Meeting of the Board of Directors

December 11, 2023 - 1:30 p.m.

THEA Headquarters
1104 E. Twiggs Street
First Floor Board Room
Tampa, FL 33602

For any person who wishes to address the Board, a sign-up sheet is provided at the Board Room entrance. Presentations are limited to three (3) minutes. When addressing the Board, please state your name and address and speak clearly into the microphone. If distributing backup materials, please furnish ten (10) copies for the Authority Board members and staff. Any person who decides to appeal any decisions of the Authority concerning any matter considered at its meeting or public hearing will need a record of the proceedings and, for such purpose, may need to hire a court reporter to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which an appeal is to be based.

I. Call to Order and Pledge of Allegiance

II. Public Input/Public Presentations

III. Consent Agenda

A. Approval of the Minutes from the October 30, 2023, Board Meeting

B. Approval of Potential Board Member Travel – TEAMFL - $750

C. Approval of Ongoing Task Work Orders – FY2024

1. Clean and Stain REL Project Support, HNTB, $150,000
2. Annual Work Program Development Support, HNTB, $102,455
3. Urban Area Safety Evaluations and Concept Alternatives, WSP/WEY - Concept Designs, Safety Evaluation, and NACTO Standards, $109,000
4. Grant Application Services, WSP, $67,126
5. V2X Grant Application Services, WSP, $72,200
6. RSU Travel Time, Traffic Count, and Speed Functionality, Yunex - $100,000

IV. Discussion/Action Items

A. Planning & Innovation, John Weatherford, Committee Chair – *Bob Frey, Director*

1. Completion of Revisions to Whiting PD&E Preferred Alternative, Lochner

Purpose: H.W. Lochner has been performing additional analyses on the Whiting PD&E Preferred Alternative based on ongoing coordination with the City of Tampa. To complete the study with the resulting revised preferred alternative, THEA will need an extension of the PD&E contract, as well as additional funds. The remaining work includes completion of the revisions to the preferred alternative, additional public involvement, revisions to the Project Environmental Impact Report (PEIR) and supporting reports, and ongoing coordination culminating in a Board presentation.

Funding: $285,635, Capital Funds

Action: Request Board approval to execute a task order for H.W. Lochner to perform the remaining tasks to complete the Whiting PD&E Study with a revised preferred alternative in the amount not to exceed $285,635.

2. US 301 Design Traffic Analysis, WSP

Purpose: Prior to beginning the NEPA-level US 301 PD&E, THEA is completing preliminary work to assist in determining project needs. As part of this preliminary work, it is necessary to collect data and determine existing and future traffic, operational changes, and safety associated with US 301. This will include traffic operational analysis, traffic forecasting, historical and predictive safety evaluation, conceptual design, planning level cost estimation, and coordination support efforts.

Funding: $418,624, Capital Budget

Action: Request Board approval to execute a task order for the US 301 Design Traffic Analysis in the amount not to exceed $418,624.

B. Operations & Engineering, Bennett Barrow, Committee Chair – *Brian Pickard, P.E., Director*

1. Inspection Services - Selmon West Extension, Ferrovial Services Infrastructure, NKA Webber Infrastructure Management

Purpose: Approval of a task order for Ferrovial Services Infrastructure, NKA Webber Infrastructure Management, to inspect the tendons on the Selmon West Extension. This is a follow-up to what was done in 2022. Webber is responsible for maintaining all of THEA's structures through an Asset Maintenance Contract which allows for extra work on the areas they are responsible for maintaining.

Funding: Operations and Maintenance - $145,833

Action: Request the Board to authorize the Executive Director to execute a task order with Ferrovial Services Infrastructure, NKA Webber Infrastructure Management, to inspect all tendons on the Selmon West Extension for $145,833 in accordance with the terms in contract O-00617.

2. Change Order to Contract No. 0-02520 with The Middlesex Corporation for Designing and Building the East Selmon Slip Ramps

Purpose: To reimburse Middlesex for extra work, which includes material escalation costs, Hurricane Idalia response, contract adjustments for fuel and bituminous spread rate and material quality, extra work related to gate and sign control, extra drainage work, and a credit for reduction of work. This is certified as the final amount on the project and results in a final contract amount of $26,007,512.33 which is 8.4% above the original contract amount.

Funding: Capital Budget - $784,675

Action: Request the Board to authorize the Executive Director to execute a purchase order with The Middlesex Corporation in the amount of $784,675 for material escalation costs, Hurricane Idalia response, contract adjustments for fuel and bituminous spread rate and material quality, extra work related to gate and sign control, extra drainage work, and a credit for reduction of work not covered in the scope of the original RFP.

3. I-4 FRAME Construction, Engineering, and Inspection (CEI), Consor

Purpose: To procure the services of a CEI consultant to perform field engineering and testing for the contract work called for in the I-4 Frame Project being designed by KCI (Board Meeting October 30, 2023). Negotiations were conducted and finalized with Consor Engineering selected previously (August 26, 2019, Board meeting) for task-driven contracts for minor design and CEI projects.

Funding: Capital Budget - $497,807

Action: Request the Board to authorize the Executive Director to execute a purchase order with Consor Engineering for $497,807 to provide CEI services for the I-4 Frame.

4. GEC (HNTB) Assistance in Evaluating Risk Items from South Selmon Capacity Procurement

Purpose: To utilize the GEC (HNTB) and their sub-consultants (60% of work to be done by them) to assist THEA staff in identifying the capacity of foundations, bridge decks, pile lengths, noise wall options, and utility coordination prior to the next phase of the South Selmon Capacity procurement. This will significantly reduce the risk that the upcoming South Selmon Capacity Project contractor will incorporate into their price.

Funding: Capital - $1,092,620

Action: Request the Board to authorize the Executive Director to execute a task order with HNTB to provide GEC support during FY24 to evaluate and reduce risk items for the upcoming South Selmon Capacity Project from Himes Avenue to the Hillsborough River in an amount not to exceed $1,092,620.

5. Assistance in Evaluating Risk Items from South Selmon Capacity Procurement – Consor Engineering

Purpose: To utilize Consor Engineering and their sub-consultants to assist THEA staff in identifying pavement condition, cross slope corrections required, drainage modeling, and advanced stormwater permitting requirements and mitigation in preparation for the next phase of the South Selmon Capacity procurement. This will significantly reduce the risk that the upcoming South Selmon Capacity Project contractor will incorporate into their price. Consor Engineering was selected previously (August 26, 2019, Board meeting) for task-driven contracts for minor design and CEI projects.

Funding: Capital Budget - $496,722

Action: Request the Board to authorize the Executive Director to execute a task order with Consor Engineering to provide support during FY24 in evaluating and reducing risk items for the upcoming South Selmon Capacity Project from Himes Avenue to the Hillsborough River in an amount not to exceed $496,722.

V. Staff Reports

A. Planning & Innovation – *Bob Frey, Director*

B. Strategy, Communications & Community Engagement– *Keisha Boyd, Director*

C. Operations & Engineering – *Brian Pickard, P.E., Director*

D. Toll Operations – *Tim Garrett, Interim Director*

E. IT & Security – *Shari Callahan, Director*

VI. Executive Reports

A. Executive Director – *Greg Slater, Executive Director*

1. **Contract Renewals and Expirations**

2. Director's Report

B. General Counsel – *Amy Lettelleir*

C. Chairman – *Vincent Cassidy*

1. **Upcoming Meetings**

- Committees of the Whole – January 8, 2024
- Board Meeting – January 22, 2024

VII. Old Business

VIII. New Business

IX. Adjournment

III. A. Approval of Minutes

Tampa-Hillsborough County Expressway Authority
Minutes of the October 30, 2023, Board Meeting
1104 E. Twiggs Street
Tampa, FL 33602

The Tampa-Hillsborough County Expressway Authority held a public meeting at 1:30 p.m. on October 30, at THEA Headquarters, 1104 E. Twiggs Street in Tampa Florida. The following were present:

ATTENDANCE

Board:

Vincent Cassidy, Chairman
Bennett Barrow, Vice Chairman
John Weatherford, Secretary
FDOT District Secretary David Gwynn, Member
Mayor Jane Castor, Member

Staff:

Greg Slater
Amy Lettelleir
Jeff Seward
Bob Frey
Brian Pickard
Keisha Boyd
Shari Callahan
Tim Garrett, HNTB
Charlene Varian
Chaketa Mister
Shannon Bush
Toni Nhlapo
Brian Ramirez
Gary Holland
Frederick Pekala
Julie Aure
Szabina Szenassy
Felipe Velasco
Anna Quinones

Others:

Michael L. Pack, CATT Lab
Rick Patterson, Raymond James
Tom Delaney, Atkins
Steve Ferrell, HDR
John Generalli, Wells Fargo
Jonathan Tursky, TransCore
Matthew Sansbury, RBC
Sally Dee, Playbook
Len Becker, HNTB
Todd Josko, Ballard Partners
Snehal Ambare, CDM Smith
Christina Matthews, WSP
Sunil Jakhadi, HNTB
Sarah Lesch, Playbook
Chris Jadick, WSP
Nicole Dufra, WSP
Jim Drapp, HNTB
Jason Watts, HNTB
Alex Bourne, RS&H
Kevin Hoeflich, HNTB
Mari Bonbrest, HDR

Call to Order and Pledge of Allegiance

Chairman Cassidy called the meeting to order at 1:30 p.m., followed by the Pledge of Allegiance and invocation.

I. Public Input/Public Presentations

There were no public comments or presentations.

II. Consent Agenda

A. Approval of the Minutes from the September 25, 2023, Board of Directors Meeting

B. Increase funding to Burgess and Niple for CEI work on the ITS Generator Replacement Project, $25,923

Chairman Cassidy requested a motion to approve the consent items. Mr. Barrow moved approval, seconded by Mr. Weatherford.

The motion passed unanimously.

IV. Discussion/Action Items

A. Planning & Innovation, John Weatherford, Committee Chair – *Bob Frey, Director*

1. I-4 FRAME Design Review and Project Management, HNTB, $485,000

Mr. Frey presented an item for the I-4 FRAME design review and project management work. He noted that this is part of the FDOT I-4 FRAME project THEA is doing with FDOT. We will connect the Selmon Expressway to I-4 and the state's CV system through fiberoptic cable and roadside units (RSUs). We're essentially merging the CV Pilot with the next at-scale deployment.

HNTB will perform systems engineering, design review, and project management, as well as the collaboration between THEA and FDOT. All work will be done under a Joint Participation Agreement between THEA and FDOT.

The requested action is for the Board to approve the Executive Director to execute a task for HNTB to perform system engineering and project management services in the amount not to exceed $485,000 from the capital budget.

Chairman Cassidy requested a motion. Mr. Barrow moved approval, seconded by Mr. Weatherford.

The motion passed unanimously.

2. RITIS Trip Analytics & Customization Work, University of Maryland CATT Laboratory, $326,000

Mr. Frey presented a task order request for the UMD CATT Lab to provide data, access to the RITIS platform and trip analytics tools, and to integrate RSU data into the platform for the first-year cost of $326,000. He noted that in THEA's Strategic Plan, and in discussions with the Board, we have talked about a smart roadway and how the roadway can provide us with information to help operate and maintain the system more efficiently – this is the first step to getting there. Mr. Frey explained that RITIS has more than 50 analytics tools covering things like detector analytics and work zone performance measures, which complement the KPIs we are implementing as part of our Strategic Blueprint.

He then reviewed the various data sources, highlighting those that are key to THEA from day one, and the various uses of the data. He noted that the data functionality this will provide is integral to THEA and taking that next step in achieving a smart roadway.

Further, after investigating the available data for transportation planning and a gap in operational data, THEA has explored the use of the RITIS system to monitor operations and plan for our existing and future infrastructure. The objective of this project is to provide additional insights into road user movement and expressway performance to provide a better understanding of THEA's facilities, allowing for enhanced operations, planning, and management of the Selmon Expressway.

The requested action is to request Board approval to execute a task order for the UMD CATT Lab to provide data, access to the RITIS platform and trip analytics tools, and to integrate RS data into the platform for the first-year cost of $326,000.

Chairman Cassidy requested a motion. Mr. Barrow moved approval, seconded by Mr. Weatherford.

The motion passed unanimously.

Chairman Cassidy asked for confirmation that this expenditure will allow THEA to forego expenditures in other areas to access the information that this will provide. Mr. Frey responded in the affirmative.

Mr. Barrow thanked Mr. Slater and THEA Staff for their work on this project.

B. Operations & Engineering, Bennett Barrow, Committee Chair – *Brian Pickard, P.E., Director*

1. East Selmon ITS Improvements Assistance through the GEC

Mr. Pickard presented an item to utilize the GEC (HNTB) to assist THEA staff in developing the scope documents for procurement, managing the CEI,

reviewing design documents, and managing the contractor for the East Selmon ITS Design/Build Project.

The requested action is for the Board to authorize the Executive Director to execute a task order with HNTB to provide GEC support for procuring, design approvals, and CEI and contractor management on the East Selmon ITS Design/Build Project for $420,510 to come from the capital budget.

Chairman Cassidy requested a motion. Mr. Barrow moved approval, seconded by Mr. Weatherford.

The motion passed unanimously.

2. Design Consultant for Headquarters Security Upgrades

The next item was a request to procure the services of a design consultant to develop plans and specifications for construction contracts to complete the recommended work outlined in the security assessment dated April 4, 2023. This includes work both in THEA headquarters and the surrounding grounds.

The requested action is for the Board to authorize the Executive Director to execute a task order with Jacobs Engineering for $328,833 from the capital budget, to provide design services for constructing the recommended work outlined in the security assessment report.

Chairman Cassidy requested a motion. Mr. Barrow moved approval, seconded by Mr. Weatherford.

The motion passed unanimously.

Chairman Cassidy asked when Jacobs was selected. Mr. Pickard explained that this is a task-driven contract that was part of the GEC procurement approved in 2021. The contract ends in 2024.

3. GEC (HNTB) Assistance in Evaluating Retaining Wall Capacity

Mr. Pickard then presented a request to utilize the GEC (HNTB) and their sub-consultants to assist THEA staff in identifying the capacity of the existing retaining walls between Himes Avenue and the Hillsborough River. This will significantly reduce the risk that the upcoming South Selmon Capacity Project contractor will incorporate into their price.

The requested action is for the Board to authorize the Executive Director to execute a task order with HNTB to provide GEC support during FY24 to evaluate the capacity of the existing retaining walls from Himes Avenue to the Hillsborough River in an amount not to exceed $271,033 to come from the capital budget.

Chairman Cassidy requested a motion. Mr. Barrow moved approval, seconded by Mr. Weatherford.

Chairman Cassidy asked if this task will produce the capacity information or if the Board could expect another request. Mr. Pickard confirmed this task will produce the capacity report.

The motion passed unanimously.

4. Fiber to DMS Project – New task - KCI, $60,928.

Finally, Mr. Pickard reported that THEA received one bid on the Fiber to DMS project, and it exceeded the budget. As a result, the project will be a pay item job and will be combined with the Wrong-Way-Driving Project as one larger contract to limit unknown risks and attract more competition. The new task amount for the additional work is $60,928 to come from the capital budget. The original design task was $130,000, which is completed and closed.

The requested action is for the Board to authorize the Executive Director to execute a task order with KCI to provide system design services to THEA for scope items, including design revisions, for the Fiber to DMS project.

Chairman Cassidy requested a motion. Mr. Barrow moved approval, seconded by Mr. Weatherford.

The motion passed unanimously.

V. Staff Reports

A. Operations & Engineering – *Brian Pickard, P.E., Director*

Mr. Pickard reported the Easts Selmon Slip Ramp Project will be accepted on Tuesday or Wednesday of this week.

He reported that the railroad track removal project is underway, and he expects project completion in April 2024.

Mr. Slater asked about the schedule of road closures. Mr. Pickard noted that on the weekend of November 3, traffic will be detoured off Kennedy Blvd. to allow for the removal of tracks and supporting structures, repaving, redoing the multi-use path, and the removal of signs and signals tied to Kennedy Blvd. He added that the following week the same work will occur at Jackson Street, and in January/February work will be done on Twiggs Street.

B. IT & Security – *Shari Callahan, Director*

Ms. Callahan provided an update on the recent cybersecurity assessment for both the administrative network and the operations network. The four tasks covered include general security policies and practices; audit of network architecture and internet connectivity; website assessment and penetration testing; and internal/external non-disruptive penetration testing.

The findings for Task 1 – General Security Policies and Procedures – THEA is doing a lot of what is necessary to protect the network and we are self-enforcing our procedures. Areas of improvement include developing policies;

IT Governance (reports, compliance, and security; and improving our business continuity plan (currently underway).

Findings for Task 2 – Audit of Network Architecture and Internet Connectivity – THEA already has established and enforces network restrictions to allow only company-issued devices to access. We do need to monitor a little bit better to detect unauthorized access.

THEA's user training program is robust, and our user awareness and phishing reports have increased fivefold from a year ago. There are opportunities to increase external threat detection and we will be creating a Vendor Risk Management Plan and evaluating additional network alerting tools to monitor external threats.

Chairman Cassidy asked if there is a trigger in place to let us know if a user is accessing the network from two different devices simultaneously. Ms. Callahan will find out and report back to the Board.

Findings for Task 3 – Website Assessment and Penetration Testing – There were no vulnerabilities found on THEA's website; however, it is recommended that we implement a quarterly review of the website.

Findings for Task 4 – Internal Non-Disruptive Penetration Testing – Revealed several user accounts had passwords that were not complex enough, so we will enhance and enforce password protection policies. The testing also found that service accounts need to be diversified. As a result, we will create separate IT accounts for standard and elevated privilege activities. We will also increase server security using additional software and procedural tools.

Findings for Task 4 - External Non-Disruptive Penetration Testing – Multiple layers of protection for different routes to network access, including Multi-Factor Authentication (MFA), were detected. Recommendations for improvement include adding additional MFA on VPN access, enforcing MFA for Microsoft Cloud access, and auditing our Keeper password manager.

Mr. Weatherford asked about emails and whether an outgoing encrypted is also encrypted on the other side (encryption follows the email chain). Ms. Callahan will find out and report back to the Board.

C. Budget & Finance – *Jeff Seward, Director*

Mr. Seward provided an update on THEA's financials, noting we are wrapping up the first quarter of the fiscal year. He pointed out that THEA had originally anticipated a $2.1M reduction in revenue due to Hurricane Idalia. What we're seeing is about a $700K reduction.

Planning and Innovation expenditures are higher than normal for the first quarter; however, there were some upfront costs associated with some of the grant applications.

Professional Services and Occupancy & Office Expenses are higher due to frontloaded costs for property insurance and general liability insurance that we pay at the beginning of the fiscal year.

He closed by noting that on average spending is below budget.

D. Toll Operations – *Tim Garrett, Interim Director*

Mr. Garrett reported toll operations statistics for September. The weekly average transactions for September were 1,300,730. Total monthly transactions for September were 6,291,307, with 755,645 being non-revenue. The non-revenue portion was high due to Hurricane Idalia.

Mr. Garrett noted that overall, there was a year-over-year weekday transaction volume increase of 6.6% on the West Mainline, with the largest growth on the Selmon West Extension with a 10.7% increase.

Finally, he reported that 70% of our processed toll transactions for September were transponders and 30% were toll-by-plate. He added that our image review backlog remains low, which is currently 10 days.

Chairman Cassidy asked if E-ZPass transactions are processed through SunPass or directly between the transponder and THEA. Mr. Garrett explained that E-Z Pass and other interoperable transactions go through CFX and then to SunPass – the SunPass transactions go directly to SunPass.

The Chairman asked how THEA gets its money.

Mr. Garret noted that the money is distributed both through the Turnpike (CCSS) and through CFX for the E-ZPass transactions.

The Chairman commented that THEA has a dependency on other organizations maintaining strict procedures and protection for their technology not to interfere with THEA's money, and asked what we do about that.

Mr. Slater pointed out that it is an auditable process that we go through on a regular basis. With the replacement of our back office, THEA is simplifying transactions into one workflow.

The Chairman noted he would like to see the workflow at some future date.

E. Strategy, Communications & Community Engagement– *Keisha Boyd, Director*

Ms. Boyd provided a high-level update on the status of THEA's marketing plan and will share more details at a future meeting.

