

#### Meeting of the Board of Directors September 26, 2022 - 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 copies for the Authority Board Members and staff. Any person who decides to appeal any decisions of the Authority with respect to 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 August 22, 2022, Board of Directors Meeting
- IV. Discussion/Action Items
  - **A.** Planning John Weatherford, Committee Chair Bob Frey, Staff
    - 1. FDOT Coordination I-4 FRAME Support HNTB

**Purpose:** FDOT has initiated an intercity integrated corridor management (ICM) project along Interstate 4 called Florida's Regional Advanced Mobility Elements (I-4FRAME). The project utilizes Connected Vehicle and Roadside Unit technology along I-4 to manage traffic. This aspect of the project will be a collaboration between THEA and FDOT-D7 to connect I-4 and the Selmon Expressway using arterial roads. THEA staff has been collaborating with

FDOT District Seven over the past year on fiberoptic design. The next step will be to collaborate with FDOT to create interoperable CV applications, as well as oversee the installation of fiber optics that will benefit both agencies.

Funding: Capital Budget - \$150,000

**Action:** Request Board Approval for THEA staff to execute a task order with HNTB in an amount not to exceed \$150,000 for the support of the work with FDOT to connect to I-4 FRAME.

## **B.** Operations & Maintenance – Bennett Barrow, Committee Chair – Brian Pickard, P.E., Staff

#### 1. Selmon West Extension – Follow Up

**Purpose:** To utilize GEC (HNTB) in assisting staff with developing a methodology to inspect the Selmon West Extension Segmental Structure. **Funding:** Operations and Maintenance, Contingency - \$257,667.83

**Action:** Request the Board to authorize the Executive Director to execute a task order with HNTB for developing a methodology to inspect the Selmon West Extension Segmental Structure.

## C. Toll Operations – Bennett Barrow, Committee Chair – Andy Lelewski, P.E., Staff

#### 1. Toll Operations Storage Array Replacement

**Purpose:** To provide equipment and installation of a new scalable NAS (storage array) to replace the current storage array in the tolling network at THEA Headquarters.

**Funding:** Capital Budget **Action:** Requests the Board:

a) Approve selection of the lowest bid from BlueAlly Technology Solutions in the amount of \$251,560.32 for the Toll Operations Storage Array Replacement.

Firms	Amount					
BlueAlly Technology Solutions	\$ 251,560.32					
CDW-G Local Government	\$ 365,000.00					
Tensus Technology	\$ 435,153.78					
Imperium Data	\$2,152,301.34					

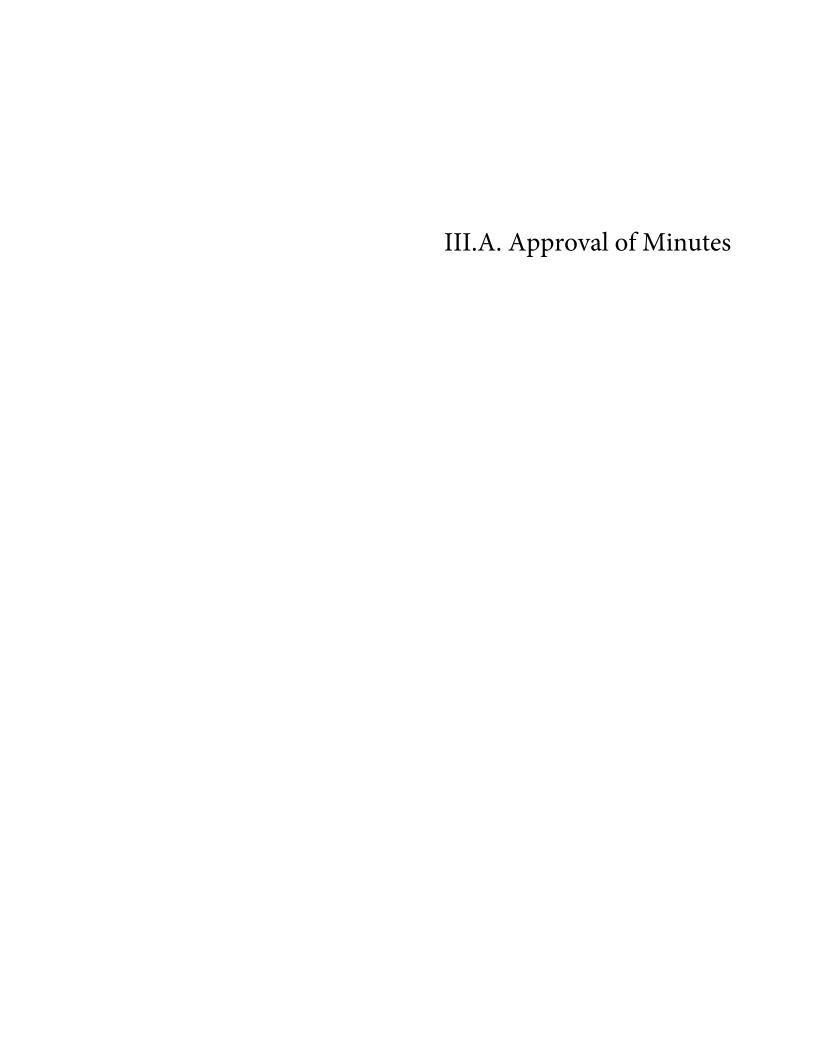
b) Authorize and direct staff to negotiate and execute a contract with the lowest responsible bid firm. If negotiations are unsuccessful, staff shall negotiate with the next lowest bid firm. Contract is subject to review and approval of THEA General Counsel.

