering & Continuing Services Consultant Contract: On-going contract completing minor designs throughout the City, including:

- State Road A1A Sidewalk Design (10+ miles)
- Dunlawton Avenue Sidewalk Design (2 miles)

CITY OF DAYTONA BEACH - Professional Engineering & Continuing Services Consultant Contract: On-going contract completing minor designs throughout the City, including:

- Accessible Pedestrian Signal on Dunn Avenue at White Street

CITY OF DEBARY - Professional Engineering & Continuing Services Consultant Contract: Task work order based contract completing the following signal design:

- US 17/92 at Highbanks Avenue (mast arm signal)

AMERICAN TRAFFIC SOLUTIONS: Task work order based contract completing red light running camera signal designs:

- Orlando
- Tampa
- Miami
- South Pasadena
- Palm Coast
- Temple Terrace

Civil Site Design:

MIRACLE TOYOTA AND COMMERCIAL SUBDIVISION: Preparation of Site and Roadway Construction plans, drainage analyses, and obtainment of permits to construct a Toyota dealership and commercial subdivision in the City of Haines City, Florida. The project included the addition of three commercial driveways along US 27, eastbound and westbound left turn lanes for the proposed driveways, and modifications to the existing traffic signal at US 27 and Bates Road. To accommodate the additional impervious area and widening caused by the addition of turn lanes, the existing drainage collection system and wet detention pond serving the affected portions of US 27 were modified. Obtained permits from numerous agencies including, but not limited to: FDOT Access, Drainage, Landscape, and Utility Permits; and multiple SWFWMD ERPs for work both within and outside of the FDOT right-of-way.

RACEWAY PROJECT #169: Preparation of Site and Roadway Construction plans, drainage analyses, and obtainment of permits to construct a RaceWay gas station and convenience store in the City of East Palatka, Florida. The project included the addition of two commercial driveways, one connecting to US 17 and the other connecting to Putnam County Blvd, and the installation of a new traffic signal at the intersection of US 17 and Putnam County Blvd. Widening along both Putnam County Blvd. and US 17 was required to install a south bound left turn lane and a westbound right turn lane; the existing eastbound left turn lane was extended as well. Modifications to the existing storm water collection system within the FDOT and County right-of-way were necessary to accommodate the proposed improvements. Obtained permits from numerous agencies including, but not limited to: FDOT Access and Drainage Permits; Putnam County ROW Use Permit; and SJRWMD ERP.

RACETRAC MARKET PROJECT #1098: Preparation of Site Construction plans, drainage analyses, and obtainment of permits to construct a RaceTrac gas station and convenience store in the City of Daytona Beach, Florida. The project included the addition of two commercial driveways connecting to state roads. Obtained permits from numerous agencies including, but not limited to: FDOT Access, Drainage, and Utility Permits; and SJRWMD ERP.



ROBERT C. ANSTON, PE

Managing Principal
Principal Electrical Engineering

PROJECT ASSIGNMENT

Project Electrical Engineer - Electrical Engineer-of-Record

EDUCATION

BSEE/Electrical Engineering/University of Florida/1989
BSME/Mechanical Engineering/Lehigh University/1981
U.S. Naval Academy/1977-79

REGISTRATION

Professional Engineer FL (#40858)

GENERAL EXPERIENCE

Over thirty-three years of experience in the electrical construction industry. Possesses extensive experience in all phases of electrical engineering design and construction including primary service, power distribution, indoor and outdoor lighting, and special systems, such as fire alarm, CCTV, intercom, music/page, security, telephone, grounding, voice/data networking, audio-visual systems, and control systems. Rob is experienced in a wide variety of projects which includes Government Facilities, Veterans Administration, United States Armed Forces, K-12 schools, recreational and community centers, colleges, universities, churches, television and radio stations, health care, museums, libraries, and commercial projects. He has a specialized experience with today's modern high technology buildings and public service facilities. Also experienced with specialized communications media facilities. Performs energy studies, short-circuit studies, coordination studies, load studies, harmonics studies, lightning protection studies, cogeneration studies, and master utility planning. Project management experience managing electrical and mechanical/electrical design on projects with construction costs up to \$85,000,000.

EXPERIENCE RELEVANT TO PROPOSED PROJECT:



***Data Center and Supervisor of Elections
Pasco County***

- 54,000 sq. ft. Two Story
- 1000 KW and 500K Generators (N+1)
- Two 200KVA UPS's (2N)
- Voice/Data Network Infrastructure



***District V Leesburg Maintenance Complex Emergency
Power Improvements***

Florida Department of Transportation

- Replacement of Emergency Generators
- Upgraded to Power the Full Facility
- New 400 KW Engine - Generator
- New Automatic Transfer Switches

***Orlando Administration Building and Operations Complex
Florida Department of Transportation***

- Replacement of Emergency Generators
- Upgraded to Power the Entire Facility
- New 600 KW Engine - Generator
- New Main Switchboard

ROBERT ANSTON PE, project experience continued



**Burns Building Auditorium Renovations 2014
Florida Department of Transportation**

- Complete Renovation and Upgrade
- New LED Lighting & Dimming
- Coordinate New Sound Systems
- In Floor Power Distribution



**Charlotte County Sheriff's Office Remodel & Expansion
Charlotte County Board of County Commissioners**

- 40,000 sq. ft. New Sheriff's Offices
- 911 Dispatch and Emergency Operations Center
- Central UPS
- Security Systems



**Burns Office Building 2011 Renovations
Florida Department of Transportation**

- Major Renovation of 12,000 sq. ft.
- New Lighting
- New Power Distribution
- New Voice / Data Network Infrastructure



**DeSoto County Emergency Operations Center -
DeSoto County Board of County Commissioners**

- 3,500 sq. ft. Emergency Operations Center
- Emergency Generator - Hardened
- UPS



**Raymond James Building IV
Raymond James Financial**

- 300,000 sq. ft.; Nine Story
- Underfloor Power Distribution
- Centralized UPS
- Emergency Generator

**I-75 Weigh-in-Motion Weight Enforcement Station Punta
Gorda**

Florida Department of Transportation

- Electrical Engineer of Record
- One of the 1st Weigh-in-Motion Stations in Florida
- Included Roadway Lighting Design

**I-75 Weigh-in-Motion Weight Enforcement Station
Wildwood**

Florida Department of Transportation

- Electrical Engineer of Record
- One of the 1st Weigh-in-Motion Stations in Florida
- Included Roadway Lighting Design

I-4 Rest Area

Florida Department of Transportation

- New Rest Area Building – East and West Bound
- Roadway and Parking Lighting



HARRY PORTELLOS, P.E., LEED AP BD+C, CxA

Associate, Senior Mechanical Engineer

PROJECT ASSIGNMENT

Project Mechanical Engineer-of-Record
Fire Protection Engineer

EDUCATION

BSME/Mechanical Engineering/University of South
Florida/1994

REGISTRATION

Professional Engineer - Florida #61597
Certified LEED AP BD+C, CxA Professional

GENERAL EXPERIENCE

Twenty-one years with extensive experience in mechanical engineering design, including all phases of HVAC, plumbing, and fire protection systems from the preliminary design through construction administration. Experienced in the design of State/County/City Government facilities, K-12 schools, colleges, universities, restaurants, hospitals, office buildings and other commercial projects. Experienced in all current ASHRAE, ADA, NFPA, the Florida Building Code compliance requirements. Responsible for project engineering, design concept and layout, cooling load and fire protection calculations, life-cycle cost analysis, construction administration, field surveys, report preparation, and production of specifications. Reviews submittals and shop drawings. Harry has specialized experience providing LEED energy modeling for over 10 projects.

Harry has recent experience with complex renovation projects for State of Florida Dept. of Transportation and Dept. of Management Services.