She also touched on THEA's Communication goals and strategies, which include elevating the THEA brand, enhancing THEA's reputation as a global leader, and reinforcing THEA's commitment and investment in the region.

Finally, she pointed out that this month THEA has experienced increased visibility with Mr. Slater providing transportation updates at four events, THEA has adopted five area schools, and engaged with the Minority Economic

Development Corp, Walk Bike Run Tampa, and Tampa Bay EDC. THEA staff will also be volunteering for the Great American Teach-In, CEOs in Schools, and the Community Pantry.

VI. Executive Reports

A. Executive Director – *Greg Slater, Executive Director*

1. Director's Report

   Mr. Slater noted that THEA has been active in the community talking about the strategic plan and work plan.

   He highlighted a Tampa Bay Business Journal article that reported a 21% increase in traffic coming into Tampa's downtown core. The data also illustrated hours lost in congestion. The data is consistent with the transaction growth we are seeing on the Selmon.

   Mr. Slater also noted that THEA continues to work through the new path for the South Selmon Capacity project. An internal workshop is scheduled for the end of November, and we plan to have a new path by the end of the year.

   He highlighted some of the things he is doing to raise THEA's profile as an industry leader, which includes serving as an expert advisor with Cambridge Forums. This year's topic will explore innovative financing and delivery of large infrastructure. He is also serving as a key stakeholder in FHWA's Cooperative Driving Automation Design and Architecture Workshop. Finally, he is serving as an advisor to the National Academy of Science on a project titled "Collective and Individual Actions Envision and Realize the Next Era of America's Transportation Infrastructure." The Focus is on modernization and true community-centered transportation assets. THEA is the only expressway authority involved.

   He also highlighted several community events in which he is participating.

   Finally, he recognized Szabina Szenassy for going above and beyond with her coverage of the finance office to fill in for a co-worker.

2. Contract Renewals and Expirations

   Mr. Slater reported one contract with Hall Engineering is expiring in April of 2024 and the contract with Stantec will be renewed through April of 2025.

B. General Counsel – *Amy Lettelleir*

No report.

C. Chairman – *Vincent Cassidy*

1. Upcoming Meetings

   - Board Meeting – November 13, 2023 - *Cancelled*
   - Board Meeting – December 11, 2023

III. Old Business

No old business.

IV. New Business

No new business.

V. Adjournment

The meeting was adjourned at 2:08 p.m.

APPROVED: _____ ATTEST: _____

Chairman: Vincent Cassidy Vice Chairman: Bennett Barrow

DATED THIS 11th DAY OF December 2023.

III. D. Approval of Ongoing Task Work Orders

HNTB PR 2024XXXX
HI-0XXX C-XX
Clean and Stain REL (1/1/24 - 6/30/24)
Scope Of Services

Purpose & Need

With their small in-house staff, THEA requires support to provide engineering and administrative support to assist THEA Staff on the Clean and Stain REL Project. This task work order is for Clean and Stain REL Support from 1/1/24 - 6/30/24.

Scope

Provide support as required to assist THEA Staff on the Clean and Stain REL Project. Anticipated work includes providing analysis, engineering, scope development, project management, administrative and operational support as necessary to complete the Clean and Stain REL Project. Providing support for preparing the scope of services, procurement, design, construction and assisting THEA staff as directed. Includes coordination, attending meetings and responding to requests for information from FDOT and other agencies.

SUMMARY FEE SHEET

ATTACHMENT "A"

PROJECT DESCRIPTION: Tampa-Hillsborough Expressway Authority — **HNTB PR 2024XXXX**
GEC CONTRACT NO. HNTB PR 2024XXXX — **Clean and Stain REL (1/1/24 - 6/30/24)**
HI-0XXX C-XX
PRIME CONSULTANT: **HNTB Corporation**

ACTIVITY		Sr. Technical Advisor		Project Manager		Chief Eng./Planner Sr. Proj. Eng.		Sr. Eng./Planner		Proj. Eng./Planner		Engineer/Planner		Sr. Technician		Clerical		TOTAL		Avg. Hourly Rate
		Man Hours	Hourly Rate $ 173.37	Man Hours	Hourly Rate $ 144.54	Man Hours	Hourly Rate $ 102.19	Man Hours	Hourly Rate $ 79.95	Man Hours	Hourly Rate $ 61.62	Man Hours	Hourly Rate $ 48.21	Man Hours	Hourly Rate $ 38.96	Man Hours	Hourly Rate $ 22.66	Manhours By Activity	Salary Cost By Activity	
Clean and Stain REL		8	$1,386.96	84	$12,141.36	90	$9,197.10	160	$12,792.00	160	$9,859.20	120	$5,785.20	41	$1,597.36	16	$362.56	**679**	$53,121.74	$78.24
Total Man Hours	Total Salary [(MHxHR)]	**8**	**$1,386.96**	**84**	**$12,141.36**	**90**	**$9,197.10**	**160**	**$12,792.00**	**160**	**$9,859.20**	**120**	**$5,785.20**	**41**	**$1,597.36**	**16**	**$362.56**	**679**	**$ 53,121.74**	**$78.24**

Basic Activities Maximum Limiting Fees (Salary Costs)	$53,121.74
Cost Elements & Additives	
(a) 2.78 Multiplier	$147,678.44
Direct Expenses 4.37% $ 2,321.42 — SUBTOTAL (Cost Elements applied to Basic Activities Fee):	$147,678.44
(d) Direct Reimbursables	$2,321.42
Total Project Cost:	**$149,999.86**
Maximum Limiting Amount:	**$149,999.86**

HNTB PR 2024XXXX
Work Program Support (1/24/23 - 6/30/24)
Scope Of Services

Purpose & Need

Provide support for THEA staff and its Board through the preparation and update of the short and long term work program. This work will include updating data related to anticipated expenses related to operating expenses, preservation projects and activities, other routine maintenance, additional capacity projects and their associated production pipeline and to provide information and a facilitated discussion by the THEA Board of the major capital projects to be undertaken in the next 20 years. This work will include supporting the annual update to to identify future priorities for both preservation and capacity projects for an improved expressway system. This work program will help staff and the THEA Board quickly reference a history and projection of the production pipeline of projects as well as anticipate future expenses and projects for THEA's CPMP. Ongoing development of a short and long term work program, along with supporting data in a spreadsheet format will help convey the long term vision of the agency to its customers and aid in interaction and planning with complementary transportation agencies.

Scope

The GEC in working with THEA staff will support the update all data related to developing a short and long term work program. The GEC will discuss with THEA staff several options for the type of information to be included in potential work programs to be used by staff, Board members, or for public consumption. Items to be discussed include: inclusion of preservation activities under a certain dollar threshold, inclusion of internal staffing costs, inclusion and specificity of GEC costs and task assignments, interval of updating project costs, format for reflecting updated costs or project information, potential formats for different audiences (i.e., THEA Board, management team, public), format for documenting assumptions for expected revenue, etc. The GEC will support the update of the short term (5-year) and long term (minimum 20 year) transportation plan including supporting data.

The GEC will work with the THEA Staff to update major capital programs currently under consideration containing a consistent set of base information: project description, projected cost and duration of construction, anticipated additional revenue for the first five years of operation, projected increase in traffic and in O&M expenses.

SUMMARY FEE SHEET

ATTACHMENT "A"

PROJECT DESCRIPTION: Tampa-Hillsborough Expressway Authority — **HNTB PR 2024XXXX**

GEC CONTRACT NO. HNTB PR 2024XXXX — **Work Program Support (1/24/23 - 6/30/24)**

PRIME CONSULTANT: **HNTB Corporation**

ACTIVITY	Sr. Technical Advisor		Project Manager		Chief Eng./Planner Sr. Proj. Eng.		Sr. Eng./Planner		Proj. Eng./Planner		Engineer/Planner		Sr. Technician		Clerical		TOTAL		Avg. Hourly Rate
	Man Hours	Hourly Rate $ 173.37	Man Hours	Hourly Rate $ 144.54	Man Hours	Hourly Rate $ 102.19	Man Hours	Hourly Rate $ 79.95	Man Hours	Hourly Rate $ 61.62	Man Hours	Hourly Rate $ 48.21	Man Hours	Hourly Rate $ 38.96	Man Hours	Hourly Rate $ 22.66	Manhours By Activity	Salary Cost By Activity	
Annual Update to Work Program	52	$9,015.24	58	$8,383.32	64	$6,540.16	64	$5,116.80	64	$3,943.68	39	$1,880.19	25	$974.00	19	$430.54	**385**	$36,283.93	$94.24
Total Man Hours / Total Salary [(MHxHR)]	**52**	**$9,015.24**	**58**	**$8,383.32**	**64**	**$6,540.16**	**64**	**$5,116.80**	**64**	**$3,943.68**	**39**	**$1,880.19**	**25**	**$974.00**	**19**	**$430.54**	**385**	**$ 36,283.93**	**$94.24**

Basic Activities Maximum Limiting Fees (Salary Costs)	$36,283.93
Cost Elements & Additives	
(a) 2.78 Multiplier	$100,869.33
Direct Expenses 4.37% $ 1,585.61 — SUBTOTAL (Cost Elements applied to Basic Activities Fee):	$100,869.33
(d) Direct Reimbursables	$1,585.61
Subconsultant	
Total Project Cost:	**$102,454.93**
Maximum Limiting Amount:	**$102,454.93**

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY
TASK WORK ORDER: URBAN AREA SAFETY DESIGN ASSESSMENTS AND NACTO EVALUATION
SCOPE OF WORK
DRAFT: NOVEMBER 2023

Overview

The Tampa Hillsborough Expressway Authority (THEA) has proactively engaged stakeholders throughout the urban downtown area to improve safety, operations and customer experience along the expressway and surrounding community. As THEA utilizes a Safe System Approach, the agency intends to identify opportunities to incorporate urban design standards, comprehensive assessments and performance measures to align urban operational goals with system performance to advance a coordinated approach to system solutions.

Services to be Performed

As part of WSP's team, Wey Engineering will provide technical on-call support services to THEA planning staff as needed to quickly assess existing conditions surrounding the THEA system, and to develop concepts and test traffic and operational changes associated with potential projects and/or inquiries made to the Authority by other agencies. This may include traffic operational analysis, traffic forecasting, safety analysis, conceptual design, planning level cost estimation, and coordination support efforts. Assessments may include areas along the existing Selmon Expressway, ramp locations, and surrounding areas of influence to the Selmon Expressway. The Consultant staff will coordinate as needed with Transportation Systems Management and Operations (TSM&O) and conduct Road Safety Audits (RSA)s as needed.

The Consultant will evaluate potential projects and improvement concepts against National Association of City Transportation Officials (NACTO), American Association of State Highway and Transportation Officials (AASHTO) and Florida Department of Transportation FDOT standards and protocols to ensure safety, sustainability and multimodal accessibility. This may include, but not be limited to local and statewide complete streets guidelines, context classifications, and vision zero applications. The Consultant may conduct assessments on existing conditions as well as proposed improvements proposed by THEA and/or partner agencies. The Consultant staff will identify potential performance measures to evaluate proposed improvements, and assess the benefits and costs associated.

Prior to new traffic and design analyses, the Consultant will prepare an analysis methodology to establish agreed upon tools, study area, and analysis assumptions. Once submitted and agreed upon, the team will conduct assessment in close coordination with THEA planning staff, and present findings in an easy-to-understand briefing.

Deliverables may include:

- Urban area design concepts;
- GIS Support;

- Crash Data Review and Analysis;
- Fact sheets, handouts and presentations needed for staff briefings, Board meetings, public and stakeholder engagement;
- Mapping and graphics;
- Vision Zero strategy support;
- Conceptual design plans and cost estimates;

General Management Services

The Consultant will attend staff and Board meetings, as well as agency and stakeholder meetings as requested. WSP will develop materials for meetings with the Board, public, and stakeholders as needed. The Consultant will assist the Authority's Planning & Innovation Department as needed with coordination with other Authority departments, including Engineering & Operations, Tolling, and Procurement. In addition, the Consultant will act on behalf of the Authority as requested to coordinate with FDOT, Hillsborough County, City of Tampa, and other stakeholders. Other coordination efforts could include partnering and discussing maintenance agreements between the Authority and other agencies.

The Consultant will manage appropriate project administrative, financial coordination, progress reports, and invoicing. Project management and control services for the project team will be performed, including sub-consultant management.

THEA staff will review and approve any methodologies and assumptions prior to traffic analyses and will provide any supplementary data available to complete assessments.

Schedule

The anticipated Period of Performance start date for the concept development, NACTO and safety evaluations begins is December 11, 2023 and expected to terminate June 30, 2024.

Estimate of Work

This effort will not exceed $108,832.17. Attachment A provides the estimate of work.

ATTACHMENT A: ESTIMATE OF WORK

Task Work Order: XX
Project Manager: Bob Frey
Contract Number: P-00819-WSP
Project Description: Urban Area Safety Design/ NACTO Evaluation
Completion Date: 1-Jul-24

	Tasks Loaded rates based on averaged base rate per classification with overhead, fixed fee, and FCCM	Project Manager	Senior Engineer	Chief Planner	Engineer	Landscape Architect	Senior Planner	Senior Planner	Senior Planner	Senior Planner	Planner	Planner	Secretary/ Clerical	Staff Hours by Activity	Burdened Cost by Activity
		$347.11	$221.62	$270.36	$94.77	$148.37	$191.01	$105.34	$193.32	$178.39	$115.41	$111.91	$117.45		
1	**General Management and Review**														
	QA/ QC		16			8	8							32	$6,260.96
	Project Management/ Consultation/ Oversight	7											14	21	$4,074.07
	Total Staff Hours by Classification	7	16	0	0	8	8	0	0	0	0	0	14	**53**	**$10,335.03**
	Total Staff Cost (Unburdened) by Classification	$2,429.77	$3,545.92	$0.00	$0.00	$1,186.96	$1,528.08	$0.00	$0.00	$0.00	$0.00	$0.00	$1,644.30		

WSP Total	$10,335.03
Wey Engineering	$98,497.14
TOTAL	**$108,832.17**

PROJECT DEVELOPMENT & ENVIRONMENT
PROJECT DATA

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: THEA GPC (WSP Prime) TWO #2
County: Hillsborough
FPN: P-00819
FAP No.: N/A

Consult. Name: WEY Engineering, PLLC
Consult. No. 190014
Date: 11/15/2023
Estimator: D. Hubbard

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Project Manager 1	Chief Engineer 1	Senior Designer	Engineer 1	Engineering Intern	-	-	-	-	-	-	-	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$174.75	$201.20	$100.82	$131.10	$97.36	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00			
Project Description and Objectives	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Public Involvement	40	20	20	0	0	0	0	0	0	0	0	0	0	40	$7,519	$187.98
Engineering Analysis & Report	648	292	32	130	45	149	0	0	0	0	0	0	0	648	$90,978	$140.40
Environmental Analysis & Reports	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Environmental Document	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Design Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Total Staff Hours	688	312	52	130	45	149	0	0	0	0	0	0	0	688		
Total Staff Cost		$54,522.00	$10,462.40	$13,106.60	$5,899.50	$14,506.64	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$98,497.14**	**$143.16**

Check = $98,497.14

SALARY RELATED COSTS:			$98,497.14
OVERHEAD:	0.00%		$0.00
OPERATING MARGIN:	0.00%		$0.00
FCCM (Facilities Capital Cost Money):	0.00%		$0.00
EXPENSES:	0.00%		$0.00
SALARY RELATED SUBTOTAL:			**$98,497.14**
Survey (Field - if by Sub)	0.00	4-man crew days $ - / day	$0.00
SUBTOTAL - SUBCONSULTANT			**$98,497.14**
Optional Services			$0.00
SUBCONSULTANT TOTAL ESTIMATED FEE:			**$98,497.14**

Note:
1. This sheet to be used by Subconsultant to calculate its fee.

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY
TASK WORK ORDER: ATTAIN GRANT APPLICATION
SCOPE OF WORK
DRAFT: DECEMBER 2023

Overview

Since 2009, WSP USA Inc. (WSP) has helped clients secure more than $27 billion in federal discretionary grant funding and financing for over 140 highway, transit, freight, and passenger rail projects. WSP approaches grant assistance through rigorous planning, skillful research and analysis, high-quality technical writing, effective storytelling, and detailed QA/QC review. We understand that grant application cycles are short, and typically introduce new project requirements and evaluation criteria. These factors require a team that is organized, systematic, and disciplined in managing the grant application process from beginning to end.

The purpose of this work plan is to support the Tampa Hillsborough Expressway Authority (THEA) in the preparation of a grant application for the competitive **ATTAIN Grant Program**.

The following represents a scope of services between THEA and WSP to provide support with a ATTAIN grant submittal.

Scope of Work

The purpose of this Scope of Work is to provide the scope elements and WSP USA Inc. (Consultant) approach to the development and submission of the **ATTAIN grant application**.

Management and Coordination

The Consultant shall schedule a call every week with the Grant Team, which will include the relevant personnel, as well as consultant team members.

These calls will be used to track progress on the following work plan tasks and resolve any issues that may arise. In addition, a subset of the Grant Team will coordinate funding, financing and project delivery issues.

ASSUMPTIONS:

Attendance at grant coordination meetings/calls every week through the grant development timeline (5-week schedule given submission deadline).

ATTAIN Grant Application Development

The ATTAIN grant published Notice of Funding Opportunity (NOFO) will be used as a basis for scope of work and level of effort. Given this, the Consultant will prepare a draft Project Narrative for the grant application subject to the current USDOT requirements. The Project Narrative will highlight how the project meets the ATTAIN grant criteria. The Project Narrative will include content that provides the context for the project, drawing on existing material and graphics whenever possible, and assist in the editing and assembly of the draft and final grant application.

The draft Project Narrative will undergo review by THEA, and the draft narrative will be revised by the Consultant to address comments and recommendations by the reviewing team. The Consultant will update the Project Narrative to bring the application to a final draft status.

A key part of the grant application will be the demonstration of strong collaboration and partnership with a broad range of stakeholders. Unless requested, the Consultant will not support the client in requesting and assembling letters of support.

THEA will participate in meetings and conference calls requested by the Consultant to address and clarify comments and revisions, and review tasks and materials needed to complete the application.

In addition, the Consultant will monitor USDOT direction on grant application requirements, criteria, and procedures to help the THEA remain well positioned for grant award. This may include participating in USDOT webinars, asking questions of USDOT staff on behalf of the THEA and assisting the with identifying project supporters that will provide letters of support (e.g., US senators, representatives, other elected officials, freight industry and facility partners, and other key stakeholders).

The Consultant will coordinate with the client to complete all necessary Standard Forms (SFs) as outlined in the Notice of Funding Opportunity (NOFO).

In addition to the SFs listed above, WSP will prepare the following information as outlined in the NOFO:

- Volume 1 Technical Application/Project Narrative (30-page limit)
- Volume 2 Budget Application (no page limit)
- Additional Supporting Documentation as needed

DELIVERABLES:

- Input into the Draft and Final Project Narrative.
- Assembled addenda for inclusion in the grant application.
- Draft Project Technical Application/Project Narrative in Word format and Budget Application
- Final Project Technical Application/Project Narrative package, Budget Application, and related addenda (the grant application materials) in PDF format

Assumptions

- THEA and additional supporting technical consultants will provide available Key Information necessary to complete the tasks
- THEA will submit the grant application package and required forms

SCHEDULE

The FY 2024 ATTAIN grant program has confirmed that the deadline is expected to be **February 2, 2024.**

In order to meet this deadline, the Consultant will have a draft grant application completed and delivered to THEA electronically January 24, 2024, and a final grant application completed and delivered to THEA electronically by January 31, 2024. This schedule assumes a Notice to Proceed no later than December 11, 2023.

Estimate of Work

This effort will not exceed $67,125.28. Attachment A provides the estimate of work.