#### V. Staff Reports

- **A.** Planning & Innovation *Bob Frey*
- **B.** Operations & Maintenance *Brian Pickard*, *P.E.*
- C. Toll Operations Andy Lelewski, P.E.
- **D.** Budget & Finance *Jeff Seward*
- **E.** Communications *Sue Chrzan*

#### VI. Executive Reports

- **A.** Executive Director *Greg Slater* 
  - 1. Director's Report
- **B.** General Counsel *Amy Lettelleir, Esq.*
- **C.** Chairman *Vincent Cassidy* 
  - 1. Upcoming Meetings
    - THEA Committees of the Whole October 10, 2022 Cancelled
    - THEA Board Meeting October 24, 2022 Cancelled
    - THEA Board Meeting November 14, 2022
    - THEA Board Meeting December 12, 2022
- VII. Old Business
- **VIII. New Business** 
  - IX. Adjournment



#### Tampa- Hillsborough County Expressway Authority Minutes of the August 22, 2022, 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 August 22, 2022, at THEA Headquarters, 1104 E. Twiggs Street in Tampa Florida. The following were present:

#### **BOARD:**

Vincent Cassidy, Chairman Mr. Barrow, Vice Chairman Mr. Alvarez, Secretary Mr. John Weatherford, Member Secretary David Gwynn, Member Mayor Jane Castor

#### **STAFF:**

Greg Slater
Amy Lettelleir
Bob Frey
Jeff Seward
Andy Lelewski
Charlene Ponce
Chaketa Mister
Lisa Pessina

Judith Villegas Max Artman Krystina Stephen Elizabeth Gray Anna Quinones Shannon Bush Brian Ramirez Emma Antolinez

#### **OTHERS:**

Matthew Sansbury, RBC
John Generalli, Wells Fargo
Jansel Sexto, HDR
James VanSteenburg, HDR
Steve Ferrell, HDR
Doug Abate, Quest
Doug Draper, Bank of America
Jonathan Tursky, TransCore
James Drapp, HNTB
Rick Patterson, Raymond James
Stefanie McQueen, HDR

Christina Kight Matthas, WSP Brandie Miklus, City of Tampa Todd Josko, Ballard Partners Carlos Ramos, Ballard Partners Chris Santiago, Infotect Christina Kight, WSP Sally Dee, Playbook Sarah Lesch, Playbook Jessica Kizer, TEAMFL Suzette Taylor, TEAMFL

#### I. Call to Order and Pledge of Allegiance

Chairman Cassidy called the meeting to order at 1:30 pm, followed by the Pledge of Allegiance.

#### II. Public Input/Public Presentations

There was no public input.

#### III. Consent Agenda

- A. Approval of the Minutes from the June 27, 2022, Board Meeting
- **B.** Board Member Travel IBTTA 90<sup>th</sup> Annual Meeting Austin, Texas
- C. ITS Grounding Mitigation Assistance General Engineering Consultant Contract (GEC) \$50,000

The Chairman requested a motion for approval. Mr. Alvarez moved approval, seconded by Mr. Barrow.