EXPERIENCE RELEVANT TO PROPOSED PROJECT:



***Data Center and Supervisor of Elections
Pasco County***

- 54,000 sq. ft.; Two Story
- Pre-Action Fire Protection
- Clean Agent Fire Protection
- Produced LEED Energy Model



***Raymond James Building IV
Raymond James Financial***

- 300,000 sq. ft.; Nine Story
- Central Energy Plant; 3 - 500 ton Chillers
- High Density Data Loads for Traders
- 300 Seat Training Center



***Air Conditioning System Refresh, Second District Court
of Appeal Building, Lakeland, Florida
Florida Department of Management Services***

- Complex Phased Construction
- Occupied Building
- Replaced Two Major Air Handlers and Ductwork
- Performed Study and made Recommendations

HARRY PORTELLO PE, project experience continued



**Campus Administration and Instructional Facility
University of South Florida, Sarasota / Manatee Campus**

- 98,000 sq. ft. Three Story
- Classrooms, Technology Labs, Offices
- Teaching Auditorium, Food Court
- Separate Central Energy Plant
- Water Cooled Chillers, Cooling Towers



**DeSoto County Emergency Operations Center
DeSoto County - Board of County Commissioners**

- 3,500 sq. ft. Emergency Operations Center
- Hardened Structure



**Burns Building Auditorium Renovations 2014
Florida Department of Transportation**

- Complete HVAC Replacement
- Import and Noise Considerations
- New Restrooms
- Added Fire Protection - Sprinklers



**Suncoast Federal Credit Union Member Call Center
Suncoast Federal Credit Union**

- 41,500 sq. ft. Call Center
- Fire Protection Design
- Underfloor Air Distribution



**Burns Office Building 2011 Renovations
Florida Department of Transportation**

- Major Renovation of 12,000 sq. ft.
- All New Ductwork and VAV's
- Controls
- Fire Protection Design



**Grizzle Building 2nd Floor Interior Renovations, Largo
Florida Department of Management Services**

- 35,000 sq. ft. Interior Offices
- VAV Boxes and Ductwork
- Evaluate HVAC Systems



CHRIS W. RICKER

Partner – Mechanical Engineering

PROJECT ASSIGNMENT

Mechanical Engineering Design and Production

EDUCATION

AA/Computer Engineering Science/Saint Petersburg Junior College/1992

University of South Florida

GENERAL EXPERIENCE

Thirty-five years of experience in the mechanical engineering design and construction. Involved with all phases of HVAC and plumbing systems from the preliminary design through construction phase. Experienced in the design of State/County/City Government facilities, schools, hospitals, correctional institutions and other commercial projects. A very specialized expertise with high technology buildings like data centers and emergency operations centers. Also responsible for the direct the procurement, installation and operation of AGI's network of personal computers and software. Authored numerous programs, Web pages, and applications with Excel, Access, AutoCAD, Microstation and AutoLisp. Published in Catalyst Magazine.

EXPERIENCE RELEVANT TO PROPOSED PROJECT



**Data Center and Supervisor of Elections
Pasco County**

- 54,000 sq. ft.; Two Story.
- In-Rack HVAC System
- Redundancy (N+1) A/C System
- LEED Certification in Process
- Gray Water used for Fixture Flush



**Raymond James Building IV
Raymond James Financial**

- 300,000 sq. ft.; Nine Story
- Central Energy Plant; 3 - 500 ton Chillers
- High Density Data Loads for Traders
- 300 Seat Training Center



**Raymond James Building III
Raymond James Financial**

- 300,000 sq. ft.; Nine Story Financial Offices
- 18,000 sq. ft. Bank Building
- Kitchen / Cafeteria
- Teaching Auditorium



**Charlotte County Sheriff's Office Remodel & Expansion
Charlotte County Board of County Commissioners**

- 40,000 sq. ft. New Sheriff's Offices
- Remodeled former Electronics Manufacturing Plant
- Dispatch 911 Emergency Operations Center
- Offices, Evidence Storage, Gym
- DX Split Systems Utilized

CHRIS W. RICKER, project experience continued



**Suncoast Federal Credit Union Member Call Center
Suncoast Federal Credit Union**

- 41,500 sq. ft. Call Center
- High Density Computer Workstations
- Underfloor Air Distribution systems
- Air Cooled Chillers



**Tampa Convention Center HVAC Improvements
City of Tampa**

- New 1,750 ton Water Cooled Chiller
- Two New 200 ton Water Cooled Chillers
- New Pumps, Controls, piping



**Campus Administration and Instructional Facility
University of South Florida, Sarasota / Manatee Campus**

- 98,000 sq. ft. Three Story
- Classrooms, Technology Labs, Offices
- Teaching Auditorium, Food Court
- Separate Central Energy Plant
- Water Cooled Chillers, Cooling Towers



**Grizzle Building 2nd Floor Interior Renovations
Florida Department of Management Services**

- 35,000 sq. ft. Interior Offices
- VAV Boxes and Ductwork
- Evaluate HVAC Systems



**DeSoto County Emergency Operations Center
DeSoto County Board of County Commissioners**

- 3,500 sq. ft. Emergency Operations Center
- Redundant HVAC System
- City Water with Well Back-up
- Hardened Structure

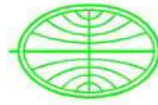


**Jacksonville Regional Service Center - Interior
Renovations**

Florida Department of Management Services

- 12,000 sq. ft. Interior Offices
- VAV Boxes and Ductwork
- Evaluate HVAC Systems

H. Paul deVivero, P.S.M.
President & Senior Project Manager



GEODATA CONSULTANTS, INC.
SURVEYING & MAPPING

Education

Undergraduate Studies
Broward Community College 1980

Construction Surveying

Miami-Dade Community College 1980

Professional Licenses

Professional Land Surveyor - Florida PLS # 4990 July
1991

Professional Affiliations

Florida Surveying & Mapping Society (FSMS)
Board Member 1993/1994 - Central Florida Chapter of the
Florida Surveying & Mapping Society (CFCFSMS).
American Congress on Surveying & Mapping (ACSM)
National Society of Professional Surveyors (NSPS)

Years of Experience with Other Firms: 17

H. Paul deVivero, P.L.S. has more than 35 years experience in providing professional surveying and mapping services. As President and Founder of Geodata Consultants, Inc., his primary responsibilities are Director of Operations and Senior Project Manager for the firm. His primary focus, since inception of the company, has been the training and management of the professional staff to insure quality and accuracy of the product and services provided to the clients. Mr. deVivero's diversified experience enables him to provide Clients with professional surveys which are accurately prepared, on schedule, and cost effective. He has a broad range of municipal experience that ranges from providing surveys for the design of government facilities such as the Orange County Courthouse to community development projects which entail right-of-way surveys for acquisition, surveys for paving, drainage, water and sewer design. He has extensive experience with transportation projects, which ranges from PD&E projects, County roadway projects, Expressway Authority projects, and Interstate Highway projects for the Florida Department of Transportation. He has experience in providing both roadway design surveys as well as right-of-way control surveys, and right-of-way mapping. He has experience in preparing surveys for eminent domain services and expert witness testimony.

SR 15 DeLeon Springs to SR 40 PD&E & Design

Provided surveying services for both the preliminary design and engineering, and the final design for the widening of this section of State Road 15 in Volusia County, Florida. Set aerial targets, and obtained initial cross sectional data and a roadway and railroad crossing of Deep Creek. During the design phase of the project a digital terrain model of the existing roadway was prepared. The limits of DTM survey included upstream Deep Creek as well as the full intersection and approaches at State Road 44.

Interstate Highway 4 Ultimate Widening

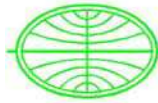
Prepared right-of-way control surveys and right-of-way mapping for five miles of I-4 from Kirkman Road to John Young Parkway in Orange County, Florida. The project included the crossing alignments of Universal Boulevard, Kirkman Road, the Florida Turnpike, Conroy Road and John Young Parkway. A separate boundary survey of Universal Studio's property was prepared to determine additional right-of-way requirements for structures at the Universal Boulevard ramp, and bridge.