ATTACHMENT A: ESTIMATE OF WORK

Task Work Order: TBD
Project Manager: Bob Frey
Contract Number: P-0001-9-WSP
Project Description: ATTAIN Grant Submittal
Completion Date: February 28, 2023

	Tasks Loaded rates based on averaged base rate per classification with overhead, fixed fee, and ROM	Project Manager	ITS Engineer	ITS Engineer	Senior Planner	Senior Planner	Senior Planner	Senior Planner	Senior Planner	Senior Planner	Senior Planner	Planner	Planner	Planner	Planner	Designer	Designer	Staff Hours by Activity	Burdened Cost by Activity
		$327.11	$242.84	$265.67	$179.23	$191.01	$156.21	$155.34	$166.63	$139.53	$162.64	$125.80	$131.71	$115.41	$91.35	$103.65	$107.48		
1	**Grant and Funding Program Assessment**																		
	Concept Project Development		16	12	16	8		8	8				4					72	$15,083.84
	Develop Data Request and Validate		4	4	12	4		4	2				4					34	$6,578.30
	Fact Sheet, Slides and Letters of Support/ Commitment				8	4			2						6	12	8	40	$5,249.04
	Development of Grant Submittal		8	12	40				8	10	18		24		12	16	8	156	$25,240.58
	QA/QC		4	4	2	4			6	6								26	$5,269.50
	Coordination & Project Meetings		6	6	6	6		6	6				6					42	$8,312.58
	General Management Services																		
	Project Management/ Consultation/ Oversight	4																4	$1,268.44
	Total Staff Hours by Classification	4	38	38	84	26	0	18	32	16	18	0	38	0	18	28	16	374	**$67,125.39**
	Total Staff Cost (Unburdened) by Classification	$1,288.44	$9,265.92	$10,855.46	$15,055.32	$4,966.26	$0.00	$2,796.12	$5,356.16	$2,232.48	$2,932.92	$0.00	$5,004.98	$0.00	$1,644.30	$2,907.24	$1,719.68		

TOTAL **$67,125.39**

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY
TASK WORK ORDER: SAVING LIVES WITH CONNECTIVITY: ACCELERATING VEHICLE TO EVERYTHING (V2X)
DEPLOYMENT GRANT DEVELOPMENT
SCOPE OF WORK
DRAFT: DECEMBER 2023

Overview

Since 2009, WSP USA Inc. (WSP) has helped clients secure more than $27 billion in federal discretionary grant funding and financing for over 140 highway, transit, freight, and passenger rail projects. WSP approaches grant assistance through rigorous planning, skillful research and analysis, high-quality technical writing, effective storytelling, and detailed QA/QC review. We understand that grant application cycles are short, and typically introduce new project requirements and evaluation criteria. These factors require a team that is organized, systematic, and disciplined in managing the grant application process from beginning to end.

The purpose of this work plan is to support the Tampa Hillsborough Expressway Authority (THEA) in the preparation of a grant application for the competitive **Saving Lives with Connectivity: Accelerating Vehicle to Everything (V2X) Deployment**.

The following represents a scope of services between THEA and WSP to provide support with a **Saving Lives with Connectivity: Accelerating Vehicle to Everything (V2X) Deployment** grant submittal.

Scope of Work

The purpose of this Scope of Work is to provide the scope elements and WSP USA Inc. (Consultant) approach to the development and submission of the **Saving Lives with Connectivity: Accelerating Vehicle to Everything (V2X) Deployment grant application**.

Management and Coordination

The Consultant shall schedule a call every week with the Grant Team, which will include the relevant personnel, as well as consultant team members.

These calls will be used to track progress on the following work plan tasks and resolve any issues that may arise. In addition, a subset of the Grant Team will coordinate funding, financing and project delivery issues.

ASSUMPTIONS:

Attendance at grant coordination meetings/calls every week through the grant development timeline (5-week schedule given submission deadline).

Grant Application Development

The Saving Lives with Connectivity: Accelerating Vehicle to Everything (V2X) Deployment grant published Notice of Funding Opportunity (NOFO) will be used as a basis for scope of work and level of effort. Given this, the Consultant will prepare a draft Project Narrative for the grant application subject to the current USDOT requirements. The Project Narrative will highlight how the project meets the Saving Lives with Connectivity:

Accelerating Vehicle to Everything (V2X) Deployment grant criteria. The Project Narrative will include content that provides the context for the project, drawing on existing material and graphics whenever possible, and assist in the editing and assembly of the draft and final grant application.

The draft Project Narrative will undergo review by THEA, and the draft narrative will be revised by the Consultant to address comments and recommendations by the reviewing team. The Consultant will update the Project Narrative to bring the application to a final draft status.

A key part of the grant application will be the demonstration of strong collaboration and partnership with a broad range of stakeholders. Unless requested, the Consultant will not support the client in requesting and assembling letters of support.

THEA will participate in meetings and conference calls requested by the Consultant to address and clarify comments and revisions, and review tasks and materials needed to complete the application.

In addition, the Consultant will monitor USDOT direction on grant application requirements, criteria, and procedures to help the THEA remain well positioned for grant award. This may include participating in USDOT webinars, asking questions of USDOT staff on behalf of the THEA and assisting the with identifying project supporters that will provide letters of support (e.g., US senators, representatives, other elected officials, freight industry and facility partners, and other key stakeholders).

The Consultant will coordinate with the client to complete all necessary Standard Forms (SFs) as outlined in the Notice of Funding Opportunity (NOFO).

In addition to the SFs listed above, WSP will prepare the following information as outlined in the NOFO:

- Volume 1 Technical Application/Project Narrative (50-page limit)
- Volume 2 Budget Application (no page limit)
- Additional Supporting Documentation as needed

DELIVERABLES:

- Input into the Draft and Final Project Narrative.
- Assembled addenda for inclusion in the grant application.
- Draft Project Technical Application/Project Narrative in Word format and Budget Application
- Final Project Technical Application/Project Narrative package, Budget Application, and related addenda (the grant application materials) in PDF format

Assumptions

- THEA and additional supporting technical consultants will provide available Key Information necessary to complete the tasks
- THEA will submit the grant application package and required forms

SCHEDULE

The FY 2024 Saving Lives with Connectivity: Accelerating Vehicle to Everything (V2X) Deployment grant program has confirmed that the deadline is expected to be **January 17, 2024.**

In order to meet this deadline, the Consultant will have a draft grant application completed and delivered to THEA electronically January 10, 2024, and a final grant application completed and delivered to THEA electronically by January 15, 2024. This schedule assumes a Notice to Proceed no later than December 11, 2023.

Estimate of Work

This effort will not exceed $72,195.04. Attachment A provides the estimate of work.

ATTACHMENT A: ESTIMATE OF WORK

Task Work Order: TBD
Project Manager: Bob Frey
Contract Number: P-0001-9-WSP
Project Description: Saving Lives with Connectivity: Accelerating Vehicle to Everything (V2X) Deployment
Completion Date: 31-Jan-23

	Tasks Loaded rates based on averaged base rate per classification with overhead, fixed fee, and ROM	Project Manager	ITS Engineer	ITS Engineer	Senior Planner	Senior Planner	Senior Planner	Senior Planner	Senior Planner	Senior Planner	Senior Planner	Planner	Planner	Planner	Designer	Designer	Staff Hours by Activity	Burdened Cost by Activity
		$207.11	$242.84	$265.97	$179.23	$191.01	$156.21	$155.34	$166.63	$139.53	$162.94	$131.71	$115.41	$91.35	$103.85	$107.48		
1	**Grant and Funding Program Assessment**																	
	Concept Project Development		24	32	8	8		4	8			4					88	$20,690.76
	Develop Data Request and Validate		4	4	12			4	2								26	$5,287.42
	Fact Sheet, Slides and Letters of Support/ Commitment				8	2			2					6	12		32	$4,007.16
	Development of Grant Submittal		8	16	40	8		8	8	10	8	24		12	16	8	166	$27,527.66
	QA/QC		4	4		2			8	4							22	$4,647.22
	Coordination & Project Meetings		8	8	8	4		4	8								40	$8,644.36
	General Management Services																	
	Project Management/ Consultation/ Oversight	4															4	$1,388.44
	Total Staff Hours by Classification	4	48	64	76	24	0	20	36	14	8	28	0	18	28	8	376	$72,195.04
	Total Staff Cost (Unburdened) by Classification	$1,388.44	$11,704.32	$18,282.88	$13,621.48	$4,584.24	$0.00	$3,106.80	$7,150.68	$1,953.42	$1,303.52	$3,687.88	$0.00	$1,644.30	$2,907.24	$859.84		

TOTAL **$72,195.04**

Data Hub – Travel Time

Tampa Hillsborough Expressway Authority

YUNEX TRAFFIC

Bob Frey
Tampa Hillsborough Expressway Authority (THEA)
1104 East Twiggs Street
Suite 300
Tampa, FL 33602

Name	**Melissa Rodriguez**
	Yunex Traffic **9225 Bee Cave Rd, Bldg B, Ste 201**
	Austin, TX 78733
Telephone	**512.761.2473**
E-mail	**melissa.rodriguez@yunextraffic.com**
Date	**November 29, 2023**

Dear Mr. Frey:

Thank you for the opportunity to propose this scope of work and effort for the Data Hub with collection and display of Travel Time.

We look forward to the opportunity to work with THEA to have a significant impact on traveler safety and improve mobility from the resulting research. Should you have any questions, please contact me.

With kind regards,

Melissa Rodriguez

Director of Channel Management

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2 Yunex Traffic Overview

Yunex Traffic as a global entrepreneur, we pioneer and innovate traffic ecosystems for good reasons. With the most comprehensive end-to-end portfolio of intelligent traffic management solutions in the market, we already enable cities and mobility operators to make their road networks and vehicle fleets more intelligent, enhance safety, and increase value sustainably over their lifecycles.

3 Scope of Work

3.1 Overview

Scope of Work for this project includes the following tasks to be confirmed by THEA for the Data Hub with collection and display of Travel Time:

1. Develop and install THEA Data Hub.
2. Collect and store RSU travel time data from (4) existing THEA RSUs in Tampa FL.
3. Map-match (3) link travel times between (4) RSUs for display on area map.
4. Integration test of travel time data collection at Yunex Traffic site in Austin TX.
5. Remote installation and verification on four RSUs in Tampa FL.
6. Operational demonstration to THEA staff in Tampa FL.

3.2 Travel Time Operation

Operation for Travel Time data collection is shown in Figure 1.

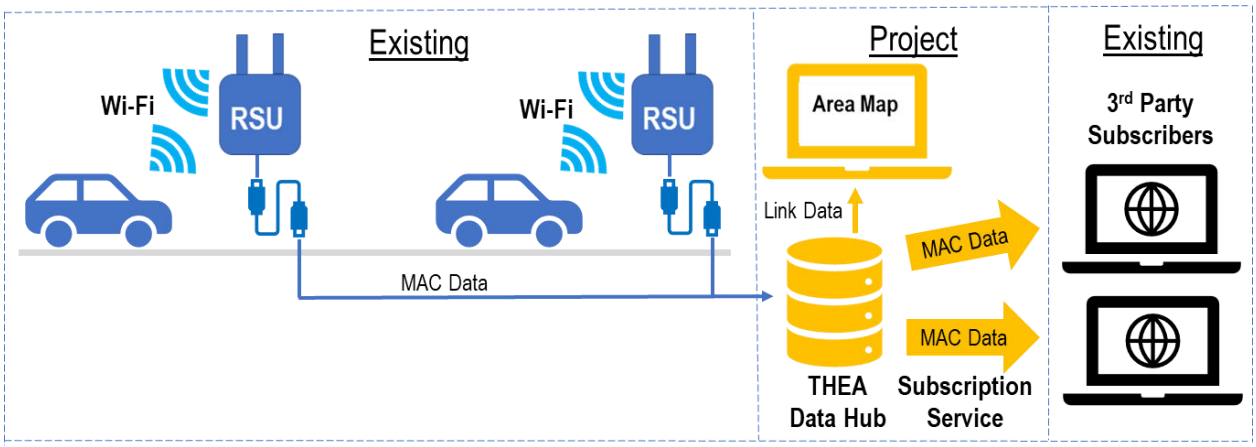


Figure 1: Travel Time Data Collection Operation

Approximately 47 Roadside Units (RSU) in the Tampa FL area include a Wi-Fi transceiver that attempts to pair with Wi-Fi devices in discover mode, typically smart phones in passing vehicles or Wi-Fi built into the vehicles themselves. When attempting to pair, the RSU Wi-Fi receiver discovers the Media Access Control (MAC) address of each transmitting device. Each MAC address is anonymized for privacy, then logged with a timestamp and RSU location into the THEA Data Hub. The log is fixed length, organized in order of timestamp, meaning that the oldest data entry is discarded and not permanently archived when the capacity is exceeded. This MAC data is available to 3rd party subscribers, meaning that each subscriber is responsible for reading and archiving the data before being discarded. Subscription data is READ ONLY, no data is returned from the 3rd party subscribers to the Data Hub.

Link travel time is calculated as the timestamp difference between an identical MAC address discovered at successive RSU locations at each end of the link. Link travel time is displayed on an area map for testing and THEA use, but not available to 3rd party subscribers.

Note that RSUs also include a Bluetooth (BT) transceiver that can collect MAC addresses in the same manner. Wi-Fi is preferred with range of approximately 300 feet versus BT with range of approximately 30 feet as shown in Figure 2.

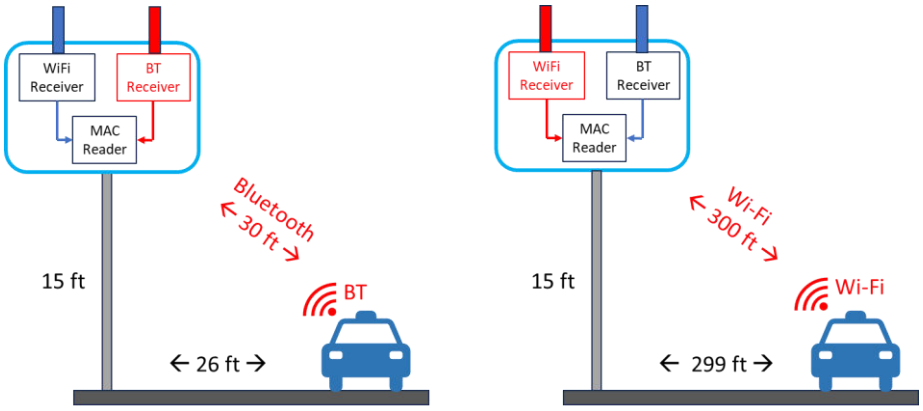


Figure 2: Bluetooth and Wi-Fi range

3.3 Travel Time Data Collection

Example of data collected is shown in Table 1.

Table 1: Travel Time Data

Time	Tenant	MAC	RSSI	Lat	Lon	RSUID
1675786788	B	FBF2F9	-47	27.955028	82.488306	81
1675786701	W	2FF2B1	-58	48.268348	16.420317	81

Where:

Time: Timestamp when the package was created

Tenant: B = Bluetooth source, W = Wi-Fi source

MAC: MAC address of the sending device

RSSI: Received signal strength indication.

Lat / Lon: RSU position

RSUID: RSU identifier

Data entries are organized in descending order of the Time column, from newest to oldest.

3.4 Deployment Locations

Scope is initially limited to implementation on four RSUs comprising three travel time links of Figure 3 that are selected to coincide to the travel time performance measures the USDOT THEA Pilot Deployment project study area.

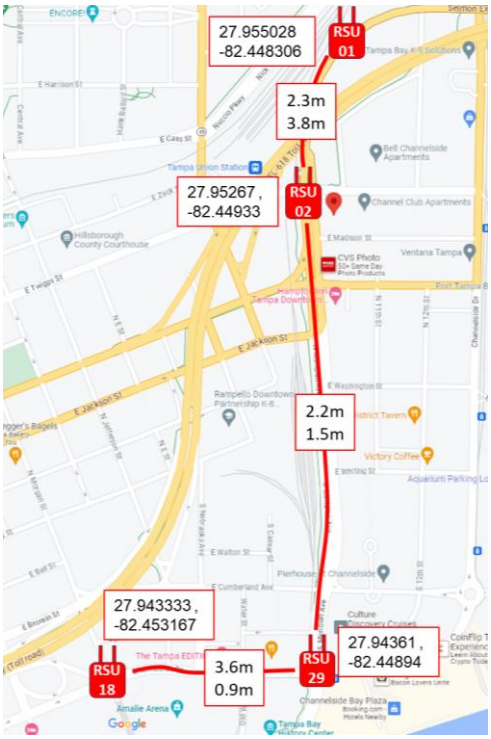


Figure 3: First Deployment Locations

- RSU 01: REL approximately 2,500 feet north of Twiggs St. / Meridian Ave.
- RSU 02: Twiggs St. / Meridian Ave.
- RSU 29: Channelside Drive / Meridian Avenue
- RSU 18: Channelside Drive / Morgan Street

3.5 Link Travel Time Display

The calculated Link Travel Time is displayed on the Studio area map as shown in Figure 3.

Upper Number: Minutes from the lower numbered RSU to higher numbered RSU
Lower Number: Minutes from the higher numbered RSU to lower numbered RSU

For example:

- Travel time from RSU01 to RSU02 equals 2.3 minutes.
- Travel time from RSU02 to RSU01 equals 3.8 minutes.

3.6 Subscription Service for 3rd Party Subscribers

Approved 3rd party IP addresses supplied by THEA are granted READ ONLY access to the MAC data of Table 1. The link travel time data of Figure 3 is for test display only, and not available to 3rd party subscribers.

4 Verification Test Cases

4.1 Test Case 1: MAC Data Collection

Verification of hub operation and data collection:

1. Enable Wi-Fi in discover mode within a test vehicle.
2. Drive the test vehicle each way through each link.
3. Verify MAC data is collected correctly per Table 1.

4.2 Test Case 2: 3rd Party Travel Time Subscription

Verification of 3rd party travel time subscription:

1. Approved 3rd party subscriber IP address is provided to by THEA.
2. Subscriber IP address is granted READ ONLY access to the data hub MAC data.
3. Subscriber verifies:
    a. READ ONLY access to THEA Data Hub is granted.
    b. Data retrieved from THEA Data Hub matches data previously verified in 4.1.

4.3 Test Case 3: Area Map Display of Link Travel Time

Verification of link travel time:

1. Manually calculate travel time in each direction for each link from data collected in 4.1.
2. Verify that calculated travel time matches six link travel times displayed on area map.

Notes:

1. If identical MAC addresses are received by multiple RSUs within range with the same timestamp, the RSU with the highest RSSI is used for link travel time.
2. Each link travel time persists until the next time any Wi-Fi device in discover mode travels that link, and the prior link travel time is overwritten with the new link travel time on the area map.

5 Assumptions & Exclusions

- License fees for continuous travel time map display is excluded as follows:
    - Test tool map displays only the most recent travel time per link to verify operation.
    - 3rd party travel time license is purchased separately for continuous display and analysis.
    - Yunex Traffic can quote Travel Sense™ system licensed from Acyclica (Flir).
- Development to translate travel time data to meet 3rd party requirements is excluded.
    - Data is collected per Acyclica (Flir) requirements.
    - Other 3rd parties perform data translations or Yunex Traffic can quote translation effort.