The motion passed unanimously.

#### IV. Discussion/Action Items

#### A. Planning - John Weatherford, Chair - Bob Frey, Staff

#### 1. MMITSS Queue Management - University of Arizona

Mr. Frey presented the MMITSS Queue Management application developed by the University of Arizona. He noted that the application will use THEA's Connected Vehicle Pilot capabilities to address congestion issues on the exit of the REL at Twiggs and Meridian. He further explained that the queue management system will detect spillbacks on the exit ramp and then use MMITSS to clear the downstream queues and allow the exit ramp queue to dissipate by working with existing signals. The project will use existing CV pilot infrastructure to establish a framework for an additional three years of research that will be defined based on the needs and capabilities under emerging connected technology and the Vision Zero Program.

Funding of \$324,000 will come from the capital budget, and the requested action is Board approval for THEA staff to execute a research agreement with the University of Arizona, College of Engineering in the amount not to exceed \$324,000 over three years for the MMITSS queue management application implementation. The research agreement is subject to review and approval of THEA General Counsel.

The Chairman requested a motion for approval. Mr. Alvarez moved approval, seconded by Mr. Weatherford

The motion passed unanimously.

## 2. Corridor Sketch Planning and Analysis – Concept Planning and Cost Estimation – WSP/RK&K

Mr. Frey presented a request to conduct sketch level concept plans that address access, mobility and constructability based on the growth patterns Tampa Bay is experiencing. The purchase order would include sketch level concept planning and cost estimates, to include design, ROW, Construction and CEI, for up to three projects in FY23.

Funding of \$180,000 would come from the capital budget. The requested board action is approval for THEA staff to execute a purchase order in the amount not to exceed \$180,000 for the corridor sketch level concept planning and analysis.

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

The motion passed unanimously.

## 3. Trails Micro-mobility Counts Program Development – Marlin Engineering

Mr. Frey presented a request for a micro data collection and monitoring service for three of THEA's trail systems. The program would include short-duration monitoring of micro-mobility traffic volumes, and the data collected will be used to inform decisions for improving THEA's community enhancement program.

Funding of \$82,000 will come from the capital budget, and the request is Board approval for THEA staff to execute a purchase order with the Marlin Engineering in the amount not to exceed \$82,000 for the development of the THEA Trails Micro-mobility Counts Program.

The Chairman requested a motion for approval. Mr. Alvarez moved approval, seconded by Mr. Weatherford

The motion passed unanimously.

## **B.** Operations & Maintenance – Bennett Barrow, Chairman – Brian Pickard, Staff

## 1. Construction, Engineering, and Inspection (CEI) Consultant for Meridian – Railroad Track Removal

Mr. Pickard presented an item to procure the services of a CEI consultant to perform field engineering and testing for the removal of the railroad tracks that once serviced Ardent Mills along Meridian Ave. He noted that negotiations were conducted and finalized with KCI Technologies, Inc.

Funding will come from the capital budget in the amount of \$324,264, and the request is for the Board to authorize the Executive Director execute a purchase

order with KCI Technologies, Inc. to provide CEI services for the Meridian - RR Track Removal Project.

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

The motion passed unanimously.

## 2. South Selmon Capacity Public Information Consultant – Through General Engineering Consultant Contract (GEC)

Mr. Pickard presented an item to use HNTB and their subconsultant, Versant, to provide public information consultant support during the procurement, design, and construction of the South Selmon Capacity Project.

Funding of \$187,000 will come from the capital budget, and the request is for the Board to authorize the Executive Director to execute a purchase order with HNTB for public information consultant support on the South Selmon Capacity Project.

The Chairman requested a motion for approval. Mr. Barrow moved approval, seconded by Mr. Alvarez.

The motion passed unanimously.

#### V. Chairman – Vincent Cassidy

### A. Acceptance of Board Member Evaluations of the Executive Director and General Counsel

The Chairman requested a motion to accept. Mr. Weatherford moved acceptance, seconded by Mr. Alvarez. The motion passed unanimously.

#### VI. General Counsel – Amy Lettelleir, Esquire

#### A. Board Elections

Ms. Lettelleir opened the floor to nominations for Chairman.