SR 520, US 1 to Forest Avenue, Cocoa, Florida

Prepared a design survey for this extremely constrained and congested section of State Road 520 in Cocoa. The survey included a full digital terrain model of the bifurcated roadway, which had extreme grade changes and sharp curves. The survey included the collection of onsite and offsite drainage structure inventory and invert data, as well as the location of surface and subsurface utilities, and commercial buildings adjoining the roadway.

Maitland Boulevard Extension

Provided right-of-way mapping services for the Orlando Orange County Expressway Authority project 414-211. The 1.75 mile segment of virgin roadway alignment was established, staked and referenced. The proposed right-of-way was calculated, and mapped. Prepared legal descriptions and sketches for the acquisition of right-of-way, and easement parcels.



H. Paul deVivero, P.S.M.

President & Senior Project Manager

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Interstate Highway 95 PD&E and Design Project

Provided surveying services for the preliminary design and engineering, and final design for the widening of I-95. The PD&E study limits were approximately 40 miles from State Road 50 in Brevard County to the I-4 interchange in Daytona Beach, Florida. Services for the study included aerial targets for raster aerial photography, and bridge clearance dimensions. The Design limits were a fourteen mile segment from the Brevard/Volusia County line to State Road 44 in New Smyrna Beach. Aerial targets were set for LAMP. Conventional ground survey was performed to obtain drainage structure data, and obscured area topography. A right-of-way control survey was performed and right-of-way maps were prepared for the project.

State Road 408 at Good Homes Road

Provided design survey and prepared right-of-way maps for the Orlando Orange County Expressway Authority's interchange improvement project. The project consisted of the addition and re-alignment of ramps for the interchange and the widening of Good Homes Road. Prepared legal descriptions and sketches for the acquisition of right-of-way, and easement parcels.

State Road 528 at Narcoossee Road

Performed design survey for the improvements to the Beachline and Narcoossee Road interchange. The OOCEA portion of the project included bridge surveys, and obscured area topographic surveys to supplement aerial mapping. A full design survey of Narcoossee Road was performed for the City of Orlando from the interchange north to Lee Vista Road.

SR 408, Oxalis Drive to Chickasaw Trail

Performed supplemental design surveys for the 1.5 mile widening of the East-West expressway. Surveys included providing topographic surveys of obscured areas for LAMP mapping, drainage and wetland surveys, and full bridge surveys for three bridges within the project limits. Post design services were provided to as-built new construction completed for an adjoining OOCEA project.

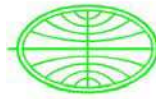
SR 408 Bridge Over Lake Underhill

Provided bathymetric surveys of Lake Underhill for the widening of the Orlando Orange County Expressway Authority's East-West Expressway bridge. A control survey was performed around the southerly banks of the lake which was used to position the soundings taken along the lake bottom. A digital terrain model of the lake bottom was prepared.

SR 408 at SR 50 Re-Alignment and Ramp Improvements

Performed design and right-of-way surveys for the east end of State Road 408 from just west of the Woodbury Road bridge to just north of State Road 50. The surveys were performed for the re-alignment of the east bound lanes of SR 408 and for the re-design of the exit ramp to east bound SR 50. The design survey included the Woodbury Road Bridge, and SR 50 from the expressway to Bonneville Road. Wetland boundaries and the location of seasonal high water marks were included as part of the drainage surveys. Existing underground utilities and ITS fiber optic lines were located. The right-of-way survey included the retracement of the original alignments for both State Roads, and the location of section lines associated with the roadway boundaries.

Jeffrey M. Schwartz, P.S.M., E.I.
Project Surveyor



GEODATA CONSULTANTS, INC.
SURVEYING & MAPPING

Education

B.S. Civil Engineering
University of Central Florida 2006

Professional Licenses

Professional Land Surveyor - Florida PLS #6618 -
July 2007
Engineer Intern License EI #1100011160 –
January 2007

Professional Affiliations

Florida Surveying & Mapping Society

Hire Date with Geodata

June 2008

Years of Experience with Other Firms

7

Jeffrey Schwartz, P.S.M., E.I. has over thirteen years of surveying experience and resides in the City of Oviedo. The majority of his experience has been focused on the office side of surveying including, but not limited to project management, client relations, production and training. Mr. Schwartz enjoys all aspects of surveying especially boundary surveys, topographic surveys, and sketch and descriptions. Jeff has extensive experience in processing field data, is responsible for setting up the field crews and directing them on each of their projects. He also oversees the CAD department. Mr. Schwartz takes pride in completing a job under budget and on time while meeting the client's project requirements.

Texas Avenue Roadway Improvements, Orange County, Florida

Prepared a topographic survey for roadway improvements for Texas Avenue starting 650 feet south of Oak Ridge Road going north for approximately 1.54 miles. Survey area extended 25 feet beyond the proposed right of way and included all side streets intersecting the project along with two off site proposed ponds. Vertical control was also established as part of this project.

Chickasaw Trail from Rain Forest Drive to Mattituck Circle Roadway Improvements, Orange County, Florida

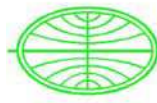
A right-of-way and design survey was completed for the addition of a turn lane for the existing entrance to Liberty Middle School along Chickasaw Trail in Orange County. The right-of-way survey was tied to the Orange County control points using fast static GPS. Traverse control was used to locate existing right-of-way, position the design survey and served as the baseline of survey for the project. Sufficient property corners, subdivision block corners and associated section corners were located to calculate the existing right-of-way lines. The design survey included horizontal and vertical control surveys and topographic surveys.

Central Florida Parkway at John Young Parkway, Orange County, Florida

Performed a right-of-way and design survey for a turn lane improvement project and prepared Survey Control Sheets for the project. The length of the survey was approximately 1,600 linear feet. A control traverse was established relative to the state plane coordinate system relative to Orange County control which served as the survey baseline for the project. Right-of-way lines were determined from a search of Orange County's official records, adjacent plats, and property corners. Project benchmarks were established for the project at approximately every 600 feet.

John Young Parkway Roadway Improvements, Orange County, Florida

Completed a topographic survey for the full right of way of approximately 2.3 miles of John Young Parkway including side streets. The existing alignment was verified and used for the horizontal control for the project. The survey included locating borings, side street alignments, and setting project benchmarks. Survey control sheets were included in the survey deliverables.



Woodbury Road Extension, Orange County, Florida

A topographic survey was completed along Woodbury Road, the proposed extension of Woodbury Road, State Road 50, and Challenger Parkway for design purposes. A right of way exhibit map was prepared showing the existing right of way of Woodbury Road and the proposed right of way for the Woodbury Road Extension. Baselines of construction were established and referenced for the project and vertical control was established throughout the project limits.

International Drive from S. Westwood Boulevard to N. Westwood Boulevard, Orange County, Florida

Completed a right of way survey for the purposes of surveying and mapping the centerline and right of way limits of International Drive. Property lines adjoining the right of way and side streets were based on the last deed of record and adjacent plats along with property corners found along the existing right of way. The centerline of International Drive was calculated, monumented, and referenced for construction purposes. In addition, project benchmarks were established along the project route at approximately 600 foot intervals.

Interstate 95, Florida Department of Transportation – District Five, Volusia County, Florida

Professional Surveyor and Mapper for Interstate 95 project beginning at the Brevard County line to North of State Road 44, approximately 16.75 miles. Project includes control survey maps, right-of-way mapping, and preparing legal descriptions for acquisition purposes.

Interstate 4 Ultimate, Florida Department of Transportation, Orange County, Florida

Professional Surveyor and Mapper for Interstate 4 project from South of Kirkman Road to South of Orange Blossom Trail. Assisted in right-of-way mapping, QA/QC and data submittals.

Plumley Farms Survey, Florida Department of Transportation – District Five, Marion County, Florida

A topographic survey was completed along State Road 500 and a portion of the Plumley Farms property for a drainage project. Horizontal and vertical control was established relative to existing FDOT projects. An existing pond site was included as part of this survey.