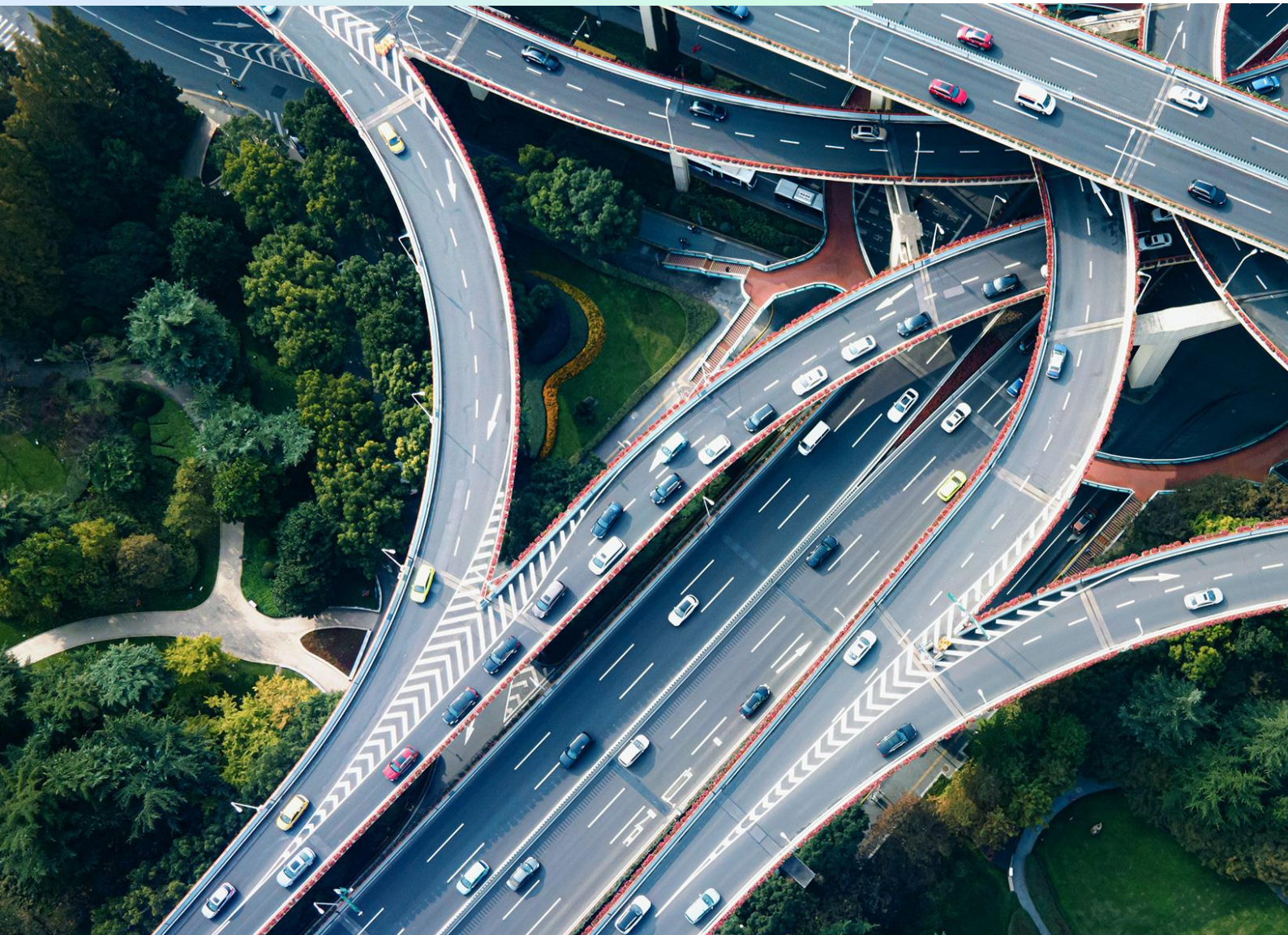
6 Price

Fixed Price Total	$96,257 Not to Exceed

Yunex Traffic

9225 Bee Cave Rd.
Building B Suite 201
Austin, TX 78733
Tel: +1.512.837.8300
Fax: +1.512.421-6617
us.yunextraffic.com

Yunex Traffic is a global leader in the field of intelligent traffic systems, offering the widest end-to-end portfolio of solutions for adaptive traffic control and management, highway and tunnel automation, as well as smart solutions for V2X and road user charging tolling. Yunex Traffic has 3100 employees from 58 nations and is active in over 40 countries worldwide. Its intelligent mobility solutions are currently being used in major cities across the world, including Dubai, London, Berlin, Bogota, and Miami. Yunex Traffic has successfully concentrated its efforts on mastering technologies in the three segments of hardware, software, and service, and is subsequently the only supplier who is capable of meeting all major regional standards in Europe, UK, Asia and America. Further information is available at us.yunextraffic.com.



IV. A. 1. Completion of Revisions to Whiting PD&E Preferred Alternative

Scope of Services
Additional Services 03
Contract O-00519

Tampa Hillsborough Expressway Authority (THEA)
Whiting Street Project Development & Environment (PD&E) Study

---

I. Revisions to the Proposed Whiting Street Preferred Alternative

A. Revisions to Preferred Alternative Concepts

The CONSULTANT will support THEA with the development of revisions to the preferred alternative concepts developed for the proposed Whiting Street project to address concerns and requests raised by the City of Tampa (City) in their September 25, 2023 letter to Keith Slater. These revisions will reflect changes requested by the City to the Selmon Expressway Ramp 6A and proposed improvements to the relocated Ramp 6B and Whiting Street. These revisions will also include an analysis of existing and future traffic projections and how the revised alternatives will function up to and including the project's design year.

B. Assessment of Revisions to Preferred Alternative Concepts

The CONSULTANT will support THEA with an engineering analysis of the revised Whiting Street project concepts developed as part of Task I.A above. This analysis will include an assessment of the revised concepts to determine if they meet the requirements of the FDOT Design Manual (FDM). If it is determined that the alternative concepts meet these requirements, an analysis of its constructability and cost to construct will then be undertaken.

C. Public Involvement

The CONSULTANT will support THEA in conducting a Public Hearing to present the revised preferred alternative. This task will include the development of graphics, presentation boards, power point presentations, handouts, and other documents needed to present the project to stakeholders and the general public. The consultant will also develop a public hearing technical memorandum and will update the project's Comments and Coordination Report to include any comments received as part of the public hearing process.

D. Revisions to the Environmental Document and Supporting Reports

The CONSULTANT will support THEA in revisions to the Whiting Street Project Environmental Impact Report (PEIR), Preliminary Engineering Report (PER), and specific project environmental support documents. These revisions will address changes in the preferred project alternative and will include information collected and analyses undertaken as part of Tasks I.A and I.B above. The PEIR, PER and support documents will be revised to include an updated project purpose and need statement, and an updated project preferred alternative description and graphics. Any additional

analyses and text revisions needed to identify sociocultural, cultural, natural and physical environment impacts resulting from the revised preferred alternative will also be incorporated into project documents.

E. Project Coordination

At the direction of THEA, the CONSULTANT will coordinate with THEA, the City of Tampa, and other project stakeholders as needed to obtain information, discuss preferred alternative revisions, and present project information.

II. CONTRACT MANAGEMENT

The CONSULTANT will ensure that all documents and other deliverables are thoroughly reviewed prior to submittal. The CONSULTANT will also coordinate with THEA to present project deliverables and provide THEA adequate time to review and comment on draft documents.

III. COMPENSATION

Payment for the work accomplished will be in accordance with **Exhibit A** of this Supplemental Agreement. The CONSULTANT's Project Manager will monitor the cumulative invoiced billings to ensure the reasonableness of the billings compared to the work accomplished and accepted by THEA. THEA's Project Manager will decide whether work of sufficient quality and quantity has been accomplished by comparing the reported Scope of Services percent complete against actual work accomplished.

PROJECT DEVELOPMENT & ENVIRONMENT
PROJECT DATA

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Project Development and Environment (PD&E) Study for Whiting Street (Supplemental #4)
County: Hillsborough
FPN: HI-0141-P-04
FAP No.: N/A

Consult. Name: H. W. Lochner, Inc.
Consult. No. enter consultants proj. number
Date: 11/21/2023
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Project Manager 3	Principal Engineer	Chief Engineer 1	Chief Engineer 2	Senior Engineer 1	Senior Engineer 2	Engineer 1	Engineer 2	Engineering Intern	Senior Engineering Technician	Technician Aid	Chief Scientist	Environmental Specialist	Senior Designer	GIS Specialist	Graphics Designer	Contract Coordinator	Secretary / Clerical	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$267.73	$303.24	$261.91	$303.24	$206.29	$191.34	$151.62	$181.94	$121.30	$112.59	$51.55	$266.85	$99.16	$181.94	$97.04	$120.39	$90.97	$62.07			
Public Involvement	187	84	0	0	0	0	0	0	0	0	0	0	84	0	0	0	19	0	0	187	$47,192.13	$252.36
Engineering Analysis & Report	567	57	0	0	0	57	0	227	57	113	0	0	0	0	0	57	0	0	0	568	$91,045.64	$160.29
Environmental Analysis & Reports	140	42	0	0	0	0	0	0	0	0	0	0	70	28	0	0	0	0	0	140	$32,700.64	$233.58
Miscellaneous	222	89	0	0	0	0	0	44	0	0	0	0	89	0	0	0	0	0	0	222	$54,248.90	$244.36
Total Staff Hours	1,116	272	0	0	0	57	0	271	57	113	0	0	243	28	0	57	19	0	0	1,117		
Total Staff Cost		$72,822.56	$0.00	$0.00	$0.00	$11,758.53	$0.00	$41,089.02	$10,370.58	$13,706.90	$0.00	$0.00	$64,844.55	$2,776.48	$0.00	$5,531.28	$2,287.41	$0.00	$0.00		**$225,187.31**	**$201.60**

Check = $225,187.31

Survey Field Days by Subconsultant

4 - Person Crew:

Notes:
1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.
2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

SALARY RELATED COSTS:					$225,187.31
OVERHEAD:					$0.00
OPERATING MARGIN:					$0.00
FCCM (Facilities Capital Cost Money):					$0.00
EXPENSES:					$0.00
SALARY RELATED SUBTOTAL:					**$225,187.31**
Survey (Field - if by Prime)	0.00	4-man crew days @	$ -	/ day	$0.00
SUBTOTAL - PRIME					**$225,187.31**
Subconsultant: Adams Traffic					$0.00
Subconsultant: AREHNA					$7,720.87
Subconsultant: ECHO UES					$0.00
Subconsultant: IAA					$5,668.00
Subconsultant: Janus					$0.00
Subconsultant: CMT					$21,671.18
Subconsultant: InNovo Partners, LLC					$78,092.11
Subconsultant: WSP					$72,295.34
SUBTOTAL ESTIMATED FEE:					**$410,634.81**
Remaining Budget from Previous Authorizations					-$125,000.00
GRAND TOTAL ESTIMATED FEE:					**$285,634.81**

IV. A. B. US 301 Design Traffic Analysis

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY
TASK WORK ORDER: US 301 – DESIGN TRAFFIC ANALYSIS
SCOPE OF WORK
DRAFT: NOVEMBER 2023

Overview

Hillsborough County continues to see significant growth in South County, resulting in increases in traffic growth and crashes. In partnership with the Florida Department of Transportation (FDOT) and Hillsborough County, THEA intends to evaluate the potential for a toll road extension from the Selmon Expressway south towards Big Bend Road. This includes early planning activities including traffic and safety analysis prior to the initiation of a Project Development and Environment (PD&E).

Services to be Performed

The Consultant team will develop concepts and test traffic and operational changes and safety associated with US301 in advance of a Project Development and Environment (PD&E) study. This will include traffic operational analysis, traffic forecasting, historical and predictive safety evaluation, conceptual design, planning level cost estimation, and coordination support efforts. Assessments may include areas along the existing Selmon Expressway, ramp locations, and surrounding areas of influence to the Selmon Expressway.

Data Collection

a. The Consultant will review the traffic counts obtained from THEA and coordinate throughout the data collection process. Based on a review of the synopsis reports at the FDOT Portable Traffic Monitoring Sites (PTMS) along the study corridor, the peak periods were identified by the Consultant to be 6 AM – 9 AM and 4 PM – 7 PM in the study area. The following counts were requested:

   Six-hour Turning Movement Counts (TMC) and the pedestrian and bicycle counts during the peak periods on a normal weekday at the following signalized intersections:

   1. US301 & Selmon Expressway (WB Ramps)
   2. US301 & Selmon Expressway (EB Ramps)
   3. US301 & Causeway Blvd
   4. US301 & S Falkenburg Rd
   5. US301 & Everhart Rd / Crescent Park Dr
   6. US301 & Bloomingdale Ave
   7. Progress Blvd/Bloomindale Ave & Valleydale Drive/Tranquility Lake Cir
   8. Bloomindale Ave & Duncan Rd/Gornto Lake Rd
   9. US301 & Krycul Ave / Duncan Rd
   10. US301 & Lake St Charles Blvd
   11. US301 & Riverview Dr
   12. US301 & Balm Riverview Rd

13. US 301 & Gibsonton Dr / Boyette Rd
14. Gibsonton Dr & Alafia Trace Blvd/Park Pl Ave
15. Boyette Rd & Balm Riverview Rd
16. US 301 & Symmes Rd
17. US 301 & Rhodine Rd
18. US 301 & Southern Pointe Blvd / Panther Trace Blvd
19. US 301 & Summerfield Crossing Blvd
20. US 301 & Big Bend Rd
21. Big Bend Rd & Lincoln Rd
22. Big Bend Rd & Summerfield Blvd
23. Balm Road & US 301

72-hour Classification Counts on US 301 North of Big Bend Rd

b. In addition to the existing counts, the Consultant will review previous studies and historical traffic data in the project area.

c. A qualified traffic engineer of the Consultant and registered in the state of Florida Professional Engineer will perform field reviews during the study peak weekday time periods to make qualitative assessments. Factors such as queue lengths, delays, vehicular conflicts, pedestrian/bicycle conflicts, or any other operational characteristics critical to evaluate the need for improvements will be noted. During the field review, safety conditions shall be observed and recorded. Pedestrian street crossing activity and bicycle activity will be observed.

Existing Traffic Analysis

a. Based on the 6-hour TMCs obtained from THEA, the peak hour(s) of the study corridor will be determined. The 2023 AM and PM peak hour weekday turning movement volumes (TMV) at 23 signalized intersections will be developed by seasonally adjusting the raw TMCs and balancing the entering/exiting roadway segment volumes as needed.
b. The pedestrian and bicycle count data during the same peak hour at each intersection will be summarized for analyses.
c. The CONSULTANT will also determine the K, D, T factors and peak hour factors based on the counts and historical data from 2022 FDOT Traffic Online database.
d. Using the TMV developed, the Consultant will use the latest version of Synchro/SimTraffic (version 12) to analyze the 23 signalized intersections for AM and PM peak hours for the existing condition. Existing signal timing plans from the maintaining agencies will be requested and used for the analysis. Geometric measurements for pedestrian and bicycle facilities and corresponding counts will be input in Synchro models wherever Highway Capacity Manual (HCM) 7 or HCM 6 module is applicable for the multimodal level of service (LOS) analysis.

e. The existing LOS, vehicle delay, and Synchro 95th percentile queue length for motor vehicles, pedestrian crosswalk score and LOS, and bicycle score and LOS will be collected and documented for these intersections.

2045 Traffic Analysis

The development of future forecast data will use the currently adopted version of the Tampa Bay Regional Planning Model (TBRPM). Prior to developing future year forecasts, the CONSULTANT shall validate the Project sub-area of the TBRPM. Once the TBRPM sub-area validation is complete, The CONSULTANT will use the TBRPM to develop Annual Average Daily Traffic (AADT) for two (2) alternatives: No-Build and Build.

a. The latest TBRPM will be used for forecasting the travel demand in the no-build condition in 2045. The Consultant will develop the Annual Average Daily Traffic (AADT) volumes.
b. The AM and PM Directional Design Hour Volumes (DDHV) for the no-build condition will be developed by applying the approved K and D factors to the 2045 AADT volumes and then applying the existing measured TMC percentages to the DDHV to develop the turning movement volumes for the 2045 no-build condition.
c. The Consultant will enter the 2045 design hour volumes developed in the previous step to the existing Synchro models and optimize signal timings at the intersections to create synchro models for AM and PM peak hours for 2045 no-build condition.
d. The latest TBRPM will be used for forecasting the travel demand in the full build condition in 2045. The Consultant will develop the Annual Average Daily Traffic (AADT) volumes.
e. The AM and PM Directional Design Hour Volumes (DDHV) for the full build condition will be developed by applying the approved K and D factors to the 2045 AADT volumes. Considering the changes in the traffic pattern, traffic will be rerouted for build conditions. Volumes will be developed for different alternatives.
f. Synchro will be used for alternative screening and further identify up to two (2) alternatives at the intersections for operational analysis.
g. 2045 full-build Synchro models including 4 interchanges and at-grade signalized intersections along US 301 will be created for both AM and PM peak hours based on the 2045 build roadway network and traffic volumes. The operational analysis will be performed up to two (2) alternatives. Signal timings will be optimized for each alternative. Proposed geometric measurements for pedestrian and bicycle facilities and corresponding counts will be input in Synchro models wherever HCM 7 or HCM 6 module is applicable for the multimodal level of service (LOS) analysis.
h. The design year full-build and no-build LOS, vehicle delay and Synchro 95th percentile queue length for motor vehicles, pedestrian crosswalk score and LOS, and bicycle score and LOS will be collected and documented for all the intersections.
i. A Comparison Matrix will be prepared for existing condition, 2045 no-build and the two full-build alternative scenarios. A total of 8 model runs will be performed for the operational analysis as follows:

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY
TASK WORK ORDER: US 301 – DESIGN TRAFFIC ANALYSIS
SCOPE OF WORK
DRAFT: NOVEMBER 2023

Analysis Period:	2023		2045	
Alternative:	AM	PM	AM	PM
Existing Conditions	**X**	**X**		
Future No-Build			**X**	**X**
Future Full-Build Alternative 1			**X**	**X**
Future Full-Build Alternative 2			**X**	**X**

Safety Analysis

a. The Consultant will obtain available data from FDOT's Signal 4 Analytics for the most recent five (5) years. The data collected will include the number and type of crashes, crash locations, contributing causes, number of fatalities and injuries, and estimates of property damage and economic loss, etc. Based on the safety data obtained, the Consultant will identify project needs associated with safety of the existing facility and summarize the crash history in graphic and tabular format.
b. To assess the safety benefit of the proposed alternatives, predictive crash and economic analysis will be performed at intersection and segment levels for US 301 surface street for 2045 no-build and two (2) build alternatives in Highway Safety Software (HSS) following the Highway Safety Manual (1st Edition) methodology. The HSS urban facility module will be utilized. Models will also be used for screening alternatives.
c. HSS freeway and ramp facility module will be used to evaluate the toll facility. HSS models will be created to evaluate the toll road segments, speed change lanes, ramp segments, and ramp terminal intersections. The predictive crash analysis and economic analysis will be performed for 2045 no-build and two (2) full-build alternatives. Models will also be used for screening alternatives.
d. A Comparison Matrix will be prepared for 2045 no-build and the two full-build alternative scenarios.

Traffic Analysis Technical Memorandum

A Traffic Analysis Technical Memorandum will be prepared to document the data, methodologies, and alternatives operational analysis for existing, 2045 no-build and full-build conditions for vehicle, pedestrian, and bicycles. Historical crash analysis and predictive safety evaluation will also be documented in this report.

Conceptual Design for Design Traffic Analysis

The Consultant team will develop planning level concepts in the support of traffic and safety analysis that will include:

- Develop two (2) typical sections for each segment that includes a typical section from the previous sketch level planning analysis and a second typical section based on safety and multi-

modal analysis.
    - Segment 1 – Selmon Expressway to Bloomingdale Avenue (2.7 miles)
    - Segment 2 - Bloomingdale Avenue to Gibsonton Drive (2.8 miles)
    - Segment 3 – Gibsonton Drive to Big Bend Road (4.5 miles)
- Provide one (1) sketch level conceptual design plan for the following interchange:
    - Selmon Expressway and US301
    - US301 and I-75
    - US301 and Bloomingdale Avenue
    - US301 and Gibsonton Drive
    - US301 and Big Bend Road
- A long-range construction cost estimate for each typical section and interchange design option.

Deliverables will include:

- Traffic assessment methodologies
- Reports of operational and safety assessments as needed
- Typical Section, conceptual design plans and cost estimates
- Technical reviews on traffic analyses

General Management Services

The Consultant will attend staff and Board meetings, as well as agency and stakeholder meetings as requested. WSP will develop materials for meetings with the Board, public, and stakeholders as needed.

The Consultant will manage appropriate project administrative, financial coordination, progress reports, and invoicing. Project management and control services for the project team will be performed, including sub-consultant management.

THEA staff will review and approve any methodologies and assumptions prior to traffic analyses and will provide any supplementary data available to complete assessments.

Schedule

The anticipated Period of Performance is December 2023 and expected to end August 2024.

Estimate of Work

This effort will not exceed $418,623.18. Attachment A provides the estimate of work.