Mr. Alvarez nominated Vincent Cassidy to serve as Chairman, seconded by Mayor Castor.

With no other nominations, Ms. Lettelleir conducted a roll call vote.

Mr. Cassidy was elected by a unanimous vote.

Ms. Lettelleir opened the floor for nominations for Vice Chairman.

Mr. Cassidy nominated Mr. Bennett Barrow as Vice Chairman, seconded by Mr. Alvarez, and nominated Mr. Daniel Alvarez for Secretary, seconded by Mr. Weatherford.

With no other nominations, Ms. Lettelleir conducted a roll call vote.

Mr. Barrow was elected Vice Chairman and Mr. Alvarez was elected as Secretary by a unanimous vote.

#### VII. Staff Reports

#### **A.** Operations & Maintenance – *Brian Pickard*

Mr. Pickard updated the Board on the East Selmon Slip Ramp contract with Middlesex at 50% of earnings and 48% of time.

He provided an update on other construction projects. The Twiggs Street turn lane is complete and the REL lighting project was accepted in May 2022. The outstanding item on that project is the replacement of repaired luminaires and the delivery of spare parts.

The Chairman asked if the glare issue is resolved. Mr. Pickard noted that the glare issue is resolved.

The Chairman also asked if there have been any reports of satellite interruption while driving under the elevated Selmon on Gandy. Mr. Pickard responded that he has not had any reports of interruptions.

Mr. Pickard gave an update on other major design projects:

Project	Completion
CSX Track Removal (KCA)	August 2022
Connection from Cabinet to DMS Signs with Fiber (KCI)	August 2022
Investigation & Repair of Asphalt near East Toll Plaza (KCA)	August 2022
Wrong Way Driving East End - Design (BCC)	August 2022
Fiber Characterization (PCS)	December 2022

#### **B.** Toll Operations – *Andy Lelewski*

Mr. Lelewski updated the Board on THEA Toll operations through June 2022. He reviewed total number of toll transactions at various points on the Selmon Expressway, noting a 1% increase on the east mainline; 7% increase on the west mainline; 10% increase on the REL; and 26% on the west extension,

compared to June 2021. Addressing a question asked by the Chair during the May meeting regarding the number of customers who travel the entire length of the expressway, Mr. Lelewski reported that after reviewing the transponder records and the license plate records and between the east mainline and the west mainline, on a typical weekday, we're seeing about 25,000 people travel that distance – eastbound and westbound. Between the east mainline and the west extension roughly 6,000 people are making that trip.

Chairman asked for clarification on the daily trips and asked if, based on the average weekday transactions, the Selmon is seeing 150,000 individual vehicles daily. Mr. Lelewski noted that would be a good assumption, but more analysis would need to be done to confirm.

Mr. Slater noted that one of the most challenging things we deal with is the unknown planning horizon relative to population growth and technology.

Mr. Lelewski reviewed the total posted transactions per month, noting the transactions for June 2022 total 5,792,907.

The next graph depicted pre-paid vs. post-paid transactions over the last two years. He reported that Toll Operations will be embarking on a campaign to increase the number of customers who are pre-paid.

Mr. Lelewski reviewed past due payments made and the method in which those payments are made, whether CSR calls, website, IVR, mail or walk-ins, as well as in-house Customer Service.

Next, he reported on new programs:

- The partnership with the Tax Collector to accept payments for registration holds in June 2022, yielded 1200 transactions and over \$110K.
- The MacDill AFB Discount Program currently has over 350 active participants. These vehicles travel between the east mainline and the west mainline.

The Chairman asked about the level at which the Air Force Base is back to normal working hours. Mr. Slater noted they are still in a bit of a hybrid model but are starting to transition back to a traditional schedule. He added that, to really get the full advantage of the program, participants need to be traveling the system every day. THEA is looking at different ways to meet the needs of the base.

The Chairman asked for a future discussion, once we have established a regular pattern, on what the financial impact is to those using the program.

Mr. Lelewski mentioned that a survey went out today to those who are a part of the program to find out how it is working for them.

There was some additional discussion about the program and what was projected versus what we are seeing and what the financial impact is.

Next, Mr. Lelewski discussed some toll operations statistics related to the ending of FY2022, including total posted transactions, pointing out that THEA is back on track after COVID. He also discussed pre-paid transactions by interoperable transponder program.