Interstate 4 at Universal Boulevard and Adventure Way Florida Department of Transportation – District Five, Orange County, Florida

Performed a boundary survey of approximately 7.97 acres of land to be transferred to FDOT for purposes of road right of way. A legal description was prepared in accordance to FDOT standards. Horizontal control was established relative to FDOT GPS control utilizing fast static, dual vector GPS. The existing alignment along Interstate 4 was verified.

SR415 Eminent Domain Florida Department of Transportation – District Five, Orange County, Florida

Performed acquisition appraisal surveys for 18 parcels along State Road 415. The project included recovering existing horizontal and vertical control relative to existing FDOT projects and perform individual surveys of specific parcels. A certified surveyor's report was included as part of the survey deliverables.

State Road 15A Drainage Outfall, Florida Department of Transportation – District Five, Volusia County, Florida

Performed a topographic survey over an existing drainage outfall pipe that has failed. The survey included recovering existing FDOT control based on previous projects and creating a digital terrain model of the survey limits. A baseline and project benchmarks were established along the project.



Summary of Capabilities

Roadway, Corridor and Bridge Studies
Geotechnical Engineering
Project Management
Deep Foundation Evaluation
Embankment Design
Land Subsidence Investigations

Years of Experience

With Tierra: 5 months
With other Firms: 21 Years

Education

MS, Geotechnical Engineering
University of Michigan, 1987
BS, Civil Engineering,
Beirut University, 1984

Professional Organizations/Registrations

Florida Professional Engineer, No. 56112
American Society of Civil Engineers
National Society of Professional Engineers
Florida Engineering Society

Mr. Abboud has over 21 years of experience in the field of geotechnical engineering. His experience includes management of various sized projects in the public, private and government sectors. He has analyzed and designed a variety of shallow and deep foundation systems, including driven piles, drilled shafts and auger cast piles. He has designed and executed dozens of pile load tests, both instrumented and non-instrumented. In addition, he has been involved in collecting field data on driven piles using the Pile Driving Analyzer (PDA). Mr. Abboud has managed the geotechnical aspects of multiple FDOT projects in every District in the State of Florida. Mr. Abboud has designed and executed several low cost and time effective surcharge embankments. Good examples of projects where he designed surcharge embankments are the Western Beltway (SR 429), Part C, Section 1, in Osceola County, FL., and the surcharge embankments on SR 415 in Seminole and Volusia counties. Mr. Abboud has also designed and executed several deep subsoil stabilization pressure grouting programs. Good example is the recent pressure grouting program that was executed on the Wekiva Parkway (Section 4A/4B) in Lake County, Florida.

FDOT PROJECT EXPERIENCE

FDOT District V

- Wekiva Parkway (SR 429) Section 4A/4B, *Design/Build*, Orange and Lake Counties
- SR 35 Baseline Widening, *Design/Build*, from SR 464 to SR 40, Marion County
- CR 314 Sharpes Ferry Bridge Replacement over the Ocklawaha River, *Design/Build*, Marion County
- SR 9 (I-95) Widening from South of Malabar Road to North of Palm Bay Road, *Design/Build*, Brevard County, Florida
- SR 9 (I-95) Widening from South of SR 514 to South of SR 519, *Design/Build*, Brevard County, Florida
- SR 35 Baseline Widening from SR 464 to SR 40, *Design/Build*, Marion County, Florida
- I-4 Widening, from Saxon Boulevard to SR 472, Volusia County
- I-4 Ultimate Lanes, Segment 3, from South of SR 435 to South of SR 500/600, Orange County
- SR 5 (US 1) Bridge over the Sebastian River, Brevard County
- SR 5 Southbound Bridge Replacement over Turnbull Creek, Volusia County
- SR 40 Widening from East of NE 64th Court to East of CR 314, Marion County
- SR 500 Widening, from Lake Ella Road to Avenida Central, Lake County
- SR 426/CR 419, from West of SR 434 to West of Oviedo Boulevard, Seminole County
- I-95 Widening, from South of Lake Washington Road to South of Fiske Boulevard, Brevard County
- SR 50 Widening, from Good Homes Road to Pine Hills Road, Orange County
- SR 415 Widening, from Seminole County Line to Reed Ellis Road, Volusia County
- SR 15/600 (US 17/92) Widening, from Shepard Road to Lake Mary Boulevard, Seminole County
- SR 15 Widening, from Lee Vista Boulevard to Conway Road, Orange County
- SR 11 Bridge Replacement over Little Haw Creek, Flagler County
- Chapman Road widening from SR 426 to SR 434, Seminole County
- SR 46 PD&E Study, from SR 15/600 to SR 415, Seminole County,
- Matanzas Woods Parkway/I-95 Interchange Improvements, Flagler County
- Old Kings Parkway and Palm Harbor Parkway Extensions PD&E Study, Flagler County
- SR 5 Roadway Widening from Barnes Boulevard to Rosa Jones Drive, Brevard County

NW 44th Avenue roadway widening from US 27 to CR 326, Marion County
SR 19 Bridge Replacement over Juniper Creek, Marion County, Florida
SR 50 Mabel Bridge Replacement, Temporary Critical Wall Design, Sumter County, Florida
SR 93 (I-75) Widening from Hernando County Line to SR 470, Sumter County, Florida

FDOT District I

Lakeland In-Town Bypass, Polk County
SR 400 (I-4) at US 98 Interchange Improvements, Polk County

FDOT District II

SR 23 – First Coast Outer Beltway from N. Argyle Forest Blvd. to I-10 (North Phase), *Design/Build*, Duval County
SR 200 (US 301), from MP 11.245 in Duval County to South of Callahan, *Design/Build*, Nassau and Duval Counties
J. Turner Butler South Bridge over the Inter-Coastal Waterway, Duval County
SR 105 Bridge over Sisters Creek, Duval County
SR A1A Seawall Study in North Vilano Beach, St. Johns County

FDOT District III

SR 8A (I-110), from SR 296 to SR 750, Escambia County

FDOT District IV

Fort Lauderdale Terminal Access Roadway Improvements, Broward County

FDOT District VI

HEFT Widening

Florida's Turnpike Enterprise & Orlando-Orange County Expressway Authority

Western Beltway, Part C, Section 1, Osceola County
Western Beltway, Part C, Section 3, Orange County
Florida Turnpike Bridge Widening over SR 50, Orange County
Florida Turnpike Interchange Improvements at I-4, Orange County
SR 570 (Polk Parkway) and Pace Road Interchange Improvements, Polk County
SR 429 Bridge over CR 437, *VECP*, Orange County



Summary of Capabilities

Roadway, Corridor and Bridge Studies
Geotechnical Engineering
Project Management
Deep Foundation Evaluation
Embankment Design
Land Subsidence Investigations

Years of Experience

With Tierra: 2 Years
With other Firms: 13 Years

Education

BS, Civil Engineering, University of Central Florida, 1999

Professional Organizations/Registrations

Florida Professional Engineer, No. 62951
American Society of Civil Engineers

Mr. Sewell has over 15 years of experience in geotechnical engineering for projects throughout Florida, Texas and Georgia. The projects that Mr. Sewell has been involved with have ranged from roadway and bridge design and construction to embankment design and subsidence investigation.

He has a wide variety of experience on FDOT highway and bridge studies, shallow foundation design, settlement evaluations, retaining wall design, sinkhole remedial repair, and ground subsidence evaluations throughout Florida. Mr. Sewell's experience also includes the design of deep foundation systems, cross-hole sonic logging (CSL) and compaction grouting requirements for deep subsoil improvement.

Mr. Sewell has been the Project Manager for numerous roadway soil surveys and bridge foundation designs and construction projects.