ATTACHMENT A: ESTIMATE OF WORK

Task Work Order: XX
Project Manager: Bob Frey
Contract Number: P-00819-WSP
Project Description: US301 Design Traffic
Completion Date: 1-Aug-23

	Tasks	Project Manager	Senior Engineer	Chief Planner	Engineer	Landscape Architect	Senior Planner	Senior Planner	Senior Planner	Senior Planner	Engineer	Chief Planner	Designer	Planner	Secretary/ Clar ical	Designer	Staff Hours by Activity	Burdened Cost by Activity
	Loaded rates based on averaged base rate per classification with overhead, fixed fee, and FCCM	$347.11	$221.62	$270.56	$94.77	$148.37	$191.01	$155.34	$193.92	$178.39	$168.08	$273.27	$107.48	$115.41	$117.45	$122.16		
1	**AATD Development**																	
	Task 1: TBRPM Subarea Validation								24					24			48	$7,423.92
	Task 2: No Build Horizon Year AADTs								34					22			56	$9,132.30
	Task 3: Build Horizon Year AADTs								34					22			56	$9,132.30
1	**Data Collection**																	
	Traffic Counts Review and Coordination						4				20						24	$4,125.64
	Collect/Review Existing Traffic Studies										20						20	$3,361.60
	Field Review				8						8						16	$2,102.80
1	**Existing Traffic Analysis**																	
	Develop 2023 Existing Peak Hour Volumes from 6-hr TMC (23 intersections, AM and PM peaks)										50						50	$8,404.00
	Summarize bike and pedestrian volumes from 6-hr TMC (23 intersections, AM and PM peaks)										30						30	$5,042.40
	Identify Traffic Factors, K,D,T										24						24	$4,033.92
	Prepare base 2023 Synchro model – obtain signal timing, develop model intersection geometrics & enter 2023 volumes for Existing Conditions (23 intersections, AM and PM peaks) – enter geometric measurements for bike/ped facilities – perform intersection LOS analysis for vehicles, pedestrians, and bikes										138						138	$23,195.04
	Collect and summarize model outputs										40						40	$6,723.20
1	**2045 Traffic Analysis**																	
	Develop 2045 Nobuild Design Hour Volumes										115						115	$19,329.20
	Prepare Nobuild 2045 Synchro model – optimize signal timing, enter 2045 volumes (23 intersections, AM and PM peaks) – perform intersection LOS analysis for vehicles, pedestrians, and bikes										69						69	$11,597.52
	Develop 2045 Build Design Hour Volumes										115						115	$19,329.20
	Develop Build alternatives for 2045 analysis – traffic rerouting for different alternatives – alternative screening at 4 interchanges with Synchro – identify two (2) build alternatives for 2045 operational analysis										100						100	$16,808.00
	Prepare 2045 Build Synchro models for two (2) alternatives – develop model intersection geometrics, optimize signal timing, enter 2045 volumes (23 intersections, AM and PM peaks) – perform intersection LOS analysis for vehicles, pedestrians, and bikes										276						276	$46,390.08
	Collect and summarize model outputs										70						70	$11,765.60
	Prepare Comparative Matrix for Existing, Future No-Build, 2 Build Alternatives										12						12	$2,016.96
	Safety Analysis																	
	Perform Historical Crash Analysis for most recent five (5) years along US301										40						40	$6,723.20
	Perform Predictive Crash Analysis for US301 Surface Street for 2045 (intersections and segments) using Highway Safety Software (HSS) – collect and enter geometric and traffic inputs and safety parameters for HSS – run HSS models for Nobuild and 2 build alternatives and collect predictive crash frequencies and crash cost outputs from the models – run HSS models for alternative screening										120						120	$20,169.60

	Perform Predictive Crash Analysis for US 301 Toll road and interchanges – collect and enter geometric and traffic inputs and safety parameters to perform analysis on freeway segments, speed change lanes, ramps, ramp terminal intersections in HSS – run HSSmodels for 2 build alternatives and collect predictive crash frequencies and crash cost outputs from the models – run HSSmodels for alternative screening – prepare Comparative Matrix for Future No-Build, 2 Build Alternatives										80						80	$13,446.40
	Prepare Comparative Matrix for Future No-Build, 2 Build Alternatives										30						30	$5,042.40
	Documentation																	
	Prepare Traffic Analysis Technical Memorandum and Summary Slides		12	4	8		16	24			100	8	32				204	$33,717.68
	Context Plan																	
	Typical Section Analysis and Development (2 typicals per segment at 3 segments at 14 hours per typical)		25	24	40											30	119	$19,489.54
	Interchange Connection Design Options		98	32	132											100	362	$55,102.32
	Cost estimates per option per segment and interchange option.		36	8	60											52	156	$22,181.32
	Concept Plan																	
	Management/ Coordination and Meetings	24	24	12			24	24	4		24				24		160	$32,857.04
	Total Staff Hours by Classification	24	195	80	248	0	44	48	96	0	1481	8	32	68	24	182	**2530**	**$418,623.18**
	Total Staff Cost (Undiscerned) by Classification	$8,330.64	$43,215.90	$21,644.80	$23,502.96	$0.00	$8,434.44	$7,456.32	$16,616.32	$0.00	$246,926.48	$2,186.16	$3,439.36	$7,847.88	$2,818.80	$22,233.10		

WSP Total $418,623.18

TOTAL $418,623.18

IV. B. Inspection Services
Selmon West Extention

November 30, 2023

Tampa-Hillsborough Expressway Authority

ATTN: Brian W. Pickard, Director of Expressway Operations

1104 East Twiggs Street, Suite 300

Tampa, Florida 33602

RE: Proposal – Bridge 100852 West Gandy Extension – PT Investigation

Brian:

It is our pleasure to submit this proposal for the investigation of the PT Caps.

The work will consist of the following:

- Documenting any water leakage at each cap prior to any work starting.
- Removing the 512 designated caps.
- Check for water leakage.
- Perform hands on inspection to check for any fractured or loose strands.
- Seal Caps/Tendon anchorage with wax.
- Add drain caps at specified locations.
- Document/track/monitor water leakage.
- Provide summary/report documenting findings.

Total cost of $145,832.91.

Material Cost of $11,764.10.

Hourly Rate of $343.95 for invoice purposes.

Please call me at 727-946-4892 with any questions or concerns.

Thanks,

Benjamin Loesky, PE

Benjamin Loesky, P.E.
D7 Structures Project Manager

4806 N. Manhattan Ave
Tampa, FL, 33614
C. 727.946.4892
bloesky@wwebber.com | **wwebber.com**

IV. B. 2. Change Order - Slip Ramps

Contract No. O-02520 East Selmon Expressway Slip Ramps

Final Purchase Order

A	Hurricane Idalia	$	7,302.91
B	Fuel & Bit	$	137,631.71
	Asphalt Spreadrate Adjustment	$	(11,508.60)
	Asphalt CPFs	$	22,094.47
C	Preliner for Abandoned Structures at Ramp 3	$	13,125.76
D	Exit 10 Inlet Grate Tops	$	16,816.03
E	DCE Memos	$	501,498.29
F	NOI #07 - ACN Cabinet	$	101,708.16
G	36' MVDS Conc. Pole Deleted - RFM 01 (Ramp 2 Rev 3, IT-4)	$	(2,317.97)
H	Paint on one beam at 34th St Deletion	$	(1,675.32)

Final PO	**$**	**784,675.44**

A) Hurricane Idalia
As per Spec 7-14 and CPAM 7.6.5 (2.), Middlesex is entitled to compensation for taking down and replacing MOT and pre/post erosion control efforts caused by Hurricane Idalia.
Middlesex has requested a lump sum payment of $7,302.91 as compensation for these efforts (see attached quote/scope).

B) Asphalt Adjustments
As per Spec 9-2.1.1 and 9-2.1.2, Middlesex is entitled to compensation for fuel and bituminous increases during the project (see attached summary).
As per Spec 334-7 and 337-11, the Authority is entitled to compensation for spreadrates of the structure and friction placed on the project (see attached QCRR calculations and summary).
As per Spec 334-8 and 337-12.1, Middlesex is entitled to compensation for CPFs for the structure and friction placed on the project (see attached summary).

C) Preliner at Ramp 3
As per Spec 4-3.7, Middlesex is entitled to compensation for additional cleaning and adding a preliner to unknown buried structures in a drainage pipe at sta. 1218+62 since it was an unforeseen condition.
Middlesex has requested a lump sum payment of $13,125.76 as compensation for this work (see attached quote).

D) Exit 10 Inlet Grate Tops
As per Spec 4-3.2.1, Middlesex is entitled to compensation for the direction given by the Authority to construct two new inlet grate tops in the gore area at WB Exit 10.
Middlesex has requested a lump sum payment of $16,816.03 as compensation for this work (see attached quote).

E) DCE Memos for MPAs
As per DCE Memos 22-03, 22-04, 22-05, 22-10, 22-11 and 22-14, and because the Authority elected to participate in these memos, Middlesex is entitled to compensation for material price adjustments from the time of bid to when material was purchased (see attached summary).

F) NOI #07 - ACN Cabinet
As per Spec 4-3.2, Middlesex is entitled to compensation for the direction given by the Authority to add web relays and a layer 3 switch to the ACN Cabinet, and for additional programming.
Middlesex has requested a lump sum payment of $101,708.16 as compensation for the additional work (see attached quote/scope).

G) MVDS Concrete Pole Deletion
As per Spec 4-3.9, the Authority is entitled to a Contract credit for deleting a 36-ft MVDS Concrete Pole at Ramp 2, sta. 291+62.
Middlesex has offered a lump sum credit of $2,317.97 as compensation for the deleted work (see attached quote/approval).

H) Class 5 Finish on Beam Deletion
As per Spec 4-3.9, the Authority is entitled to a Contract credit for deleting the Class V Finish on one beam at the 34th St Bridge #100449.
Middlesex has offered a lump sum credit of $1,675.32 as compensation for the deleted work (see attached quote/approval).

IV. B. 3. I-4 FRAME CEI - Consor

SCOPE OF SERVICES
CONSTRUCTION ENGINEERING AND INSPECTION

1.0 PURPOSE:

This scope of services describes and defines the Construction Engineering and Inspection (CEI) services which are required for contract administration, inspection, and materials sampling and testing for the construction project listed below.

2.0 SCOPE:

Provide services as defined in this Scope of Services, the referenced Tampa-Hillsborough County Expressway Authority (THEA) and Florida Department of Transportation (Department or FDOT) manuals, and procedures.

The project for which the services are required is:

Description:	FDOT I-4 FRAME JPA FY 2024 Project
County:	Hillsborough County
THEA Project No.	O-XXXX

Exercise independent professional judgment in performing obligations and responsibilities under the contract. Pursuant to Section 4.1.4 of the Department's Construction Project Administration Manual (CPAM), the authority of the Consultant's lead person, such as the Senior Project Engineer, and the Consultant's Project Administrator shall be identical to the Department's Resident Engineer and Project Administrator respectively and shall be interpreted as such.

Services provided by the Consultant shall comply with Department manuals, procedures, and memorandums in effect as of the date of execution of a contract unless otherwise directed in writing by the Authority. Such Department manuals, procedures, and memorandums are found at the FDOT State Construction Office's website (https://www.fdot.gov/construction).

The project consists of the implementation of Connected Vehicle (CV) technology to complement the on-going FDOT I-4 FRAME project. It will include the procurement of 35 Roadside Units (RSU), 6 pedestrian detection safety cameras the Pedestrian Collision Warning (PCW) application at signalized intersections, 3 rail crossing Vehicle-to-lnfrastructure (V21) safety systems, and approximately 10,000 linear feet of fiber optic cable including all conduit, pull boxes, all ancillary equipment and cabling, and systems engineering necessary to complete the PROJECT.

The table below further delineates the locations and intersections to be included in this PROJECT:

FDOT I-4 FRAME Integration with THEA Connected Vehicle (CV) Pilot

Project Location/Intersections

Roadway	Limits/Intersection	Infrastructure or Device Type	Quantity	Notes
Lee Roy Selmon Expressway	W Gandy Blvd to Brandon Pkwy	RSU	18	Exact expressway locations to be confirmed during systems engineering/design.
S Dale Mabry Hwy (US 92)	Rail Crossing (near Selmon) to W Azeele St	FOC	---	Existing FOC drop to (11) signalized intersections/RSUs. Integrate with THEA FOC.
	Railroad Crossing	RSU	1	
	Lowe's Entrance	RSU	1	
	W Bay Vista Ave	RSU	1	
	W Euclid Ave	RSU	1	
	W El Prado Blvd	RSU	1	
	W Bay to Bay Blvd	RSU	1	
	W San Carlos St	RSU	1	
	W Neptune St	RSU	1	
	W Morrison Ave/Henderson Blvd	RSU	1	
	W Swann Ave	RSU	1	
	W Azeele St	RSU	1	
	(spare devices)	RSU	3	
N Florida Ave (US 41/SR 685)	E Brorein St to E Fortune St	FOC	---	Existing and new FOC with drops to 12 signalized intersections/RSUs. Integrate with THEA FOC.
	E Brorein St	RSU	1	11 existing THEA CVP RSUs between E Whiting St and E Fortune St.
	E Jackson St	Ped Detect Camera	2	Pedestrian safety/Pedestrian Collision Warning (PCW) application.
	E Kennedy Blvd	Ped Detect Camera	2	
	(spare devices)	Ped Detect Camera	2	
N 50th St (US 41)	E Adamo Dr to N Rail Crossing (at 1700 N 50th St)	FOC	---	New FOC with drops to 2 RR crossings/RSUs. Integrate with THEA FOC.
	South Rail Crossing	RSU	1	V2I Rail Crossing Safety application.
	North Rail Crossing	RSU	1	
Acronyms: FOC - Fiber Optics Communication; RSU - Roadside Unit				

The Contractor shall coordinate the Temporary Traffic Control Design with the Authority's Toll Operations Department to minimize any disruptions to toll operations.

The Contractor shall prepare ITS Plans, Specification Package, Signing and Marking Plans, and Temporary Traffic Control Plans.

The Consultant shall provide support for THEA's Public Information Office for the duration of the project.

On a single Construction Contract, it is a conflict of interest for a professional firm to receive compensation from both the Authority and the Contractor either directly or indirectly.

3.0 LENGTH OF SERVICE:

The CEI services for the FDOT I-4 FRAME JPA FY 2024 Project shall begin upon written notification to proceed by THEA.

Track the execution of the contract such that the Consultant is given timely authorization to begin work. While no personnel shall be assigned until written notification by THEA has been issued, the Consultant shall be ready to assign personnel within two weeks of notification. For

the duration of the project, coordinate closely with THEA and the Contractor to minimize rescheduling of Consultant activities due to construction delays or changes in scheduling of Contractor activities.

For estimating purposes, the Consultant will be allowed an accumulation of ninety (90) calendar days to perform preliminary administrative services prior to the issuance of the Contractor's notice to proceed and thirty (30) calendar days to demobilize and develop the final estimate after final acceptance, for a total of 485 days.

The anticipated letting schedule and construction time for the project is as shown below:

FDOT 1-4 FRAME JPA FY 2024 Construction Contract

THEA Contract #	Duration (Days)
O-XXXX	365*

*Note that the contract duration shall be adjusted depending on the contract time proposed by the Authority.

4.0 DEFINITIONS:

A. Agreement: The Professional Services Agreement between the Authority and the Consultant setting forth the obligations of the parties thereto, including but not limited to the performance of the work, furnishing of services, and the basis of payment.

B. Authority: The Tampa-Hillsborough County Expressway Authority

C. Authority Contracts and Procurement Manager: The administrative head of the Authority Procurement Office.

E. Authority Director of Operations and Engineering: The Director of Construction, Maintenance, Traffic Operations, Materials, and Safety.

F. Construction Project Manager: The Authority employee assigned to manage the Construction Engineering and Inspection Contract and represent the Authority during the performance of the services covered under this Agreement.

G. Construction Training/Qualification Program (CTQP): The Department program for training and qualifying technicians in Aggregates, Asphalt, Concrete, Earthwork, and Final Estimates Administration. Program information is available at CTQP website.

H. Consultant: The Consulting firm under contract to the Authority for administration of Construction Engineering and Inspection services.

I. Consultant Project Administrator: The employee assigned by the Consultant to be in charge of providing Construction Contract administration services for one or more Construction Projects.

J. Consultant Senior Project Engineer: The Engineer assigned by the Consultant to be in charge of providing Construction Contract administration for one or more Construction Projects. This person may supervise other Consultant employees and act as the lead Engineer for the Consultant.

K. Department (FDOT): Florida Department of Transportation

L. Construction Contract: The written agreement between the Authority and the Contractor setting forth the obligations of the parties thereto, including but not limited to the performance of the work, furnishing of labor and materials, and the basis of payment.

M. Contractor: The individual, firm, or company contracting with the Authority for design, furnishing of labor and materials, and performance of work for construction of the project.

N. Executive Director: The Chief Executive Officer of the Tampa Hillsborough Expressway Authority.

O. Engineer of Record: The Engineer noted on the Construction plans as the responsible person for the design and preparation of the plans.

P. Operations Engineer: The Director of Expressway Operations, or it's designee, assigned to administer Maintenance Contracts for the Authority.

Q. Public Information Office: The Authority's office assigned to manage the Public Information Program.

R. Resident Compliance Specialist: The employee assigned by the Consultant to oversee project specific compliance functions.

S. Resident Engineer: The Director of Expressway Operations, or it's designee, assigned to administer Construction Contracts for the Authority.

5.0 ITEMS TO BE FURNISHED BY THE AUTHORITY TO THE CONSULTANT

A. The Authority on an as needed basis, will furnish the following Construction Contract documents for each project. These documents may be provided in either paper or electronic format.

1. Construction Plans,
2. Specification Package,
3. Copy of the Executed Construction Contract
4. Utility Agency's Approved Material List (if applicable).

6.0 ITEMS FURNISHED BY THE CONSULTANT

6.1 Department Documents:

All applicable Department documents referenced herein shall be a condition of this Agreement. All Department documents, directives, procedures, and standard forms are available through the Department's Internet website. Most items can be purchased through the following address. All others can be acquired on-line at the Department's website.

Florida Department of Transportation
Maps and Publication Sales
605 Suwannee Street, MS 12
Tallahassee, Florida 32399-0450
Telephone No. (850) 414-4050

http://www.dot.state.fl.us/construction/

6.2 Office Automation:

Provide all software and hardware necessary to efficiently and effectively carry out the responsibilities under this Scope of Services.

Provide each inspection staff with a laptop computer running a Consultant furnished comprehensive construction management system supporting activities including construction administration, field record keeping, contract record maintenance, contractor payment processing, materials management, and civil rights monitoring application through use of a mobile broadband connection to the Consultant furnished server. All computer coding shall be input by Consultant personnel using equipment furnished by them. Ownership and possession of computer equipment and related software, which is provided by the Consultant, shall remain at all times with the Consultant. The Consultant shall retain responsibility for risk of loss or damage to said equipment during performance of this Agreement. Field office equipment should be maintained and operational at all times.

Current technical specifications for office automation can be viewed at:
http://www.dot.state.fl.us/Construction/DesignBuild/ConsultantCEI/OfficeAutomation.shtm

6.3 Field Office: (NOT APPLICABLE)

The Authority will not be providing direct compensation for a Field Office.

6.4 Vehicles:

Vehicles will be equipped with appropriate safety equipment and must be able to effectively carry out requirements of this Agreement. Vehicles shall have the name and phone number of the consulting firm visibly displayed on both sides of the vehicle.

6.5 Field Equipment:

Supply survey, inspection, and testing equipment essential to perform services under this Scope of Services; such equipment includes non-consumable and non-expendable items.

Hard hats shall have the name of the consulting firm visibly displayed.

Equipment described herein and expendable materials under this Scope of Services will remain the property of the Consultant and shall be removed at completion of the work.

Handling of nuclear density gauges shall be in compliance with their license.

Retain responsibility for risk of loss or damage to said equipment during performance of this Scope of Services. Field office equipment shall be maintained and in operational condition at all times.

6.6 Licensing for Equipment Operations:

Obtain proper licenses for equipment and personnel operating equipment when licenses are required. The license and supporting documents shall be available for verification by THEA, upon request.

Radioactive Materials License for use of Surface Moisture Density Gauges shall be obtained through the State of Florida Department of Health.

7.0 LIAISON RESPONSIBILITY OF THE CONSULTANT:

For the duration of the contract, keep THEA's Construction Project Manager in Responsible Charge informed of all significant activities, decisions, correspondence, reports, and other communications related to its responsibilities under this Agreement.

Facilitate communications between all parties (i.e. architectural, mechanical, materials, landscaping, local agencies, etc.) ensuring responses and resolutions are provided in a timely manner. Maintain accurate records to document the communication process.