Finally, he reviewed post-paid transactions (toll-by-plate), noting that 96% of invoices go to Florida addresses.

Mr. Alvarez asked if in the future Mr. Lelewski could provide the number of transactions along with the percentages. Mr. Lelewski responded in the affirmative.

Mr. Weatherford asked if THEA loses any revenue from the use of other transponders such as EZ Pass. Mr. Lelewski noted that no money is lost through the use of other transponders.

Mr. Slater mentioned that, looking at 96% of Toll-by-Plate transactions coming from Florida, there is an opportunity to make a significant dent in the transponder program because they are all Florida residents.

#### C. Budget & Finance – Jeff Seward

Mr. Seward provided an update on the anticipated, unaudited FY2022 year-end budget. He reviewed FY22 toll revenue collected, and investment/interest income collected – both exceeding what was budgeted. Expenditures were below budgeted, and the estimated year-end debt service ratio is 2.38.

#### **VIII.** Executive Reports

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

#### 1. Contract Closeout, Renewal and Expiration Report

Mr. Slater presented one second-year contract renewal for Metric Engineering to provide ITS Network support. The renewal is for one year.

2. Director's Report – Mr. Slater reported on the pier up lighting project with Highway Safety Devices. He noted that he approved extra work totaling \$42,373.60, bringing the total of extra work throughout the duration of the project to 7.7% of the approved original contract amount. This wraps up the work with Highway Safety Devices. THEA is working with the light manufacturer to resolve any remaining issues.

Mr. Slater also reported on community partnerships. He noted that THEA is working with TGH to become the Health and Wellness partner for the Selmon Greenway. He has also met with the Florida Aquarium to discuss potential partnerships there.

He provided an update to the board on the Whiting Street PD&E and the ongoing discussions between THEA, the City of Tampa, and the Bloomberg transportation team to work through the concerns. THEA is working to analyze some follow up alternatives and will report back to the board with the results. Counsel and staff are working with the City of Tampa on the second amendment to the Interlocal Agreement between the Authority and the City, which addresses the roadway and connection improvements – the second amendment addresses the connections at Finley and Walton to Meridian, as well as negotiated drainage options for both entities.

Mr. Slater announced the closeout of the CV Pilot and stated staff will be sharing the accomplishments that the pilot achieved, as well as the valuable contributions to the transportation industry and the safety of travelers.

He also mentioned a one-year renewal of the ITS Network Support contract with Metric Engineering.

On the team THEA front, Mr. Slater announced that Gary Holland was accepted into Leadership Tampa, and Brian Ramirez completed his associates degree.

Finally, he recognized Suzette Taylor and Jessica Fizer with TEAMFL. Tampa is hosting the next TEAMFL meeting, and registration is now open.

Chairman Cassidy asked about infrastructure bill and whether THEA anticipates any grant opportunities for connected vehicles. Mr. Slater discussed the infrastructure bill and inflation reduction act. The infrastructure bill has grant resources associated with connected vehicles as well as small cities and smart mobility. There are opportunities for grants for electric vehicle charging infrastructure and other types of innovations. The inflation reduction act also has some money that could be utilized for greenway improvements and some electric vehicle improvements.

#### **B.** General Counsel – *Amy Lettelleir, Esq.*

Ms. Lettelleir discussed the Code of Ethics and the annual conflict disclosure forms, which were disseminated to board members for signatures. She asked board members to direct any questions to her.

The Chairman asked where THEA stands with bond ratings in terms of when the rating agencies will be looking at us.

Ms. Lettelleir noted we would seek out upgrades in February/March.

Mr. Slater added that the rating agencies have reached out to us with questions, and we've been providing answers. We've also provided them with some of the graphs that Mr. Lelewski showed today that represent the growth in our transactions.

#### **C.** Chairman – *Vincent Cassidy*

- 1. Upcoming Meetings
  - THEA Committees of the Whole September 12, 2022 Cancel
  - THEA Board Meeting September 26, 2022

#### IX. Old Business

**X.** New Business – Mr. Alvarez congratulated Mr. Ramirez on his degree.

#### XI. Adjournment

The meeting adjourned at 2:18 pm.