FDOT PROJECT EXPERIENCE

Districtwide Geotechnical Contracts – FDOT Districts I, V and VII

FDOT District V

- SR 35 Baseline Widening, *Design/Build*, from SR 464 to SR 40, Marion County
- SR 40, *Design/Build*, from East of NE 64th Court to East of CR 314, Marion County
- I-75 Widening from North of Hernando County Line to South of CR 470, *Design/Build*, Sumter County
- CR 314 Sharpes Ferry Bridge Replacement over the Oklawaha River, *Design/Build*, Marion County
- SR 19 Bridge Replacement over Little Lake Harris – RFP Development, Lake County
- SR 500, from Lake Ella Road to Avenida Central, Lake County
- CR 470, from Lake/Sumter County Line to East of US 27, Lake County
- SR 426/CR 419, from West of SR 434 to West of Oviedo Boulevard, Seminole County
- I-95, from South of Lake Washington Road to South of Fiske Boulevard, Brevard County
- SR 50, from Good Homes Road to Pine Hills Road, Orange County
- SR 415, from Seminole County Line to Reed Ellis Road, Volusia County
- SR 15/600 (US 17/92), from Shepard Road to Lake Mary Boulevard, Seminole County
- SR 15 Widening, from Lee Vista Boulevard to Conway Road, Orange County
- SR 11 Bridge Replacement over Little Haw Creek, Flagler County
- Chapman Road, from SR 426 to SR 434, Seminole County
- SR 5 (US 1) Bridge over the Sebastian River, Brevard County
- SR 5 Southbound Bridge Replacement over Turnbull Creek, Volusia County
- I-4 Widening, from Saxon Boulevard to SR 472, Volusia County
- I-4 Ultimate Lanes, Segment 3, from South of SR 435 to South of SR 500/600, Orange County
- SR 46 PD&E Study, from SR 15/600 to SR 415, Seminole County,
- Matanzas Woods Parkway/I-95 Intersection, PD&E Study, Flagler County
- Old Kings Parkway and Palm Harbor Parkway Extensions PD&E Study, Flagler County
- SR 5, from Barnes Boulevard to Rosa Jones Drive, Brevard County
- NW 44th Avenue, from US 27 to CR 326, Marion County

SR 5 (US 1) at SR 430 (Mason Avenue) and SR 40 (Granada Boulevard) Intersection Improvements, Volusia County
Avalon Road, from Tilden Road to Marsh Road, Orange County
SR 436 Pavement Distress Investigation, from Driggs Drive to Raiders Run, Orange County

FDOT District I

I-75 Widening from Kings Highway to Toledo Blade Blvd., Sarasota County
I-75 at SR 64 Interchange Improvements, Manatee County
Central Polk Parkway – Segment 3, from Pollard Road to SR 60, Polk County
Polk Parkway and Pace Road Interchange Improvements, *Design/Build*, Polk County
I-4 *Design/Build*, Section 3, Polk County
Lakeland Highland Hills Road, from Polk County Parkway to Glendale Street, Polk County
I-75 Bridge over Peace River PD&E Study, Charlotte County

FDOT District II

SR 200 (US 301) *Design/Build*, from MP 11.245 in Duval County to South of Callahan, Nassau and Duval Counties
J. Turner Butler South Bridge over the Inter-Coastal Waterway, Duval County
SR 105 Bridge over Sisters Creek, Duval County
CR 241 over Olustee Creek Bridge, Columbia County
C Street Cedar Key Channel Bridge, Levy County
CR 456 (Gulf Blvd) over Daughtry Bayou Bridge, Levy County
CR 456 (Gulf Blvd) over Lewis Pass Bridge, Levy County

FDOT District III

SR 8A (I-110), from SR 296 to SR 750, Escambia County

FDOT District VI

Miami Arterial DMS Replacement Project, Miami-Dade County

FDOT District VII

CR 486, from SR 44 to Forest Ridge Boulevard, Citrus County
I-275, from US 41 to SR 56 Interchange, Hillsborough County
I-275/I-4 Operational and Safety Interchange Modifications, Hillsborough County
US 301, from Sligh Avenue to South of Tampa Bypass Canal, Hillsborough County
SR 582, from West of Riverhills Way to US 301, Hillsborough County
SR 60 (Memorial Highway), from Courtney Campbell Causeway to South of Fish Creek, Hillsborough County
SR 44, from CR 470 to Withlacoochee River, Citrus County
SR 52 at I-75 Interchange Improvements, Pasco County
SR 52, from Moon Lake Road to Suncoast Parkway, Pasco County
US 19, from Coachmen Road to Sunset Point Road, Pinellas County

Florida's Turnpike Enterprise & Orlando-Orange County Expressway Authority

SR 429 Bridge over CR 437, *VECP*, Orange County
SR 429 Bridge over CR 437A Steepened Embankments, *VECP*, Orange County
Turnpike Bridge Widening over SR 50, Orange County
Suncoast Parkway 1 Design, Sections 1, 2, 3, 4 & 6, Hillsborough, Pasco and Hernando Counties
SR 570 (Polk Parkway) and Pace Road Interchange Improvements, Polk County



Carlo Pilia

Current Position

Branch Manager

Years' Experience

10

Joined Cardno

February 2012

Education

BE in Structural-Building (Civil)
Engineering, University of
Cagliari, Italy / 2004

Professional Registrations

PE / 2014 / AZ / #58267
Chartered Engineer / Ireland /
2011 / #064243
PE / Cagliari, Italy / 2005 /
#5814

Affiliations

American Society of Civil
Engineers, East Central Branch
Treasurer
North American Society for
Trenchless Technology
American Society of Highway
Engineers
Engineers of Ireland
Engineers of Cagliari, Italy

Summary of Experience

Mr. Pilia oversees Cardno's branch office providing subsurface utility engineering, utility coordination and surveying and mapping services throughout Central Florida.

Mr. Pilia has extensive experience in all phases of subsurface utility engineering and underground assets protection, including use of 3D imaging instruments and applications. He is highly knowledgeable and well respected in the utility mapping industry; authoring several articles for technical journals and industry conference presentations.

Mr. Pilia was a partner at his previous firm in Europe where he successfully managed many subsurface utility engineering projects, including major public transportation and utility upgrades in Ireland. Since joining Cardno, he has been able to apply his experience to a multitude of subsurface utility engineering and survey projects in Central Florida.

Mr. Pilia is familiar with local agencies and utility owners, providing instrumental support to any project completed from Cardno's Central Florida branch office. He is also the primary contact for our continuing services contract with Florida Gas Transmission.

Significant Projects

I-4 Ultimate Project, Orange and Seminole Counties, FL

I-4 Ultimate project includes the reconstruction of 21 miles of I-4 from west of Kirkman Road in Orange County, Florida to east of State Road 434 in Seminole County, Florida. The I-4 Ultimate project adds four tolled express lanes to I-4 while maintaining the existing free general use lanes, providing a choice to motorists. The express lanes will be operated with variable tolls which will be adjusted to improve traffic flow throughout the corridor. As a member of the design-build team, Cardno is providing surveying and mapping, utility coordination and subsurface utility engineering services within the project corridor.

Statewide Radar Tomography Contract, FDOT Central Office

Cardno TBE provides 3D utility mapping through Radar Tomography and conventional subsurface utility engineering activities for this statewide contract. Task work orders are based on existing FDOT projects with challenging subsurface environments.

Districtwide Miscellaneous Drainage Design, Multiple Counties, FL

As task work orders dictate under this FDOT District V master contract, Cardno provides designating (CI/ASCE 38-02 Quality Level B) and locating (CI/ASCE 38-02 Quality Level A) subsurface utility engineering services and design surveying services.

Kissimmee Parking Garage, Osceola County

For this LAP project with the FDOT and City of Kissimmee, Cardno TBE provided utility coordination, survey and subsurface utility engineering on this project. One of the unique aspects of this 4-story parking facility is the vertical construction elements involved within close proximity to an overhead electric transmission system which provides a challenge for OSHA crane clearances during construction.