Submit all administrative items relating to Invoice Approval, Personnel Approval, Time Extensions, and Supplemental Amendments to the Construction Project Manager for review and approval.

8.0 PERFORMANCE OF THE CONSULTANT:

During the term of the contract and all Supplemental Amendments thereof, the Authority will review various phases of Consultant operations, such as construction inspection, materials sampling and testing, and administrative activities, to determine compliance with this Agreement. The Consultant shall cooperate and assist Authority representatives in conducting the reviews. If deficiencies are indicated, remedial action shall be implemented immediately. Authority recommendations and Consultant responses/actions are to be properly documented by the Consultant. No additional compensation shall be allowed for remedial action taken by the Consultant to correct deficiencies. Remedial actions and required response times may include but are not necessarily limited to the following:

A. Further subdivide assigned inspection responsibilities, reassign inspection personnel, or assign additional inspection personnel, within one week of notification.

B. Immediately replace personnel whose performance has been determined by the Consultant and/or the Authority to be inadequate.

C. Immediately increase the frequency of monitoring and inspection activities in phases of work that are the Consultant's responsibility.

D. Increase the scope and frequency of training of the Consultant personnel.

9.0 REQUIREMENTS OF THE CONSULTANT:

9.1 General:

It shall be the responsibility of the Consultant to administer, monitor, and inspect the Construction Contract such that the project is constructed in reasonable conformity with the plans, specifications, and special provisions for the Construction Contract.

Observe the Contractor's work to determine the progress and quality of work. Identify discrepancies, report significant discrepancies to the Authority, and direct the Contractor to correct such observed discrepancies.

Inform the Construction Project Manager of any significant omissions, substitutions, defects, and deficiencies noted in the work of the Contractor and the corrective action that has been directed to be performed by the Contractor.

9.2 Survey Control:

To the extent consistent with the provisions of the Construction Contract and with prior approval of the Construction Project Manager check or establish the survey control baseline(s) along with sufficient baseline control points and bench marks at appropriate intervals along the project in order to: (1) make and record measurements necessary to calculate and document quantities for pay items, (2) make and record pre-construction and final cross section surveys of the project site in those areas where earthwork (i.e., embankment, excavation, subsoil excavation, etc.) is part of the construction project, and (3) perform incidental engineering surveys.

9.3 On-site Inspection:

Monitor the Contractor's on-site construction activities and inspect materials entering into the work in accordance with the plans, specifications, and special provisions for the Construction Contract to determine that the projects are constructed in reasonable conformity with such documents. Maintain detailed accurate records of the Contractor's daily operations and of significant events that affect the work.

Monitor and inspect Contractor's Work Zone Traffic Control Plan and review modifications to the Work Zone Traffic Control Plan, including Alternate Work Zone Traffic Control Plan, in accordance with the Department's procedures. Consultant employees performing such services shall be qualified in accordance with the Department's procedures.

9.4 Sampling and Testing:

Perform sampling and testing of component materials and completed work in accordance with the Construction Contract documents. The minimum sampling frequencies set out in the Department's Materials Sampling, Testing and Reporting Guide shall be met. In complying with the aforementioned guide, provide daily surveillance of the Contractor's Quality Control activities and perform the sampling and testing of materials and completed work items for verification and acceptance.

The Consultant will perform inspection and sampling of materials and components at locations remote from the project site. In addition, the Consultant will perform testing of materials normally done in a laboratory remote from the project site.

Determine the acceptability of all materials and completed work items on the basis of either test results or verification of a certification, certified mill analysis, DOT label, DOT stamp, etc.

The Authority will monitor the effectiveness of the Consultant's testing procedures through observation and independent assurance testing.

Sampling, testing and laboratory methods shall be as required by the Department's Standard Specifications, Supplemental Specifications.

Documentation reports on sampling and testing performed by the Consultant shall be submitted during the same week that the construction work is done.

Transport samples to be tested in a Consultant laboratory to the appropriate laboratory.

Input verification testing information and data into the Consultant furnished comprehensive construction management system supporting construction administration, field record keeping, and materials management.

9.5 <u>Engineering Services:</u>

Coordinate the Construction Contract administration activities and with the Contractor as necessary to complete the construction of the project. Notwithstanding the above, the Consultant is not liable to the Authority for failure of such parties to follow written direction issued by the Consultant.

Services shall include maintaining the required level of surveillance of Contractor activities, interpreting plans, specifications, and special provisions for the Construction Contract. Maintain complete, accurate records of all activities and events relating to the project and properly document all project changes. Consultant shall create and maintain an electronic document management system. The following services shall be performed:

1. Attend a pre-service meeting for the contract. Provide appropriate staff to attend and participate in the pre-service meeting.
2. Schedule and attend a Final Estimate informational meeting with the Authority. Provide appropriate staff to attend and participate in this meeting.
3. Schedule and attend a meeting with the Authority Compliance Manager prior to the Pre-construction Conference. In most cases, the above will take two separate meetings based on experience and knowledge of the particular firm.
4. Schedule and conduct a meeting with the Authority prior to the Pre-construction conference and another meeting prior to project final acceptance. The purpose of these meetings is to discuss the required documentation, including as-builts, necessary for permit(s) compliance.
5. Review all Contractor-Initiated submittals subject to a 10-business day review time by the Authority.

i. Review times will commence after the Authority performs a completeness review, and in its sole and absolute direction, determines the submittal is sufficiently complete to be reviewed.

6. Coordinate and manage the Release for Construction (RFC) plan process.
7. Submit an Engineer's Certification of Compliance at the end of the project.
8. Verify that the Contractor is conducting inspections, preparing reports and monitoring all storm water pollution prevention measures associated with the project. For each project that requires the use of the NPDES General Permit, provide at least one inspector who has successfully completed the "Florida Stormwater, Erosion, and Sedimentation Control Training and Certification Program for Inspectors and Contractors". The Consultant's inspector will be familiar with the requirements set forth in the FEDERAL REGISTER, Vol. 57, No. 187, Friday, September 5, 1992, pages 4412 to 4435 "Final NPDES General Permits for Storm Water Discharges from Construction Sites" and the Department's guidelines.
9. Analyze the Contractor's schedule(s) (i.e. baseline(s), revised baseline(s), updates, as-built, etc.) for compliance with the contract documents. Elements including, but not limited to, completeness, logic, durations, activity, flow, milestone dates, concurrency, resource allotment, and delays will be reviewed. Verify the schedule conforms with the construction phasing and MOT sequences, including all contract modifications. Provide a written review of the schedule identifying significant omissions, improbable or unreasonable activity durations, errors in logic, and any other concerns.
10. Analyze problems that arise on a project and proposals submitted by the Contractor; work to resolve such issues and process the necessary paperwork.
11. When applicable, monitor, inspect and document Contractor's utility coordination efforts for compliance with Construction contract. Facilitate coordination and communication between Utility Agency's representatives, Authority's staff and Contractors executing the work. Identify potential utility conflicts and assist in the resolution of utility issues including Authority and Local Government owned facilities. Identify, review, and track progress of Joint Project Agreements, and/or other Authority and utility agreements. Address work progress, track reimbursement activities, and address betterment and salvage determination. Prepare all necessary documentation to support reimbursement activities and betterment and salvage determination.
12. Produce reports, verify quantity calculations and field measure for payment purposes as needed to prevent delays in Contractor operations and to facilitate prompt processing of such information in order for the Authority to make timely payment to the Contractor.
13. When applicable, prepare and make presentations for meetings and hearings before the Dispute Review Boards in connection with the project covered by this Agreement.
14. Monitor each Contractor and Subcontractor's compliance with specifications and special provisions of the Construction Contract in regard to payment of predetermined wage rates in accordance with Authority procedures.
15. The Authority will provide Public Information Services.

16. Prepare and submit to the Construction Project Manager monthly, a Construction Status report.
17. Video record the pre-construction conditions throughout the project limits via use of a 360-degree camera. Provide a digital photo log or video of project activities, with heavy emphasis on potential claim items/issues and on areas of real/potential public controversy.
18. Provide a digital camera for photographic documentation of pre-construction state and of noteworthy incidents or events during construction. Photographs and other media will be filed and maintained on the Consultant's computer using a Digital Media Management system. Photographs shall be taken the day prior to the start of construction and continue as needed throughout the project. Photographs shall be taken the days of Conditional, Partial and Final Acceptance.

Provide visual documentation of the Project through the periodic collection of a set of Unmanned Aircraft System (UAS) video as well as project photographs and ground – level videos. The digital media should be taken with a frequency designed to reveal changes in the progress of the Project, which can be compared to other project data including daily reports of construction and scheduling updates. Daily project and update photos should be taken. UAS media shall be updated on a weekly basis. Photographs and other media will be filed and maintained on the Consultant's computer using a Digital Media Management system.

10.0 PERSONNEL:

10.1 General Requirements:

Provide qualified personnel necessary to efficiently and effectively carry out its responsibilities under the contract.

Unless otherwise agreed to by THEA, THEA will not compensate straight overtime or premium overtime for the positions of Senior Project Engineer, Project Administrator/Project Engineer, Contract Support Specialist and Assistant or Associate to any of these positions.

10.2 Personnel Qualifications:

Provide competent personnel qualified by experience and education. Submit in writing to the Construction Project Manager the names of personnel proposed for assignment to the project, including a detailed resume for each containing at a minimum: salary, education, and experience. The Consultant Action Request form for personnel approval shall be submitted to the Construction Project Manager at least two weeks prior to the date an individual is to report to work.

Personnel identified in the Consultant technical proposal are to be assigned as proposed and are committed to performing services under this Agreement. Personnel changes will require written approval from the Authority. Staff that has been removed shall be replaced by the Consultant within one week of Authority notification.

Before the project begins, all project staff shall have a working knowledge of the current Florida Department of Transportation Construction Project Administration Manual (CPAM) and must possess all the necessary qualifications/certifications for fulfilling the duties of the position they hold. Cross training of the Consultant's project staff is highly

recommended to achieve a knowledgeable and versatile project inspection team but shall not be at any additional cost to the Authority and should occur as workload permits. Visit the training page on the State Construction Office website for training dates.

Minimum qualifications for the Consultant personnel are set forth as follows. Exceptions to these minimum qualifications will be considered on an individual basis. However, a Project Administrator working under the supervision and direction of a Senior Project Engineer or an Inspector working under the supervision and direction of a Senior Inspector shall have six months from the date of hire to obtain the necessary qualifications/certifications provided all other requirements for such positions are met and the Consultant submits a training plan detailing when such qualifications/certifications and other training relative to the Department's procedures, Specifications and Design Standards will be obtained. The Authority Director of Operations and Engineering or designee will have the final approval authority on such exceptions.

CEI SENIOR PROJECT ENGINEER - A Civil Engineering degree and registered in the State of Florida as a Professional Engineer (or if registered in another state, the ability to obtain registration in the State of Florida within six months) and six (6) years of engineering experience [(two (2) years of which are in major road or bridge construction)] or [(five (5) of which are in major bridge construction) - for Complex Bridge Projects with the exception of PTS projects which require two (2) years of major bridge construction], or for non-degreed personnel the aforementioned registration and ten (10) years of engineering experience (two (2) years of which are in major road or bridge construction). Qualifications include the ability to communicate effectively in English (verbally and in writing); direct highly complex and specialized construction engineering administration and inspection program; plans and organizes the work of subordinate and staff members; develops and/or reviews policies, methods, practices, and procedures; and reviews programs for conformance with Department standards. Also must have the following:

QUALIFICATIONS:
Attend the CTQP Quality Control Manager course and pass the examination.

CERTIFICATIONS: FDOT Advanced MOT

OTHER:
Complete the Florida Department of Transportation Critical Structures Construction Issues, Self-Study Course, and submit the mandatory Certification of Course Completion form (for structures projects).

CEI PROJECT ADMINISTRATOR/PROJECT ENGINEER - A Civil Engineering degree plus two (2) years of engineering experience in construction of major road or bridge structures, or for non-degreed personnel eight (8) years of responsible and related engineering experience, two (2) years of which involved construction of major road or bridge structures with the exception of Complex Category 2 (CC2) bridge structures.

Receives general instructions regarding assignments and is expected to exercise initiative and independent judgment in the solution of work problems. Directs and assigns specific tasks to inspectors and assists in all phases of the construction project.

Will be responsible for the progress and final estimates throughout the construction project duration. Must have the following:

QUALIFICATIONS:
CTQP Final Estimates Level II

CERTIFICATIONS: FDOT Advanced MOT

OTHER:
Attend CTQP Quality Control Manager Course and pass the examination.
Attend a FDOT accredited post-tensioning training course and pass the examination (for post- tensioned CC2 projects)
Attend a FDOT accredited grouting training course and pass the examination (for post-tensioned
CC2 projects)

A Master's Degree in Engineering may be substituted for one (1) year of engineering experience.

CEI ASSISTANT PROJECT ADMINISTRATOR/PROJECT ENGINEER –
A Civil Engineering degree plus one (1) year of engineering experience in construction of major road or bridge structures, or for non-degreed personnel six (6) years of responsible and related engineering experience, two (2) years of which involved construction of major road or bridge structures with the exception of Complex Category 2 (CC2) bridge structures.

QUALIFICATIONS:
CTQP Final Estimates Level II

CERTIFICATIONS: FDOT Intermediate MOT
CEI CONTRACT SUPPORT SPECIALIST - A High School diploma or equivalent and four (4) years of road & bridge construction engineering inspection (CEI) experience having performed/assisted in project related duties (i.e., LIMS, progress and final estimates, EEO compliance, processing Construction Contract changes, etc.) or a Civil Engineering Degree. Should exercise independent judgment in planning work details and making technical decisions related to the office aspects of the project. Should be familiar with the Department's Procedures covering the project related duties as stated above and be proficient in the computer programs necessary to perform these duties. Shall become proficient in Multi-Line and Engineering Menu.

QUALIFICATIONS:
CTQP Final Estimates Level II

CEI ASSOCIATE CONTRACT SUPPORT SPECIALIST - High school graduate or equivalent plus three (3) years of secretarial and/or clerical experience including two (2) years experience in construction office management having performed project related duties (i.e., LIMS, progress and final estimates, EEO compliance, processing Construction Contract changes, etc.). Experienced in the use of standard word processing software. Should exercise independent initiative to help relieve the supervisor of clerical detail. Assists the Project Administrator in office related duties (i.e., CQR,

progress, and final estimates, EEO compliance, Processing Construction Contract changes, etc.) Project specific. Work under the general supervision of the Senior Project Engineer and staff.

CEI RESIDENT COMPLIANCE SPECIALIST - Graduation from an accredited high school or equivalent with one (1) year of experience as a resident compliance officer on a construction project or two (2) years of assisting the compliance officer in monitoring the project. Should have prior experience in both State funded and Federal Aid funded construction projects with FDOT and knowledge of EEO/AA laws and FDOT's DBE and OJT programs. Ability to analyze, collect, evaluate data, and take appropriate action when necessary. Must attend all training workshops or meetings for Resident Compliance Specialists as determined necessary.

CEI UTILITY COORDINATOR - High School Graduate or equivalent and be knowledgeable of Department's Standards, policies, procedures, and agreements and shall have a minimum of four (4) years of experience performing utility coordination in accordance with Department's Standards, policies, procedures and agreements.

CEI SENIOR INSPECTOR/SENIOR ENGINEER INTERN – High school graduate or equivalent plus four (4) years of experience in construction inspection, two (2) years of which shall have been in bridge and/or roadway construction inspection with the exception of Complex Category 2 (CC2) bridge structures or a Civil Engineering degree and one (1) year of road & bridge CEI experience with the ability to earn additional required qualifications within one year. (Note: Senior Engineer Intern classification requires one (1) year experience as an Engineer Intern.)

Must have the following as required by the scope of work for the project:

QUALIFICATIONS:
CTQP Concrete Field Technician Level I
CTQP Concrete Field Inspector Level II (Bridges) CTQP Asphalt Roadway Level I
CTQP Asphalt Roadway Level II
CTQP Earthwork Construction Inspection Level I
CTQP Earthwork Construction Inspection Level II
CTQP Pile Driving Inspection
CTQP Drilled Shaft Inspection (required for inspection of all drilled shafts including miscellaneous structures such as sign structures, lighting structures, and traffic signal structures)
CTQP Grouting Technician Level I
CTQP Post-Tensioning Technician Level I CTQP Final Estimates Level I

CERTIFICATIONS: FDOT Intermediate MOT Nuclear Radiation Safety
IMSA Traffic Signal Inspector Level I

Responsible for performing highly complex technical assignments in field surveying and construction layout, making, and checking engineering computations, inspecting construction work, and conducting field tests and is responsible for coordinating and managing the lower level inspectors. Work is performed under the general supervision of the Project Administrator.

CEI SENIOR ITS INSPECTOR - High School graduate or equivalent plus four (4) years of experience in construction inspection, two (2) years of which shall have been in ITS construction inspection, or a Civil Engineering Degree and one (1) year of ITS CEI experience, plus demonstrated knowledge in the following:

QUALIFICATIONS:
Fiber Installation Inspection and OTDR Fiber Testing
DMS Operation and Testing
Controller Operation and Testing
CCTV Installation, Operation and Testing
MVDS Operations and Testing
FDOT SEMP Training
Familiarity with Existing Communication Equipment and Switches

CERTIFICATIONS:
IMSA Fiber Optics for ITS Level II Field (or equivalent)

Responsible for inspecting construction work; monitoring ITS and electrical installation techniques to ensure conformance with the plans, specifications, National Electrical code and other applicable manuals and is responsible for coordinating and managing the lower level inspectors. Responsible for escalating any deficiencies to the Project Administrator.

CEI INSPECTOR/ENGINEER INTERN - High school graduate or equivalent plus two (2) years experience in construction inspection, one (1) year of which shall have been in bridge and/or roadway construction inspection, or an Engineer Intern with a Civil Engineering degree (requires certificate) having the ability to earn the required qualifications and certifications within one year, plus demonstrated knowledge in the following:

Must have the following as required by the scope of work of the project:

QUALIFICATIONS:
CTQP Concrete Field Inspector Level I CTQP Asphalt Roadway Level I
CTQP Earthwork Construction Inspection Level I
CTQP Pile Driving Inspection
CTQP Drilled Shaft Inspection (required for inspection of all drilled shafts including miscellaneous structures such as sign structures, lighting structures, and traffic signal structures)
CTQP Final Estimates Level I

CERTIFICATIONS: FDOT Intermediate MOT Nuclear Radiation Safety
IMSA Traffic Signal Inspector Level I
Florida Stormwater, Erosion, and Sedimentation Control Training and Certification Program for
Inspectors and Contractors

OTHER:
Complete the Critical Structures Construction Issues, Self-Study Course, and submit the mandatory Certification of Course Completion form (for structures projects).

Responsible for performing assignments in assisting Senior Inspector in the performance of their duties. Receive general supervision from the Senior Inspector who reviews work while in progress. Civil Engineering graduates must obtain certifications within the first year of working as an inspector or Engineer Intern. Exceptions will be permitted on a case-by-case basis so long as qualifications and certifications are appropriate for specific inspection duties.

CEI ASPHALT PLANT INSPECTOR - High School Graduate or equivalent plus one (1) year experience in the surveillance and inspection of hot mix asphalt plant operations and have the following:

QUALIFICATIONS:
CTQP Asphalt Plant Level I CTQP Asphalt Plant Level II

CEI ITS INSPECTOR - High School Graduate or equivalent plus two (2) years of experience in construction inspection, one (1) year of which shall have been in ITS construction inspection, or an Engineer Intern with a Civil Engineering degree (requires certificate) having the ability to earn the required qualifications within one year, plus demonstrated knowledge in the following

QUALIFICATIONS:
Fiber Installation Inspection and OTDR Fiber Testing
DMS Operation and Testing
Controller Operation and Testing
CCTV Installation, Operation and Testing
Familiarity with Existing Communication Equipment and Switches
MVDS Operations and Testing

CERTIFICATIONS:
IMSA Fiber Optics for ITS Level I (or equivalent)

Responsible for inspecting the construction work; monitoring the correct ITS and electrical installation techniques to ensure conformance with the plans, specification, National Electrical Code and other applicable manuals. Responsible for escalating to the Senior Inspector or Project Administrator (as applicable) any deficiencies.