# IV.A.1. FDOT Coordination I-4 FRAME Support

#### HNTB PR 2023XXXX HI-0185 P-XX 2022-2023 THEA FDOT I-4 Frame Support (10/1/21 - 6/30/23) Scope Of Services

#### Purpose & Need

With their small in-house staff, THEA requires support to provide engineering and administrative support to assist THEA Staff in the development/implementation of the THEA FDOT I-4 Frame Support. This task work order is for support services from 7/1/21 - 6/30/22,

#### Scope

Provide support with the I-4 Frame Support project as required to assist THEA Staff in the development/implementation of the project. Anticipated work includes providing engineering, administrative, and operational data, and input and analyses necessary to assist with the development and implementation of the project.

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IV.B1. Selmon West Extension Follow Up

## SCOPE OF SERVICES TAMPA-HILLSBOROUGH COUNTY EXPRESSWAY AUTHORITY Selmon West Extension Tendon Inspection Task FY 2023

#### I. OBJECTIVES

The Tampa-Hillsborough County Expressway Authority (THEA) requires professional services to: 1) assess the condition of the post-tensioning system of the Selmon West Extension, 2) determine the cause past issue (if possible), and 3) advise on a course of future monitoring for the Selmon West Extension viaduct (Bridge #100852). HNTB shall develop program protocols, reports, studies, and cost estimates describing the ensuing work. These deliverables do not constitute contract documents used to bid or build any aspect of the ensuing field work, rehabilitation, or monitoring.

#### **II. PROJECT DESCRIPTION**

The Selmon West Extension viaduct is a 7059.5 ft. long precast concrete segmental box girder bridge. The bridge includes a system of longitudinal post-tensioning of various configurations, including finback tendons, internal top and bottom slab tendons, and external span tendons. Routine inspection of the bridge had identified two fractured strands in one of the external span tendons and subsequent investigation has revealed pockets of water in some of the wax-filled tendons of the bridge's post-tensioning system. There is potential that standing water may be part of a cause for potential failure of additional post-tensioning strands in the future which may adversely affect the strength and serviceability of the viaduct. Various parties, including the Design-Build Contractor, FDOT, and THEA's consultants have been engaged in further assessing the failed strands, adherence to wax injection requirements and pockets of water.

The scope of this task includes the following:

- 1. Develop a tendon inspection program.
  - a. Develop a rational approach for the selection of locations for examination.
  - b. Define a protocol for the probabilistic assessment of the reliability of the posttensioning system.
  - c. Develop a Specification which identifies acceptable inspection methods and repair/rehabilitation outcomes.
- 2. Determine the root cause of any presence of water in the post-tensioning system.
  - a. Collecting, assembling, and reviewing information from other sources regarding the failure of in-service post-tensioning, incomplete wax installation, and presence

- of water. Investigate any other bridges constructed in Florida after the specification change to wax filler, but prior to the recent specification change requiring hot air drying prior to application of the wax filler.
- b. Literature review to identify potential mechanisms for water intrusion and incomplete wax injection.
- c. Review of construction inspection documentation for compliance with the contract plans and specifications.
- 3. Recommend a scheme of future monitoring of the post-tensioning system, if deemed necessary.
  - a. Coordination with structural monitoring system vendors to establish the feasibility of implementing their system on the Selmon West Extension viaduct.
  - b. Assessment of feasible schemes' strengths and weakness relative to this site.

HNTB shall coordinate with FDOT District 7, FDOT Central Office, the Design-Build Firm and various THEA consultants as needed to obtain relevant information.

#### III. DELIVERABLES

#### HNTB shall prepare:

- 1. A report detailing the tendon inspection program.
- 2. A construction Specification for the tendon inspection program work.
- 3. A Planning-level cost estimate for the implementation of the tendon inspection program.
- 4. A report detailing the steps taken to determine the root cause of the presence of water in the post-tensioning system and a final determination, if conclusively identified.
- 5. A review of the FDOT Materials Office findings on the water samples collected during the preceding investigation by the Design-Build contractor.
- A report identifying feasible future monitoring schemes and a recommendation for implementation.
- 7. A Planning-level cost estimate for the implementation of a future monitoring scheme.