Amtrak Maintenance Terminal Wastewater Treatment Plant (WWTP) Upgrades

Cardno performed designating (ASCE Quality Level B) and locating (ASCE Quality Level A) subsurface utility engineering services for the Amtrak facility in Sanford, FL. Cardno specifically mapped the position of underground utilities, inspected and detailed manholes and performed the investigation of the wing wal foundations of the existing RR bridge.

Continuing Services Contract, Statewide, FL

Cardno is the only firm in Florida with the latest operator qualifications to complete test holes on Florida Gas Transmission (FGT) facilities. Cardno has held a master contract with FGT since 1996 and has completed nearly 100 assignments, providing designating (CI/ASCE 38-02 Quality Level B) and locating (CI/ASCE 38-02 Quality Level A) subsurface utility engineering and supporting surveying services, and is extremely familiar with their procedures and protocols.

SR 91 at I-4 Interchange Improvements, Martin County, FL

Cardno provided subsurface utility engineering and supporting survey services. This was a task work order under our master contract with the Florida Turnpike Authority.

SR 3 @ Crockett Blvd., Multiple Counties, Osceola County, FL

Cardno provided various survey tasks including horizontal and vertical control, DTM, outfall, drainage, pond site, jurisdiction line, and utility survey along with designating (CI/ASCE 38-02 Quality Level B) and locating (CI/ASCE 38-02 Quality Level A) subsurface utility engineering within the project corridor.

SR 776 @ Gulfstream, Charlotte County, FL

In preparation of an upcoming guide sign installation, Cardno established secondary control, set alignment and generated a digital terrain model of the existing roadway as well as providing designating (CI/ASCE 38-02 Quality Level B) subsurface utility engineering within the project corridor.

US 441 @ Cruise America, Brevard County, FL

Cardno provided various survey tasks including horizontal and vertical control, DTM, outfall, drainage, pond site, jurisdiction line, and utility survey along with designating (CI/ASCE 38-02 Quality Level B) and locating (CI/ASCE 38-02 Quality Level A) subsurface utility engineering within the project corridor.

Papers/Presentations/Achievements

- > *3D Utility Information for Highway Design Projects*, FES Journal, October 2013
- > *SUE Benefits Owners in Maintaining Their Infrastructure*, FES Journal, Summer 2013
- > *Trenchless Works & Subsurface Utility Engineering*, Trenchless Technology, June 2012
- > *Working with Underground Utilities*, Engineers of Ireland magazine, March 2012
- > Paper on subsurface utility engineering for proposed metro lines, NASTT No-Dig Show, Washington D.C., March 2011
- > Paper on subsurface utility engineering, methods and technology, Engineers of Ireland Geophysics Seminar, Dublin, Ireland, February 2011
- > United Kingdom and Ireland Society of Trenchless Technology (UKSTT): Young Engineer Award, April 2010 – Named Runner Up (2nd Place).



Matthew R. LaLuzerne, PSM

Current Position

Project Manager

Years' Experience

10

Joined Cardno

February 2005

Education

MBA / Business / 2011 /
Rollins College

BS / Geomatics / 2005 /
University of Florida

Professional Registrations

PSM / FL / #6766

Affiliations

Florida Surveying and Mapping
Society: President – Elect
Most Valuable Surveyor
(December, 2013)

Summary of Experience

Mr. LaLuzerne oversees the day-to-day operations of surveying and mapping and subsurface utility engineering projects throughout Central Florida. Mr. LaLuzerne has an extensive background with a variety of survey services. Starting with Cardno as an intern his senior year of college, he has worked his way up, supplementing his hands on experience with additional advanced education. Applying practices learned while obtaining his Master's in Business Administration, Mr. LaLuzerne has helped streamline operational practices for both field and office procedures in Cardno's Orlando branch. He has been able to utilize his strong academic background to provide enhanced professional services through faster response times and effective communication and scheduling. Mr. LaLuzerne has a complete understanding of how to identify and pull from multiple resources (both in-house and subconsultants) to maximize field and office productivity while reducing overall project schedule time.

He has experience with MicroStation, GEOPAK, AutoCAD, Microsoft Excel, Microsoft Word, as well as numerous types of field equipment.

Significant Projects

I-4 Ultimate Project, Orange and Seminole Counties, FL

I-4 Ultimate project includes the reconstruction of 21 miles of I-4 from west of Kirkman Road in Orange County, Florida to east of State Road 434 in Seminole County, Florida. The I-4 Ultimate project adds four tolled express lanes to I-4 while maintaining the existing free general use lanes, providing a choice to motorists. The express lanes will be operated with variable tolls which will be adjusted to improve traffic flow throughout the corridor. As a member of the design-build team, Cardno is providing surveying and mapping, utility coordination and subsurface utility engineering services within the project corridor.

Miscellaneous Surveying & Mapping/SUE Services, Florida Turnpike

Since 2002, Cardno TBE has provided continuous districtwide SUE and surveying services for major and minor design projects completing over 80 assignments. Task assignments typically include subsurface utility surveys, the collection of survey cross sections along the limited access roadways, parcel boundary stake-outs, right of way monumentation maps, topographic surveys, horizontal and vertical control surveys, and construction stake-out.



SR 25 from NW 35th St to CR 25A, Marion County, FL

Cardno TBE is providing various survey tasks including horizontal and vertical control, alignment, DTM, cross sections, side street, drainage, jurisdiction line, geotechnical and utility survey along with designating (ASCE Quality Level B) and locating (ASCE Quality Level A) SUE within the project corridor and side streets. Cardno TBE is also providing utility coordination services to identify utility owners to facilitate discussion between and the multiple utility owners to come to a satisfactory resolution of utility conflicts.

SR 45 (US 41) from 11th Place Lane to S of Realigned SR 40, Marion County, FL

This Project Development & Environment Study (PD&E) and Efficient Transportation Decision Making (EDTM) for the widening and rehabilitation of SR 45 included Cardno TBE efforts of utility survey along with designating (ASCE Quality Level B) and locating (ASCE Quality Level A) subsurface utility engineering services, utility coordination and design survey services.

SR 464 at CSX Railroad, Marion County, FL

This design-build project entails roadway, bridge and drainage improvements which adversely impacted multiple utility owners. A portion of the Utility work was fully reimbursable and the City of Ocala exercised their Design-Build Agreement and is having the EOR design their relocations and the roadway contractor to install their facilities. Cardno TBE provided Subsurface Utility Engineering and Utility Coordination services for this project. Working with the design engineers in the field helped to identify the most efficient location for the proposed utility relocations.

SR 40 from SR 45 to CR 238, Marion County, FL

Cardno TBE is providing utility survey along with designating (ASCE Quality Level B) and locating (ASCE Quality Level A) subsurface utility engineering within the project corridor and side streets. Cardno TBE is also providing utility coordination services to identify utility owners to facilitate discussion between FDOT and the multiple utility owners to come to a satisfactory resolution of utility conflicts.

SR9 (I-95) from Brevard County Line to SR44, Volusia County, FL

This project consists of adding the fifth and sixth lanes in the median of I-95. For this large interstate widening project Cardno TBE provided design survey, subsurface utility engineering and right of way mapping support. Design survey tasks included aerial targeting, DTM/Topo of obscured areas in the median and at cross drain locations, drainage survey, bridge survey, pond site survey, geotechnical support. This interstate corridor consisted of multiple large interchanges and areas of congested utilities with miles of utilities designated. Cardno TBE provided the CADD component of the R/W and Control maps.

SR 40 from Washington St. to Granada Bridge, Volusia County, FL

Cardno TBE provided various survey tasks including DTM/topo survey and apparent right-of-way survey. Existing right-of-way maps did not exist along the corridor and many of the published plats differed in occupation for this complex stretch of road. Cardno TBE was able to work very closely with the District's survey staff to review recovered monumentation, researched documents, and survey calculations to determine the apparent right of way for this project.