CEI INSPECTORS AIDE - High School graduate or equivalent and able to perform basic mathematical calculation and follow simple technical instructions. Duties are to assist higher- level inspectors. Must obtain FDOT Intermediate MOT within the first six months of the assignment.

CEI SURVEY PARTY CHIEF - High School graduate plus four years of experience in construction surveying (including two (2) years as Party Chief). Experienced in field engineering and construction layout, making and checking survey computations and supervising a survey party. Work is performed under general supervision of Project Administrator.

CEI INSTRUMENT PERSON - High school graduate plus three (3) years of experience in construction surveying one (1) year of which shall have been as instrument-man. Responsible for performing assignments in assisting Party Chief in the

performance of their duties. Receives general supervision from Party Chief who reviews work while in progress.

CEI ROD-MAN/CHAIN PERSON - High school graduate with some survey experience or training preferred. Receives supervision from and assists Party Chief who reviews work while in progress.

CEI SECRETARY/CLERK TYPIST- High school graduate or equivalent plus two (2) years of secretarial and/or clerical experience. Ability to type at a rate of 35 correct words per minute. Experienced in the use of standard word processing software. Should exercise independent initiative to help relieve the supervisor of clerical detail. Work under general supervision of the Senior Project Engineer and staff.

10.3 Staffing:

Once authorized, the Consultant shall establish and maintain appropriate staffing throughout the duration of construction and completion of the final estimate. Responsible personnel, thoroughly familiar with all aspects of construction and final measurements of the various pay items, shall be available to resolve disputed final pay quantities until the Authority has received a regular acceptance letter.

Construction engineering and inspection forces will be required of the Consultant while the Contractor is working. If Contractor operations are substantially reduced or suspended, the Consultant will reduce its staff appropriately.

In the event that the suspension of Contractor operations requires the removal of Consultant forces from the project, the Consultant will be allowed five (5) days maximum to mobilize, relocate, or terminate such forces.

11.0 QUALITY ASSURANCE (QA) PROGRAM:

11.1 Quality Assurance Plan:

Within thirty (30) days after receiving award of an Agreement, furnish a QA Plan to the Construction Project Manager. The QA Plan shall detail the procedures, evaluation criteria, and instructions of the Consultant's organization for providing services pursuant to this Agreement. Unless specifically waived, no payment shall be made until the Department approves the Consultant QA Plan.

Significant changes to the work requirements may require the Consultant to revise the QA Plan. It shall be the responsibility of the Consultant to keep the plan current with the work requirements. The Plan shall include, but not be limited to, the following areas:

A. Organization:

A description is required of the Consultant QA Organization and its functional relationship to the part of the organization performing the work under the Agreement. The authority, responsibilities and autonomy of the QA organization shall be detailed as well as the names and qualifications of personnel in the quality control organization.

B. Quality Assurance Reviews:

Detail the methods used to monitor and achieve organization compliance with Agreement requirements for services and products.

C. Quality Assurance Records:

Outline the types of records which will be generated and maintained during the execution of the QA program.

D. Control of Subconsultants and Vendors:

Detail the methods used to control subconsultant and vendor quality.

E. Quality Assurance Certification:

An officer of the Consultant firm shall certify that the inspection and documentation was done in accordance with FDOT specifications, plans, standard indexes, and Authority procedures.

11.2 Quality Assurance Reviews:

Conduct semi-annual Quality Assurance Reviews to ensure compliance with the requirements of the Agreement. Quality Assurance Reviews shall be conducted to evaluate the adequacy of materials, processes, documentation, procedures, training, guidance, and staffing included in the execution of this Agreement. Quality Assurance Reviews shall also be developed and performed to achieve compliance with specific QA provisions contained in this Agreement. The semi- annual reviews shall be submitted to the Construction Project Manager in written form no later than one (1) month after the review.

On short duration CCEI projects (nine (9) months or less), the CCEI shall perform an initial QA review within the first two (2) months of the start of construction.

On asphalt projects, the CCEI shall perform an initial QA review on its asphalt inspection staff after the Contractor has completed ten (10) full work days of mainline asphalt paving operations, or 25% of the asphalt pay item amount (whichever is less) to validate that all sampling, testing, inspection, and documentation are occurring as required of the CCEI staff.

11.3 Quality Records:

Maintain adequate records of the quality assurance actions performed by the organization (including Subcontractors and vendors) in providing services and products under this Agreement. All records shall indicate the nature and number of observations made, the number and type of deficiencies found, and the corrective actions taken. All records shall be available to the Department, upon request, during the Agreement term. All records shall be kept at the primary job site and shall be subject to audit review.

12.0 CERTIFICATION OF FINAL ESTIMATES:

12.1 Final Estimate Submittal:

Prepare documentation and records in compliance with the Agreement, Statewide Quality Control (QC) Plan, or Consultant's approved QC Plan and the Department's Procedures as required by Section 4.1.4 of Review and Administration Manual.

Submit the Final Estimate(s) documenting the Contractor's work in accordance with the Review and Administration Manual.

Revisions to the Certified Final Estimate will be made at no additional cost to the Authority.

12.2 Certification:

Consultant personnel preparing the Certified Final Estimate Package shall be CTQP Final Estimates Level II.

Duly authorized representative of the Consultant firm will provide a digitally signed certification on a form pursuant to Department and Authority's procedures.

12.3 Offer of Final Payment:

Prepare the Offer of Final Payment package as outlined in Chapter 14 of the Review and Administration Manual. The package shall accompany the Certified Final Estimates Package submitted to the Authority for review. The Consultant shall be responsible for forwarding the Offer of Final Payment Package to the Contractor.

13.0 AGREEMENT MANAGEMENT:

13.1 General:

(1) With each monthly invoice submittal, the Consultant will provide a Status Report for the Agreement. This report will provide an accounting of the additional contract calendar days allowed to date, an estimate of the additional calendar days anticipated to be added to the original schedule time, an estimate of the Agreement completion date, and an estimate of the Consultant funds expiration date per the Agreement schedule for the prime Consultant and for each subconsultant. The Consultant will provide a printout showing the previous month's payments made to subconsultants. Invoices not including this required information may be rejected.

(2) When the Consultant identifies a condition that will require an amendment to the contract the Consultant will communicate this need to the Construction Project Manager for acceptance. Upon acceptance, prepare and submit an Amendment Request (AR), and all accompanying documentation to the Construction Project Manager for approval and further processing. The AR is to be submitted at such time to allow the Authority two (2) weeks to process, approve, and execute the AR. The content and format of the AR and accompanying documentation shall be in accordance with the instructions and format to be provided by the Authority.

(3) The Consultant is responsible for performing follow-up activities to determine the status of each Amendment Request submitted to the Authority.

13.2 Invoicing Instructions:

Monthly invoices shall be submitted to the Authority in a format and distribution schedule defined by the Authority, no later than the 30th day of the following month.

If the monthly invoice cannot be submitted on time, notify the Authority prior to the due date stating the reason for the delay and the planned submittal date. Once submitted, the Consultant Project Principal or Senior Project Engineer shall notify the Construction Project Manager via e- mail of the total delay in calendar days and the reason(s) for the delay(s).

All invoices shall be submitted to the Authority in electronic and hard copy formats in accordance with Authority's procedures.

All charges to the individual project will end no later than thirty (30) calendar days following final acceptance; or where all items of work are complete and conditional/partial acceptance is issued; unless authorized in writing by the Authority.

A Final Invoice will be submitted to the Authority no later than the 30th day following Final Acceptance of the individual project or as requested by the Authority.

14.0 OTHER SERVICES:

Upon written authorization by the Director of Operations and Engineering or designee, the Consultant will perform additional services in connection with the project not otherwise identified in this Agreement. The following items are not included as part of this Agreement but may be required by the Authority to supplement the Consultant services under this Agreement.

A. Assist in preparing for arbitration hearings or litigation that occurs during the Agreement time in connection with the construction project covered by this Agreement.

B. Provide qualified engineering witnesses and exhibits for arbitration hearings or litigation in connection with the Agreement.

C. Provide inspection services in addition to those provided for in this Agreement.

D. Provide services determined necessary for the successful completion and closure of the Construction Contract.

Proposed Staff Months / Hours
CONSTRUCTION ENGINEERING AND INSPECTION (CEI) SERVICES FOR FDOT 1-4 FRAME JPA FY 2024 Project
THEA PROJECT No. O-XXXX

Personnel Classifications	Billing Rate With OM	Firm	P 1	P 2	P 3	C 4	C 5	C 6	C 7	C 8	C 9	C 10	C 11	C 12	C 13	C 14	C 15	T 16	Total Staff-Months	Straight Time Staff Hours	Overtime Staff Hours	Total Staff Hours	Total Costs	Premium OT @ 10%	Total Compensation
	With Expenses		Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25							
Sr. Project Engineer	$289.04	CON	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.80	132		132	$38,153.10		$38,153.10
Project Engineer	$180.04	CON	0.20	0.20	0.20	0.20	0.20	0.20	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	5.20	858		858	$154,471.56		$154,471.56
Contract Support Specialist	$125.54	CON	0.10	0.10	0.10	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	2.60	429		429	$53,854.88		$53,854.88
Sr. Inspector	$125.38	CON							0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	825	83	908	$113,784.85		$113,784.85
Inspector	$75.78	CON							1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	10.00	1,650	165	1,815	$137,542.13		$137,542.13
Total Staff Months / Hours																				4603.5	288.75	4892.25	$497,806.52		$497,806.52

Legend P = Preconstruction C = Construction T = Post Construction

IV.B.4. GEC - Evaluating Risk - South Selmon

South Selmon Expressway
Scope
for Risk Investigation

Purpose & Need

With their small in-house staff, THEA requires support to provide engineering and management support to meet the requirements of THEA to provide engineering investigation and analysis of the various items impacting the contractor's financial risk in bidding for the South Selmon Capacity Project. The project will provide additional capacity and upgrades to the existing facility.

Scope/Report

<u>Noise Wall Analysis</u>

- Analyzes and evaluate noise wall options (type/materials/location).
- Three concepts are to be consider:

    - Concept 1: Cantilever structural slab from the existing retaining walls to obtain the appropriate roadway shoulders. Figure 1.

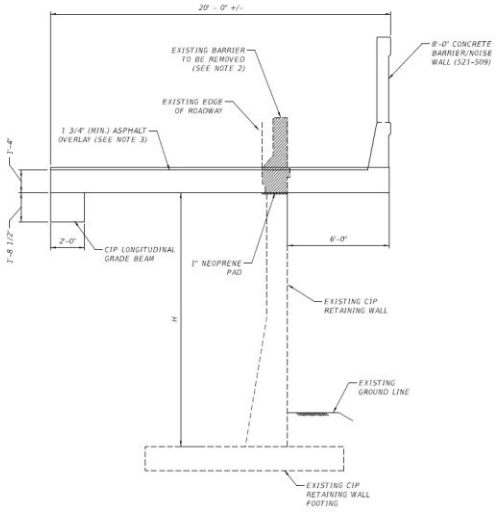


Figure 1 – Concept 1

- Concept 2: Widen existing bridges to the outside with new superstructure and substructure to obtain the appropriate bridge shoulders Figure 2.

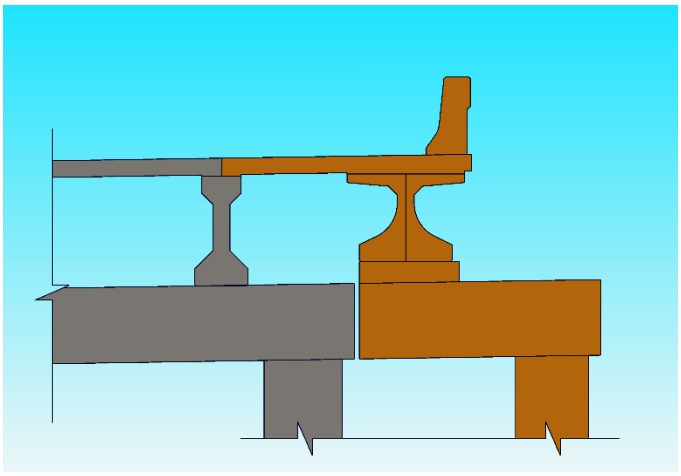


Figure 2 – Concept 2

- Concept 3: Utilizing Ground Mounted Sound Walls near the right-of-way. See following preliminary Figure 3 - Use of FDOT Standard Plans, Index FDOT Index 534-200 Noise Walls – (Precast)

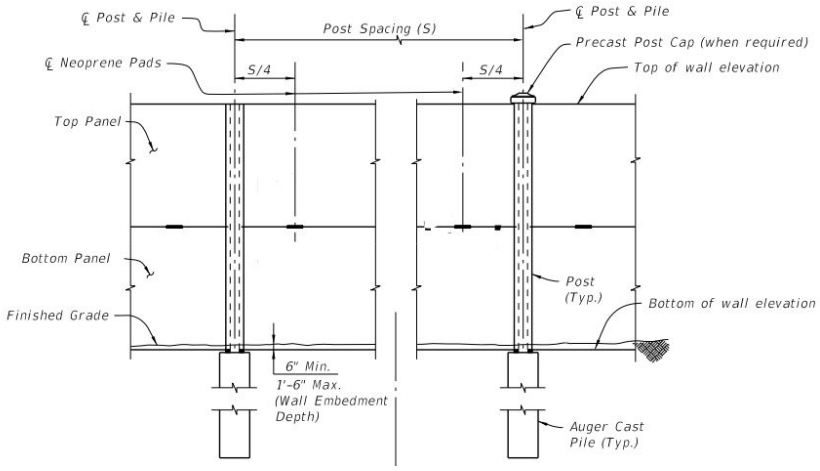


Figure 3 – Concept 3

- Provide cost estimates for recommended alternatives.

Structural Analysis

Given:

- Existing Conditions
  - Existing original Contract Plans (no As-Builts available)

  - Original Project Design Specifications: 1973 Edition of American Association of State Highway Officials (AASHO) Standard Specifications for Highway Bridges
  - Project Construction Specifications: 1973 FDOT Standard Specifications for Roads and Bridges
- Analyze and evaluate structural requirements based on additional geotechnical information provided as part of this risk investigation.
- Analyze new areas of inside widening for bridge sections not being widened in the previous procurement concept.

Outside Shoulder Analysis

- Analyze and evaluate options to widen roadways sections to provide AASHTO standard width shoulders throughout the length of the project.
- Analyze and evaluate options to widen retaining wall and bridge sections (same as noise wall options on structures) to provide AASHTO standard width shoulders throughout the length of the project.
- Provide conceptual design and cost estimates for options for each section.

Utilities & Geotechnical Analysis

- Element- Coordinate with utility owners that cross the Hillsborough River via subaqueous crossings. Attempt to get relocation schedules or confirm no conflict. Coordinate updates to scope and RFP to state that once they are relocated, if they are affected, any relocation cost would be the burden of the bidding contractor.
- Element- For UAO's crossing the bridge that are attached, develop and attempt to obtain a relocation schedule each utility. For example, vetting if there is enough slack, condition of conduits, etc. to allow a temporary move, coordinate who goes first and how long to mobilize work force to start shifting are all aspects that will be performed under advance coordination efforts.
- Element- Coordinate sound wall improvements with overhead electric facilities. Fully vetting these improvements and if the sound wall can't be removed from conflict, attempt to obtain relocation schedules and possibly advanced relocation of overhead electric facilities.
- Element- With the potential for drainage to be redesigned, work directly with TECO Peoples Gas to mitigate conflicts through design. If conflicts can't be mitigated, collaborate with them for advanced relocation.
- Element- As long as widening is now to the inside, Tampa Electric transmission overhead shouldn't be affected.
- Element- Mitigate the gravity wall conflict with Tampa Electric's underground transmission crossing if the widening to the inside still requires the gravity wall.
- Assist and coordinate with Element performing their utilities analysis.
- See attached Tierra proposal for geotechnical analysis.
- Assist and coordinate with Tierra performing their geotechnical testing and analysis.

South Selmon Expressway
Scope
for Risk Investigation

Pavement Analysis Review

- Review pavement analysis performed by Consor.

Drainage & Permitting Analysis Review

- Review drainage & permitting analysis performed by Consor.

Additional Items:

- Meetings.
- Supervision and QC.

Subconsultants- Tierra (SBE), Geotechnical Analysis ($624,016.70)

Element (SBE), Utilities Analysis ($34,018.80)

SBE Participation- 60.23%

Services from 1/1/2024 - 6/30/2024.

TIERRA

November 29, 2023

HNTB Corporation
One Tampa City Center
201 North Franklin Street, Suite 1200
Tampa, Florida 33602

Attn: Mr. James E. Drapp, P.E.

RE: Geotechnical Services Proposal
Tampa Hillsborough Expressway Authority
South Selmon Expressway Improvements
From Himes Avenue to Whiting Street
Hillsborough County, Florida
Tierra Project No. 6511-21-169

Mr. Drapp:

Tierra, Inc. appreciates the opportunity to submit the attached proposal to provide geotechnical services for the subject project.

This project, as we understand it, consists of performing services that will support a Design-Build RFP to provide inside roadway and bridge widening along the Selmon Expressway from Himes Avenue to Whiting Street. Geotechnical services are desired to provide subsurface data with the RFP package that can be used for information purposes. Tierra previously performed geotechnical explorations for this project. The existing information will be included with the geotechnical services provided herein to support the RFP package for the project.

This proposal has been prepared to provide additional information for the following items:

1. Additional coring of the Expressway over the Hillsborough River Bridge Decks for deck concrete quality assessment.

2. Additional geotechnical test borings for the inside bridge widenings and for the post and panel sound walls.

3. Estimate pile lengths for the Expressway over the Hillsborough River Bridges on a “per test” basis through parallel seismic testing.

Geotechnical Project Approach

Our services for this project will consist of providing geotechnical services in general accordance with the Florida Department of Transportation (FDOT) "Soils and Foundation Handbook" guidelines.

We anticipate the field testing program to consist of the following services:

1. Conduct a visual site reconnaissance of the project site and locate and coordinate utility clearances and maintenance of traffic.

2. Perform test borings in the vicinities of the proposed Selmon Expressway bridge inside widenings associated with this project as follows:

Bridge Nos.	Bridge Location	Number of Borings	Boring Depths (ft)
100308 &100309	Himes	2	80
100310 & 100311	W. Euclid Ave	3	80 to 100
100312 & 100313	W. El Prado Blvd.	2	80
100314 & 100315	S. Macdill Ave/ Bay to Bay Blvd.	10	75
100316 & 100317	W. Mississippi Ave.	0	NA
100318 & 100319	W. Watrous Ave./S. Howard Ave.	4	75
100320 & 100321	W. Morrison Ave.	4	70
100322 & 100323	W. Swann Ave.	3	100
100324 & 100325	W. Platt Street	2	80
100326 & 100327	S. Willow Ave.	2	80
100328 &100329	S. Boulevard	4	120
100330 & 100331	S. Hyde Parke Ave./S. Plant Ave.	9	100
100332 & 100333	Viaduct	20	80

A total of 65 Standard Penetration Test (SPT) borings are included in this proposal. The SPT borings will be performed using land-based drilling rigs. The borings will be performed to depths ranging from 70 to 120 feet below existing grades. The borings will be sampled continuously in the top 10 feet and on 2½-foot centers thereafter. Rock coring will be performed at selected intervals within selected borings.

The above boring plan is based on one test boring at each inside widening bent (but not one boring per bridge per bent).

3. Perform up to 20 SPT borings along the alignments of the post and panel sound walls to provide data for design of the sound wall foundations. These SPT borings will be performed to a depth of 30 feet.

4. Perform concrete coring of the existing bridge deck for bridges 100332 and 100333 over the Hillsborough River. The cores will be performed with a 2 to 4-inch diameter core bit. The thickness of the bridge deck will be measured at each core location. Compressive strength testing will be performed on the obtained concrete core samples. A total of 10 cores are planned.

5. Maintenance of Traffic (MOT) will be provided in general accordance with Florida Department of Transportation guidelines

6. Visually classify and stratify recovered soil samples in the laboratory using the Unified Soil Classification System (USCS). Perform limited laboratory tests on selected representative samples to develop the soil legend for the project. Perform split-tensile and compressive strength tests on selected rock core samples obtained from the borings.