#### Additionally, HNTB shall assemble and transmit:

- 1. Proposed and adopted changes to the FDOT Specifications for post-tensioning materials and procedures available by August 22, 2022.
- 2. Additional changes to FDOT Specifications, Standard Plans, and Structures Manual for posttensioning related materials, details, and construction procedures, as they become available.
- Publicly available documents for the procurement of monitoring scheme(s) at Roosevelt Bridge (Bridge #890151 and 890152).

The reports and documents listed above shall be submitted in draft format for THEA's review and comment, followed by a final submittal. Cost estimates shall be updated when significant scope changes occur and at project submittal milestones.

The following are specifically excluded from the scope of work:

- 1. CADD Plans, layouts, or exhibits used to illustrate the work or for bidding the ensuing work.
- 2. Load rating or structural evaluation of the as-designed, as-built, or existing bridge condition.
- 3. A site-specific monitoring scheme concept.
- 4. Field work or site visits associated with the implementation of the tendon inspection program, the root cause determination, or the future monitoring scheme.
- 5. Materials testing.

#### IV. PROJECT SCHEDULE

Within ten (10) days after the Notice-to-Proceed, and prior to HNTB beginning work, provide a detailed project activity/event schedule for THEA and HNTB scheduled activities. All work on this task shall be completed within nine months of Notice-to-Proceed or by January 1, 2024, whichever comes later.

#### V. QUALITY CONTROL

HNTB shall be responsible for ensuring that all work products conform to THEA standards and criteria. This shall be accomplished through an internal Quality Control (QC) process performed by HNTB. This QC process shall ensure that quality is achieved through checking, reviewing, and surveillance of work activities by objective and qualified individuals who were not directly responsible for performing the initial work.

#### VI. PROGRESS MEETINGS

Progress Meetings will be held bi-monthly throughout the project duration. Within ten (10) days after the Notice-to-Proceed, HNTB shall provide a schedule of calendar deadlines in a format prescribed by THEA.

## PLANNING LEVEL COST ESTIMATE TENDON INSPECTION PROGRAM

Bridge: Selmon West Extension

Road: SR 618 Bridge No.: 100852

Number of Spans: 35Number of Substructures: 36Number of Fin Piers: 27

No. of B Tendons: 248 No. of BP Tendons: 54

	Total Tendon Anchorages per	Total	Estimated Inspecti		E	stimated		
INSPECTION SITES	Location	Locations	Percent	Number	Unit Cost	Inspection Cost		
Number of E DS Tendon Anchorages:	6	210	20%	42	\$1,500	\$	63,000	
Number of E US Tendon Anchorages:	6	210	20%	42	\$1,500	\$	63,000	
Number of E Tendon DS Anchorage Trumpets:	6	210	20%	42	\$1,500	\$	63,000	
Number of E Tendon US Anchorage Trumpets:	6	210	20%	42	\$1,500	\$	63,000	
Number of E Tendon DS Slopes:	6	210	20%	42	\$1,500	\$	63,000	
Number of E Tendon US Slopes:	6	210	20%	42	\$1,500	\$	63,000	
Number of E Tendon Low Points:	6	210	20%	42	\$1,500	\$	63,000	
Number of Fin DS Tendon Anchorages:	3	81	20%	16	\$1,500	\$	24,000	
Number of Fin US Tendon Anchorages:	3	81	20%	16	\$1,500	\$	24,000	
Number of Fin DS Tendon Trumpets:	3	81	20%	16	\$1,500	\$	24,000	
Number of Fin US Tendon Trumpets:	3	81	20%	16	\$1,500	\$	24,000	
Number of DS B Tendon Anchorages:		248	20%	50	\$1,500	\$	75,000	
Number of US B Tendon Anchorages:		248	20%	50	\$1,500	\$	75,000	
Number of DS BP Tendon Anchorages:		54	20%	11	\$1,500	\$	16,500	
Number of US BP Tendon Anchorages:		54	20%	11	\$1,500	\$	16,500	
				Subtotal		\$	720,000	
			N	1obilization	10%	\$	72,000	
				Cotingency	20%		144,000	
				Total		\$	936,000	

#### **NOTES:**

- 1. Estimate Inspection Cost based on preliminary value for percentage of sites to be inspected and is subject to change during development of the formal Tendon Inspection Program.
- 2. DS: Downstation / Back Staton
- 3. US: Upstation / Ahead Station
- 4. Estimate does not include CEI costs.