Continuing Services Contract, Statewide, FL

Cardno is the only firm in Florida with the latest operator qualifications to complete test holes on Florida Gas Transmission (FGT) facilities. Cardno has held a master contract with FGT since 1996 and has completed nearly 100 assignments, providing designating (CI/ASCE 38-02 Quality Level B) and locating (CI/ASCE 38-02 Quality Level A) subsurface utility engineering and supporting surveying services, and is extremely familiar with their procedures and protocols.

TAB 2: REFERENCES

AECOM References

Project Name: FDOT District 4 RTMC Design
Client Name: FDOT District 4
Client Contact: Dong Chen
Email: dong.chen@dot.state.fl.us
Phone Number: (954) 847-2796

Project Name: Georgia DOT TMC Reconfiguration
Client Name: Georgia DOT
Client Contact: Mark Demidovich, PE
Email: mark.demidovich@dot.state.ga.us
Phone Number: (404) 635-2838

Project Name: FDOT District 2 RTMC Design
Client Name: FDOT District 2
Client Contact: Peter Vega, PE
Email: peter.vega@dot.state.fl.us
Phone Number: (904)360-5463

Project Name: Lee Tran Administration, Operations and Maintenance Facility
Client Name: Lee County
Client Contact: Steve Myers, Lee County Transit Director
Email: slmyers@leegov.com
Phone Number: (239) 533-0322

Project Name: Jacksonville Regional Transportation Management Center
Client Name: FDOT District 2
Client Contact: Craig Teal, FDOT Project Manager
Email: craig.teal@dot.state.fl.us
Phone Number: 386.961.7703

URS References

Project Name: Headquarters Building ITS Control Room Design
Client Name: CFX (formerly OOCEA) –
Client Contact: Glenn Pressimone
Email: pressimoneg@cfx.com
Phone Number: (407) 690-5000

Project Name: Memphis SmartWay ITS and New RTMC Design and CEI Services
Client Name: Tennessee DOT
Client Contact: Rodney Chester
Email: rodney_chester@gspnet.com
Phone Number: (678) 518-3891

Project Name: I-75 FMS and Satellite TMC CEI Services
Client Name: FDOT District 1
Client Contact: James Nichols
Email: James.Nichols@dot.state.fl.us
Phone Number: (941) 359-7333

Traffic Engineering Data Solutions (TEDS)

Project Name: Traffic Operations Continuing Service
Client Name: FDOT District 5
Client Contact: Rick Morrow, PE
Email: rick.morrow@dot.state.fl.us
Phone Number: (386) 943-5309

Project Name: Districtwide Traffic Safety Contract
Client Name: FDOT District 5
Client Contact: Tony Nosse, PE
Email: anthony.nosse@dot.state.fl.us
Phone Number: (386) 943-5332

Project Name: Traffic Engineering and Transportation Planning
Client Name: Volusia County
Client Contact: Jon Cheney, PE
Email: jcheney@volusia.org
Phone Number: (386) 736.5968

REFERENCES



Anston-Greenlees, Inc.

Project Name: Data Center and Supervisor of Elections
Client Name: Pasco County Government
Client Contact: Humberto Gonzalez, Facilities Mgmt.
Email: hgonzalez@pascocountyfl.net
Phone Number: (727) 834-3292

Project Name: Burns Building Auditorium Renovations
2014
Client Name: Florida Department of Transportation
Client Contact: Mark Weigly
Email: Mark.Weigly@dot.state.fl.us
Phone Number: (850) 414-4360

Project Name: Orlando Administration Building and
Operations Complex
Client Name: Florida Department of Transportation
Client Contact: Michael Nohr, Contract Manager
Email: Michael.Nohr@dot.state.fl.us
Phone Number: (386) 943-5512

Tierra, Inc.

Project Name: Suncoast Parkway, Sections 1, 2 and 3
Client Name: Florida's Turnpike Enterprise
Client Contact: Mr. Roger Gobin, Ph.D., P.E.
Email: roger.gobin@dot.state.fl.us
Phone Number: (407) 264-3839

Project Name: Geotechnical Services Continuing
Contract
Client Name: FDOT District 1 and District 7
Client Contact: Terry Puckett, P.E.
Email: teresa.puckett@dot.state.fl.us
Phone Number: (863) 519-4246

Project Name: Districtwide Materials Testing Contract
Client Name: FDOT District 7
Client Contact: Mr. Tim Smith
Email: tim.smith@dot.state.fl.us
Phone Number: (863) 292-3368

Cardno

Project Name: Continuing Services Contract, Statewide
(1996 – ongoing)
Client Name: Florida Gas and Transmission
Client Contact: Jose Sanchez
Email: joseph.e.sanchez@energytransfer.com
Phone Number: (407) 838-7171

Project Name: I-4 Ultimate Project
Client Name: HDR/Jacobs
Client Contact: Larry Low
Email: Larry.Low@hdrinc.com
Phone Number: (407) 623-6443

TAB 3:
REQUIRED
CERTIFICATIONS

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.

AECOM Technical Services, Inc.
Name of Consultant

By: 

Bob Edelstein, PhD, PE, Senior Vice President

March 9, 2015
Date



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
04/07/2014

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

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

PRODUCER Marsh Risk & Insurance Services CA License #0437153 777 South Figueroa Street Los Angeles, CA 90017 Attn: LosAngeles.CertRequest@Marsh.Com 06510 -AECOM-01-14-15 LosAng UMB TBD TBD	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE NAIC # INSURER A : Zurich American Insurance Company 16535 INSURER B : INSURER C : Illinois Union Insurance Co 27960 INSURER D : N/A N/A INSURER E : INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** LOS-001593050-60 **REVISION NUMBER:**

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

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC			GLO 5965891 06	04/01/2014	04/01/2015	EACH OCCURRENCE	\$ 2,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 1,000,000
							MED EXP (Any one person)	\$ 5,000
							PERSONAL & ADV INJURY	\$ 2,000,000
							GENERAL AGGREGATE	\$ 2,000,000
							PRODUCTS - COMP/OP AGG	\$ 2,000,000
								\$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			BAP 5965893 06	04/01/2014	04/01/2015	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE	\$
							AGGREGATE	\$
								\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						WC STATUTORY LIMITS	OTHER
							E.L. EACH ACCIDENT	\$
							E.L. DISEASE - EA EMPLOYEE	\$
							E.L. DISEASE - POLICY LIMIT	\$
C	ARCHITECTS & ENG. PROFESSIONAL LIAB.			EON G21654693 ""CLAIMS MADE""	04/01/2013	10/08/2014	Per Claim/Agg	\$2,000,000
							Defense Included	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 All U.S. subsidiaries are Named Insureds

CERTIFICATE HOLDER AECOM Technology Corporation AECOM Technical Services, Inc. 515 S. Flower St., 9th Floor Los Angeles, CA 90071	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE of Marsh Risk & Insurance Services David Denihan <i>DA Denihan</i>

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CERTIFICATE OF LIABILITY INSURANCE

4/1/2015

DATE (MM/DD/YYYY)

3/20/2014

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

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

PRODUCER Lockton Insurance Brokers, LLC 19800 MacArthur Blvd., Suite 1250 CA License #0F15767 Irvine 92612 949-252-4400	CONTACT NAME: PHONE (A/C, No. Ext): FAX (A/C, No): E-MAIL ADDRESS: <hr/> INSURER(S) AFFORDING COVERAGE NAIC # INSURER A: Travelers Property Casualty Co of America 25674 INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:
INSURED 1075642 AECOM Technology Corporation AECOM Technical Services, Inc. 515 S. Flower St., 9th Floor Los Angeles CA 90017	

COVERAGES AECTE01 **CERTIFICATE NUMBER:** 11000061 **REVISION NUMBER:** XXXXXXXX

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

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR <hr/> GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX DAMAGE TO RENTED PREMISES (Ea occurrence) \$ XXXXXXXX MED EXP (Any one person) \$ XXXXXXXX PERSONAL & ADV INJURY \$ XXXXXXXX GENERAL AGGREGATE \$ XXXXXXXX PRODUCTS - COMP/OP AGG \$ XXXXXXXX \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			NOT APPLICABLE			COMBINED SINGLE LIMIT (Ea accident) \$ XXXXXXXX BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX \$ XXXXXXXX
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX AGGREGATE \$ XXXXXXXX \$ XXXXXXXX
A A A A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	TRJUB-4245B231-14 (MA, WI) TC2JUB-4245B22A-14 (All Other States)	4/1/2014 4/1/2014	4/1/2015 4/1/2015	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 Notice of Cancellation applies per attached endorsement. All U.S. subsidiaries are covered.