7. Measure observed groundwater levels at each boring location.

8. Draft the results of the field explorations in Microstation on Report of Core Boring sheets.

9. Prepare a formal geotechnical report, which summarizes the course of study pursued, the field and laboratory data generated, and the subsurface conditions encountered.

Service Fee

The fee for the above described geotechnical services is estimated at **$624,016.70** as detailed on the attached Unit Fee Schedule.

Estimate Pile Lengths at the Hillsborough River

Tierra understands that pile driving records are not available and it may be desired to perform testing to estimate pile tip elevations and resulting estimated pile capacities. Based on the footing configurations, parallel seismic testing will be required to perform pile length estimates.

General Approach and Test Methods

Parallel Seismic Testing (PST) is an industry preferred NDT method commonly applied for providing pile depth/embedment estimates in Florida. PST testing in conjunction with knowledge of the subsurface conditions (soil boring data) is a viable method for estimating pile capacities.

Parallel Seismic Testing (PST) is a widely applicable NDT method to estimate foundation embedment depths. PST utilizes a hydrophone placed within a cased boring that is extended into the bearing material below the estimated foundation embedment. The borehole must be performed adjacent to the foundation at depths on the order of 15 feet below pile tip elevations in order to ensure full data capture at the pile toe/soil interface. Data is collected by striking the foundation near the pile head utilizing an impact hammer and measuring the resultant seismic wave. The hydrophone is raised and lowered within the cased borehole while recording the corresponding decreases or increases in seismic wave arrival times. The collected waveform data are plotted for each hydrophone depth interval and best-fit lines are drawn through the first wave peaks. The point of inflection on the waveform plot represents the estimated depth of the foundation member.

PST has been used successfully on a number of FDOT projects to estimate foundation embedment depths and has been widely accepted as a versatile NDT method. Experienced testing engineers use PST in conjunction with other NDT methods to evaluate more complex deep foundation systems such as pile pier groups. As discussed above, PST requires a cased borehole installed as close to the subject pile as possible. Prior analysis of existing subsurface conditions is critical to the implementation of PST in order to set the required casing depths below estimated tip elevations. For this reason, SPT borings taken during the casing installation are necessary in conjunction with the PST.

Scope of Services

The project inherently possesses several variables (such as access conditions, variable subsurface conditions and variable pile embedment depths) that can limit an exact scope of services and schedule. Based on our understanding of the site conditions and project, the following scope of services is anticipated:

- Identify proposed test locations in the field and coordinate utility locates through Sunshine State One Call of Florida.

- Obtain the necessary Environmental Protection Agency (EPA) Permit through Southwest Florida Water Management District (SWFMD).
- Provide barge access for Parallel Seismic Testing at specified pier locations within the river.
- Install steel casing to provide a stable borehole from the barge deck and provide a conduit for installation of PVC casing for hydrophone access during the Parallel Seismic Testing. The casing is estimated to extend to depths ranging from 80 to 90 feet below mean sea level.
- Perform an SPT Boring at each test location.
- Obtain the estimated pile tip elevations and complete FBDeep analyses to estimate pile compression capacities.
- Prepare a formal engineering report in accordance with the request for proposal provided and the scope of services herein that summarizes the course of study pursued, the field data generated, subsurface conditions encountered and our engineering estimates.

For land-based applications, individual tests and reports will cost $13,500.00 and for water-based piers individual tests and reports will cost $27,930.00. If Tierra can be provided a more specific scope of desired piers for testing and there are multiple piers to be tested, the cost per pier of testing will be less than provided herein as there will be cost savings with mobilizations and added efficiency with completing multiple piers at a time.

Tierra, Inc. appreciates the opportunity to provide our services to HNTB and the Tampa Hillsborough Expressway Authority on this important project. Please do not hesitate to contact our office should you have any questions or desire additional information.

Sincerely,

TIERRA, INC.

Kevin H. Scott, P.E.
Senior Geotechnical Engineer

Larry P. Moore, P.E.
Principal Geotechnical Engineer

Attachment A – Geotechnical Fees

SUMMARY FEE SHEET

ATTACHMENT "A"

PROJECT DESCRIPTION: Tampa-Hillsborough Expressway Authority — **HNTB PR 2024XXXX**

GEC CONTRACT NO. O-00121 — **South Selmon Capacity DB Project Risk Investigation (11/1/23- 6/30/24)**

HI-0112 C-XX

PRIME CONSULTANT: **HNTB Corporation**

ACTIVITY		Senior Technical Advisor		Project Manager		Chief Eng./Planner Sr. Proj. Eng.		Sr. Eng./Planner/ Specialist		Proj. Engineer/ Planner		Engineer/Planner		Sr. Technician		Clerical		TOTAL		Avg. Hourly Rate
		Man Hours	Hourly Rate $ 168.32	Man Hours	Hourly Rate $ 144.54	Man Hours	Hourly Rate $ 102.19	Man Hours	Hourly Rate $ 79.95	Man Hours	Hourly Rate $ 61.62	Man Hours	Hourly Rate $ 48.21	Man Hours	Hourly Rate $ 38.96	Man Hours	Hourly Rate $ 22.66	Manhours By Activity	Salary Cost By Activity	
Noise Wall Analysis			$0.00	40	$5,781.60	60	$6,131.40	60	$4,797.00	52	$3,204.24	40	$1,928.40	24	$935.04	4	$90.64	**280**	$22,868.32	$81.67
Structural Analysis			$0.00	44	$6,359.76	72	$7,357.68	72	$5,756.40	60	$3,697.20	48	$2,314.08	24	$935.04	4	$90.64	**324**	$26,510.80	$81.82
Outside Shoulder Structural Analysis			$0.00	48	$6,937.92	88	$8,992.72	88	$7,035.60	72	$4,436.64	60	$2,892.60	40	$1,558.40	4	$90.64	**400**	$31,944.52	$79.86
Utilities & Geotech Analysis			$0.00	12	$1,734.48	12	$1,226.28	16	$1,279.20	16	$985.92		$0.00		$0.00	4	$90.64	**60**	$5,316.52	$88.61
Pavement Analysis Review			$0.00	16	$2,312.64	40	$4,087.60	80	$6,396.00	48	$2,957.76	16	$771.36	16	$623.36		$0.00	**216**	$17,148.72	$79.39
Drainage & Permitting Analysis Review			$0.00	8	$1,156.32	200	$20,438.00	120	$9,594.00		$0.00		$0.00		$0.00		$0.00	**328**	$31,188.32	$95.09
Meetings			$0.00	12	$1,734.48	12	$1,226.28	12	$959.40	12	$739.44		$0.00		$0.00	8	$181.28	**56**	$4,840.88	$86.44
Supervision & QA/QC			$0.00	40	$5,781.60	40	$4,087.60	32	$2,558.40	24	$1,478.88		$0.00		$0.00	8	$181.28	**144**	$14,087.76	$97.83
Total Man Hours	Total Salary [(MHxHR)]	**0**	**$0.00**	**220**	**$31,798.80**	**524**	**$53,547.56**	**480**	**$38,376.00**	**284**	**$17,500.08**	**164**	**$7,906.44**	**104**	**$4,051.84**	**32**	**$725.12**	**1,808**	**$153,905.84**	**$85.12**

	Total
Basic Activities Maximum Limiting Fees (Salary Costs)	$153,905.84
Cost Elements & Additives	
Direct Expenses	(a) 2.78 Multiplier $427,858.24
SUBTOTAL (Cost Elements applied to Basic Activities Fee):	$427,858.24
(d) Direct Reimbursables	$6,725.69
Subconsultants- Tierra (SBE) Geotechnical	$624,016.70
Subconsultants- Element (SBE) Utilities	$34,018.80
Total Project Cost:	$1,092,619.42
Maximum Limiting Amount:	**$1,092,619.42**

IV.B.5. Consor - Evaluating Risk - South Selmon

EXHIBIT "A"

SCOPE OF SERVICES
SOUTH SELMON CAPACITY PROJECT
HILLSBOROUGH COUNTY
NO. O-00619CE

1.0 BACKGROUND

The Tampa-Hillsborough County Expressway Authority (the "Authority" or "THEA") is currently retaining Consor Engineers (the "CONSULTANT") to provide engineering services for the review of the roadway cross slope, existing drainage system and any improvements and permitting of the inside widening of the Selmon Expressway to 6-lanes.

2.0 PURPOSE

This scope is required to evaluate the existing asphalt roadway cross slope, existing drainage system with the new roadway improvements and the permits required for the new roadway improvements. The following is a breakdown for each task discipline:

3.0 SCOPE

Under this Supplemental Amendment, the CONSULTANT shall add the following services:

3. Project General Tasks

3.4 Contract Maintenance and Project Documentation

The CONSULTANT shall add work efforts for the maintenance of this contract.

3.6 Prime Consultant Project Manager Meetings

The CONSULTANT shall add work efforts for meetings on this contract. The meetings are for roadway analysis, drainage, permitting and weekly principal meetings.

4. Roadway Analysis

The following represents an addition in work effort associated with the cross slope evaluation of the mainline pavement and shoulders of the Selmon Expressway:

4.4 Cross Slope Analysis (lanes and shoulders)

The CONSULTANT shall review the existing cross slopes of the two existing through lanes in each direction as well as the full depth inside shoulder pavement. If out of tolerance, details will be developed to correct the cross slopes as the new lanes will utilize a portion of the full depth shoulder.

4.5 Horizontal/Vertical Master Design Files

The CONSULTANT shall add minimal design linework to assist with developing plan sheets for accompanying the necessary permits for the project.

4.22 Technical Meetings

The CONSULTANT shall add work efforts for additional meetings for the cross slope analysis with the authority.

4.23 Quality Assurance/Quality Control

4.25 Supervision

4.26 Coordination

5. Roadway Plans

The following represents the work effort associated with the roadway plans component of the permitting of the Selmon Expressway:

5.7 Plan Sheet

The CONSULTANT shall develop plan sheets for accompanying the necessary permits for the project.

5.25 Quality Assurance/Quality Control

5.26 Supervision

6a. Drainage Analysis

The CONSULTANT shall analyze and document Drainage Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

The CONSULTANT shall be responsible for designing a drainage and stormwater management system. All design work shall comply with the requirements of the appropriate regulatory agencies and the FDOT Drainage Manual.

The CONSULTANT shall coordinate fully with the appropriate permitting agencies and the authority's staff. All activities and submittals should be coordinated through the authority's Project Manager. The work will include the engineering analyses for any or all of the following:

- The CONSULTANT is tasked with examining the conceptual and as-built stormwater systems to ensure they maintain adequate conveyance following any changes to the concept plan. Additionally, the CONSULTANT will assess video

inspections (provided by the Authority) to determine the acceptability of pipe lining or identify any necessary alternative improvements.

- The CONSULTANT will provide supporting documentation for all permits, coordinate with permitting agencies, and design appropriate treatment for existing outfalls.

- The CONSULTANT is required to provide pond analysis to support permitting documentation, including assessments of stormwater quality and quantity, as well as control structures.

- A Bridge Hydraulic Report (BHR) for the bridge widening over the Hillsborough River will be prepared.

- All calculations will receive approval from the Authority, and drainage documentation should not solely reference previous design documentation.

6a.2 Hydroplaning Analysis

Perform a hydroplaning analysis to assist in determining the appropriate roadway geometry for all necessary locations (both typical sections and critical cross sections) as needed. See the FDOT Hydroplaning Guidance and FDOT Design Manual (FDM) Chapters 210 and 211 for more information. Requires the evaluation of multiple typical sections in addition to a few critical locations (1-3).

6a.3 Existing Permit Analysis

Data gathering, including desktop analysis of local, state, and federal Drainage permits. Factors to consider are off-site basins, comingling, regional facilities, or facilities with unique features.

6a.4 Utility Conflict Matrix (for drainage structures)

Populating and coordinating the utility conflict matrix for all drainage structures. A closed drainage system with nearly 300 structures and major utility involvement.

6a.7 Pond Siting Analysis and Report

A pond siting analysis is not included in this scope of services. Pond siting will be based upon the current Pond Siting Report.

6a.8 Analysis of Pipe Video Inspection Report

Analyze the pipe video inspection report provided by the others.

Due to the age of drainage system, pipe lining is assumed for all existing pipes to be utilized as part of the final design. The CONSULTANT will request the video inspections, from the Authority, of all pipes to be utilized in the design and

recommend alternatives to pipe lining if necessary.

6a.9 Bridge Hydraulic Report

The CONSULTANT shall prepare a Bridge Hydraulic Report (BHR) and Bridge Hydraulic Recommendation Sheet for the bridge widening over the Hillsborough River. Hydraulic analysis shall be in accordance with the FDOT Drainage Manual, FDOT Drainage Design Guide, and FDOT Bridge Scour Manual and shall include both a riverine and tidal analysis with scour calculations provided for the most conservative conditions. The hydraulic analysis shall be performed by a qualified Coastal Engineer as defined in Section 5.1 of the FDOT Drainage Design Guide.

6a.12 Design of Stormwater Management Facility

Design stormwater management facilities to meet requirements for stormwater quality treatment, attenuation, and aesthetics. Develop proposed pond layout (contributing drainage basin, shape, contours, slopes, volumes, tie-ins, aesthetics, etc.), perform routing, pollutant/nutrient loading calculations, recovery calculations, and design the outlet control structure.

Roadside Treatment Swales and Linear Ponds: Design stormwater management facilities to meet requirements for stormwater quality treatment, attenuation, and aesthetics. Develop proposed pond layout (contributing drainage basin, shape, contours, slopes, volumes, tie-ins, aesthetics, etc.), perform routing, pollutant/nutrient loading calculations, recovery calculations and design the outlet control structure.

6a.14 Design of Storm Drains

Analyze conceptual and as-built stormwater systems. Delineate contributing drainage areas, determine runoff, identify inlet locations, and calculate spread. Evaluate hydraulic losses, including friction, utility conflicts, and, if necessary, minor losses. Determine the design tailwater and, if needed, implement outlet scour protection.

6a.21 Drainage Design Documentation Report

Compile drainage design documentation into report format. Include documentation for all the drainage design tasks and associated meetings and decisions.

6a.25 Quality Assurance/Quality Control

6a.26 Supervision

6a.27 Drainage Meetings

Meetings with THEA staff, regulatory agencies, local governments such as

meetings with THEA Drainage Engineer, the Water Management District, FDEP, etc.

6a.29 Coordination

6b. Drainage Analysis

The CONSULTANT shall prepare Drainage plan sheets, notes, and details. The plans shall include the following sheets necessary to convey the intent and scope of the project for the purposes of construction.

6b.1 Drainage Map (Including Interchange)

Conceptual Drainage Maps will be provided for permitting purposes.

6b.3 Drainage Structures

Drainage structures sheets will not be provided. Special details may be provided in select locations.

6b.5 Retention/Detention/Floodplain Compensation Ponds

Conceptual stormwater management facility plans will be provided for permitting purposes.

6b.8 Quality Assurance/Quality Control

6b.9 Supervision

8. Env. Permits and Clearances

The following represents the work effort associated with procuring the all permits for the Selmon Expressway widenng:

8.1 Preliminary Project Research

The CONSULTANT shall review the existing permits as to potentials to amend, split or new permit specifics.

8.2.2 Establish Wetlands Jurisdictional Lines and Assessments

The CONSULTANT shall field verify the edge of water and ordinary high water line; as well as the routine storm surge.

8.2.3 Species Survey

The CONSULTANT shall conduct a field review inclusive of checking nesting, denning, roosts on and in existing structures, inclusive of ultrasonic acoustic pedestrian survey(s) for bats.

8.3 Agency Verification of Wetland Data

The CONSULTANT shall add work efforts related to the impact of the existing wetland within the project.

8.4.1 Complete and Submit All Required Wetland Permit Applications

The CONSULTANT shall add work efforts related to permitting with SWFWMD (ERP), USACE (§10 & §404), Hillsborough County and City of Tampa (Hillsborough River).

8.4.2 Complete and Submit All Required Species Permit Applications

The CONSULTANT shall add work efforts related to consultations with Hillsborough County, City of Tampa, US Fish and Wildlife Service (USFWS), Freshwater Fish and Wildlife Conservation Commission (FWC).

8.5 Coordinate and Review Dredge and Fill Sketches

The CONSULTANT shall add work efforts related to the impact of the existing wetland within the project.

8.6.1 Prepare and Submit Required Documents for USCG Coordination

The CONSULTANT shall add all early work efforts related to USCG permit.

8.6.2 Complete and Submit USCG Bridge Application

The CONSULTANT shall add all final work efforts related to USCG permit.

8.7 Prepare Water Management District or Local Water Control District Right of Way Occupancy Permit Application

8.11 Mitigation Coordination and Meetings

8.12 Regulatory Agency Support

8.13 Other Environmental Permits

The CONSULTANT shall add work efforts related to the permits with Hillsborough County and City of Tampa.

8.14.4 Wetland Impact Analysis

The CONSULTANT shall add all work efforts related to technical support of Environmental Clearances.

8.14.5 Essential Fish Habitat Impact Analysis

The CONSULTANT shall add all work efforts related to technical support of Environmental Clearances.

8.14.6 Protected Species ad Habitat Impact Analysis

The CONSULTANT shall add all work efforts related to technical support of Environmental Clearances.

8.15.4 Wetland Impact Analysis

The CONSULTANT shall add all work efforts related to the preparation of Environmental Clearances.

8.15.5 Essential Fish Habitat Impact Analysis

The CONSULTANT shall add all work efforts related to the preparation of Environmental Clearances.

8.15.6 Protected Species ad Habitat Impact Analysis

The CONSULTANT shall add all work efforts related to the preparation of Environmental Clearances.

8.18 Technical Meetings

The CONSULTANT shall add work efforts related to the permits of project.

8.19 Quality Assurance/Quality Control

8.20 Supervision

8.21 Coordination

4.0 CONSULTANT RESPONSIBILITIES

All services as outlined above, except as modified herein.

5.0 THE AUTHORITY'S RESPONSIBILITIES

The authority's responsibilities shall include:

- Pipe video inspection of all existing drainage pipes
- Utility coordination, if needed
- Provide all concept design, including all pdfs and CADD files
- Provide any design reports given to the original bidders and any additional reports finalized since.

6.0 METHOD OF COMPENSATION

VI.A.1. Contract Renewals & Expirations

Report month: November December, 2023

CONTRACT RENEWAL
and
EXPIRATION REPORT
(> $30,000)

Project Manager	Firm	Description of Services	Contract Effective Date	Contract Expiration Date	Term of Contract (Years)	Bid / Renew / End
Brian	A-Stellar Property Maintenance & Landscaping, Inc.	Maintenance and Landscaping Services	7/1/2017	6/30/2024		Expires
Brian	Aptim Environmental & Infrustructure, LLC	Environmental Advisory Services	5/7/2019	5/6/2024	3-yr, 2 Optional 1-yr Renewals	Renew (2nd one-year renewal ~ 5/7/24 - 5/7/25)
Amy	Arthur J. Gallagher & Co.	Insurance Broker Services	6/4/2021	6/3/2024	3-yr, 2 Optional 1-yr Renewals	Renew (1st one-year renewal ~ 6/4/24 - 6/3/25)
Bob	Atkins Global	Misc. Trail, Parks & Community Enhancement Serivces	5/20/2021	5/20/2024	3-yr, 2 Optional 1-yr Renewals	Renew (1st one-year renewal ~ 5/20/24 - 5/20/25)

Report month: November December, 2023

CONTRACT RENEWAL
and
EXPIRATION REPORT
(> $30,000)

Amy	**Bryant Miller Olive P.A**	**Disclosure Counsel**	**5/5/2020**	**5/4/2024**	**3-yr, 2 Optional 1-yr Renewals**	**Renew (1st one-year renewal ~ 5/5/24 - 5/4/25)**
Bob	**Evolve**	**Misc. Emerging Technology Services**	**6/27/2019**	**6/26/2024**		**Expires**
Brian	**Ferrovial Services Infrastructure, Inc. NKA Webber Infrastructure Management, Inc.**	**Asset Management Services**	**7/1/2017**	**6/30/2024**		**Expires**
Brian	**Handex**	**Environmental Advisory Services**	**5/19/2019**	**5/19/2024**		**Expires**
Jeff	**Public Trust Advisors**	**Investment Advisory Services**	**5/19/2019**	**5/1/2024**		**Expires**