CERTIFICATE HOLDER 11000061 Evidence of Coverage	CANCELLATION See Attachment SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
--------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

TRAVELERS

WORKERS COMPENSATION AND EMPLOYERS LIABILITY POLICY ENDORSEMENT WC 99 06 11 (A)

POLICY NUMBER: TRJUB-4245B231-14

TC2JUB-4245B22A-14

NOTICE OF CANCELLATION

Except for non-payment of premium by you, we agree that no cancellation or limitation of this policy shall become effective until the number of days written notice specified in item 2 of the Schedule has been mailed to you and to the person or organization designated in item 1 of the Schedule at the address indicated.

SCHEDULE

1. **Name:** Any person or organization to whom you have agreed in a written contract that notice of cancellation or material limitations of this policy will be given but only if:

1. You send us a written request to provide such notice, including the name and address of such person or organization, after the first Named Insured receives notice from us of the cancellation or material limitation of this policy; and

2. We receive such written request at least 14 days before the beginning of the applicable number of days shown in this Schedule.

Address: The address for that person or organization included in such written request from you to us

2. **Number of Days Written Notice:** 30 Additional Days

Evidence of Coverage

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective: 4/1/2014 Policy No. TRJUB-4245B231-14 Endorsement No.

TC2JUB-4245B22A-14

Insured AECOM Technology Corporation AECOM Technical Services, Inc. Premium \$

Insurance Company Travelers Property Casualty Co of America

Page 1 of 1

PROFESSIONAL SERVICES DBE OR SMALL BUSINESS COMMITMENT FORM

Firms will submit this form in response to the Request for Proposal or alternatively, at the time of Expanded Letter of Response submittal.

Used for Professional Services:

- BDI Set-Asides (Standard note 7 of Professional Services advertisement)
- Advertisements that contain Under-Utilized Work Groups (Standard note 8 of professional services ad)
- Advertisements that contain a DBE/Small Business Aspiration Goal (Standard note 9 of professional services ad)

Contract/Advertisement No.:	15565
Project Description:	RTMC Design
Prime Consultant:	AECOM Technical Services, Inc.

The Prime is a Department of Transportation certified Disadvantaged Business Enterprise (DBE). Yes No
 The Prime is a Non-DBE Small Business. Yes No
 The Prime is a Small Business. Yes No

Expected percentage of contract fees to be utilized by DBE(s): 10 %. (Combine DBE Prime and DBE subconsultants, if applicable).

Expected percentage of contract fees to be utilized by Non-DBE Small Businesses 10 %. (Combine Non-DBE Small Business Prime and Non-DBE Small Business subconsultants, if applicable).

The proposed Prime and subconsultants/subvendors are as follows:

Prime (If applicable)	Type of Work	Percentage	DBE	Small Business	"Non-DBE" Small Business
		%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Subconsultant/Subvendor (If applicable)	Type of Work	Percentage			
Anston-Greenlees, Inc.	MEP Design	10%	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Traffic Engineering Data Solutions, Inc.	Concept Ops, Agency Coord	6%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geodata Consultants, Inc.	Surveying	2%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tierra, Inc.	Geotechnical Services	2%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please note, the number one ranked firm is required to enter DBE Participation in the Equal Opportunity Compliance (EOC) System subsequent to contract award and any future contract amendments or task work orders (if applicable).

Firms listed in the table as DBEs should appear in the Department's listing of DBE's at:
<http://www3b.dot.state.fl.us/EqualOpportunityOfficeBusinessDirectory/CustomSearch.aspx>

Professional Services firms listed as "Non-DBE" Small Businesses should appear on the Department's listing of all Non-DBE Small Businesses at: <http://www2.dot.state.fl.us/procurement/professionalservices/lppc/sbeonly.htm>. Road and bridge construction firms and other non-professional services firms should appear on the Department's listing at: <http://www2.dot.state.fl.us/sasweb/cgi-bin/broker.exe?service=default&program=inetprog.db2.smbusform.scl>

By: 

Title: Senior Vice President

Date: March 9, 2015

**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: AECOM Technical Services, Inc.

By: Bob Edelstein, PhD, PE, Date: March 9, 2015 _____ Authorized Signature

Title: Senior Vice President _____



**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY
AND VOLUNTARY EXCLUSION FOR FEDERAL AID CONTRACTS**
(Compliance with 49CFR, Section 29.510)
(Appendix B Certification]

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: AECOM Technical Services, Inc.

By: Bob Edelstein, PhD, PE Date: March 9, 2015

Authorized Signature

Title: Senior Vice President

Instructions for Certification


1. By signing and submitting this certification with the proposal, the prospective lower tier participant is providing the certification set out below.
2. 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 may pursue available remedies, including suspension and/or debarment.
3. 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 when submitted or has become erroneous by reason of changed circumstances.
4. The terms 'covered transaction', 'debarred', 'suspended', 'ineligible', 'lower tier covered transaction', 'participant', 'person', 'primary covered transaction', 'principal', 'proposal', and 'voluntarily excluded', as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the person to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
5. 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.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Appendix B: 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.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
8. 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 a participant are not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 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 may pursue available remedies, including suspension and/or debarment.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**VENDOR CERTIFICATION REGARDING
SCRUTINIZED COMPANIES LISTS**

Respondent Vendor Name: AECOM Technical Services, Inc.
Vendor FEIN: 95-2661922
Vendor's Authorized Representative Name and Title: Bob Edelstein, PhD, PE, Senior Vice President
Address: 150 N. Orange Ave. Suite 200
City: Orlando State: Florida Zip: 32801
Phone Number: 954-205-5109
Email Address: bob.edelstein@aecom.com

Section 287.135, Florida Statutes, prohibits agencies from contracting with companies for goods or services of \$1,000,000 or more, that are on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List. Both lists are created pursuant to section 215.473, Florida Statutes.

As the person authorized to sign on behalf of Respondent, I hereby certify that the company identified above in the section entitled "Respondent Vendor Name" is not listed on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List. I understand that pursuant to section 287.135, Florida Statutes, the submission of a false certification may subject company to civil penalties, attorney's fees, and/or costs.

Certified By: 
who is authorized to sign on behalf of the above referenced company.
Authorized Signature Print Name and Title: Bob Edelstein, PhD, PE, Senior Vice President
Date: March 9, 2015

About AECOM

AECOM is a premier, fully integrated professional and technical services firm positioned to design, build, finance and operate infrastructure assets around the world for public- and private-sector clients. With nearly 100,000 employees — including architects, engineers, designers, planners, scientists and management and construction services professionals — serving clients in over 150 countries around the world, AECOM is ranked as the #1 engineering design firm by revenue in Engineering News-Record magazine's annual industry rankings. The company is a leader in all of the key markets that it serves, including transportation, facilities, environmental, energy, oil and gas, water, high-rise buildings and government. AECOM provides a blend of global reach, local knowledge, innovation and technical excellence in delivering customized and creative solutions that meet the needs of clients' projects. A Fortune 500 firm, AECOM companies, including URS Corporation and Hunt Construction Group, had revenue of approximately \$19 billion during the 12 months ended Dec. 31, 2014. More information on AECOM and its services can be found at www.aecom.com.

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