Questions – 3/27/2023:

1. Amendment dated 01/19/23 (pdf page 13 of 15) indicates that the design-build firm can provide new toll equipment in the existing building at 210 South Brevard Avenue, Tampa, FL, 33606. Please provide as-built drawings for this existing building.

Answer: West Toll Plaza plans are provided with these answers.

2. I.A - Description of Work (pg. 4 of 111); X. R - Signalization and Intelligent Transportation System Plans (pg. 101 of 111) - The widening of the Hillsborough river bridge to the north side will be in conflict with the existing traffic signals at the S Tampa St and E Brorein St intersection. Neither the RFP nor Signalization Concept Development Plans identify any scope at this intersection. Please confirm that the impacted signals have to be replaced as part of this project.

Answer: Any existing traffic signals impacted by project improvements will need to be designed and replaced by the DB Firm.

3. RFP Questions and Answers (2/9/2023); Answer No. 5 - ANSWER No. 5 - "The Design-Build Firm shall install the fiber optic backbone per Section X.I.gg with three 2" conduit in the barrier wall. Separate junction boxes shall be provided for each of the three conduit. The ITS Concept Plans shall be updated to reflect the fiber optic backbone installation within the barrier wall." Based on the posted direction above, the design will include conduits and junction boxes for fiber optic cabling within the barrier wall (per FDOT Standard Plans, Index 630-010). Please confirm the following:

a. Due to the limitations of physical interior dimensions of the embedded junction boxes (1'-6" X 8" X 8"), typical fiber optic cabling requirements for fiber optic pull box slack described in FDOT Standard Specifications for Road and Bridge Construction, Section 633-1.3.4 (i.e., 50 LF) is not required in the junction boxes.

b. Spacing for junction boxes will not be required to meet the requirements for fiber optic pull boxes described in FDOT Standard Specifications for Road and Bridge Construction, Section 635-3.2.1 (i.e., 1760' for metropolitan areas).

Answer: For question 3a, do not install slack fiber in the junction boxes.
For question 3b, please follow the spacing requirements identified in FDOT Standard 630-010.

4. RFP Section T. Tolling Requirements as Amended 1/19/23 (original RFP pg. 110, Amendment pg. 12) - Amendment dated 01/19/23 (pdf page 13 of 15) indicates that the design-build firm can provide new toll equipment shelter instead of retrofitting the existing building 210 South Brevard Avenue. Can the Design-Build Firm provide equipment cabinets similar to the existing South Selmon toll facilities, the recently constructed West Selmon toll facilities, and as indicated in Appendix A_005-THEA General Tolling Requirements (GTR), Appendix 7 Civil and Electrical Guidelines?

Answer: No

5. The initial ITS Conceptual Development Plans (R_07.05) depict fiber optic splice vaults/enclosures at many locations that do not require splicing for drop connections to either the Tolls or ITS network. Please confirm that splice vaults with enclosures are only required at the following

locations: (A) Beginning and end of the project - one each for all three (3) conduit networks (ITS, Tolls, Spare) (B) Immediately adjacent to each ITS field device for drop connection - one each for the ITS conduit network (C) Immediately adjacent to each Toll site for drop connection - one each for the Tolls conduit network.

Answer: Install enclosures only at locations with drop cables. Although protected in the enclosure, cutting the jacket increases the vulnerability of the fiber strands. To mitigate this risk, enclosures should be installed only when fiber is being spliced.

6. Section IX.O.2 Public Involvement - Target Audience - Please note that there is an overhead catenary for the Hillsborough Area Regional Transit Authority (HART) streetcar along Franklin Street. The catenary crosses directly below the Hillsborough Viaduct with the wire located within inches from the bottom of the structure and it is likely to be impacted during the widening of the bridge. Please confirm that HART is aware of the potential impacts of this project on their operations, and provide minimum requirements for clearances and/or temporary relocation or outage of their service. Please provide as-built electrical, communications, and signals drawings of the HART transit system at this location.

Answer: THEA is coordinating with HART and will provide any design and/or construction requirements received from HART. THEA has no as-built HART Plans.

7. Bay to Bay Public Space Improvements show in concept plans (RFP Reference document R_17-Bay to Bay Concept Final) shows EV parking spots. Please clarify if EV charging stations are required and provide minimum technical requirements.

Answer: The DB Firm shall follow USDOT's Final Rule for National Electric Vehicle Infrastructure (NEVI) Standards and Requirements (23 CFR Part 680). Following these minimum standards will facilitate regional consistency and ensure eligibility in the event THEA pursues Federal funding. On the Bay-to-Bay concept the DB Firm should conform to a "dig once" philosophy where the base and underground infrastructure, including conduits and power lines, shall be installed as part of this project. The charger stations themselves will be installed by others.

1. **Power Level:** (for Alternative Fuel Corridor locations) DCFC ports up to 150kW (simultaneous), AC Level 2 ports at least 6kW (simultaneous).
2. **Security:** Appropriate physical security strategies and cybersecurity strategies
3. **Traffic Control Devices or On-Premise Signs Acquired, Installed, or Operated:** Including ADA requirements.

8. Section X.I - Structure plans - 1. Bridge Design Analysis – c - Based on the load rating reports included in the RFP reference documents, the existing bridges were load rated using the Simplified method for shear resistance from the 7th edition of the AASHTO LRFD Bridge Design Code (Cl. 5.8.3.4.3). The Simplified method has been replaced in the 9th edition of the AASHTO LRFD Bridge Design Code with the General method. The Simplified method has also been removed from LRFR calculations of 2022 edition FDOT Load Rating Manual. The use of the Simplified method increases the shear strength of concrete as compared to the current General method included in AASHTO 9th edition, cl. 5.7.3.4.2. Our analysis indicate that some of the existing girders rated above 1.0 using the Simplified method will rate lower than 1.0 using the General method. Please confirm that a design deviation will be allowed to rate the existing bridges using the simplified method from the 7th edition of the AASHTO LRFD.

Answer: The AASHTO 7th Edition Simplified Method (5.8.3.4.3) may be used as a shear rating method for structures that do not meet shear load rating requirements using the AASHTO 9th edition specifications.

9. Section X.I.2.i.iii - RFP Section X.I.2.i.iii requires, "Match the existing superstructure vertical clearance of the bridge being widened." Please confirm that the Willow Avenue eastbound (100327) and westbound (100326) bridges should be widened to maintain the existing minimum vertical clearance under the eastbound bridge (100327).

Answer: Per the inspection reports, the Willow Ave WB bridge (100326) has a vertical clearance of 16.8 ft., while the Willow Ave EB bridge (100327) has a vertical clearance of 14.5 ft. The Willow Ave WB bridge (100326) is to be widened to meet the requirements of FDM "Table 260.6.1 Minimum Vertical Clearances for Bridges", and the Willow Ave EB Bridge (100327) is to be widened to maintain the existing vertical clearance.

10. The revised roadway concept plan, R_07.01 - PLANRD013REV022023, indicates two-sided median guardrail is to be installed from Sta 85+06 to Sta 97+38. With the inside widening in both EB and WB directions within the superelevated section, Sta 89+50 to Sta 97+00, the differential in pavement elevation will be as much as one foot. Would THEA accept the use of a grade separated median concrete barrier instead?

Answer: THEA prefers grade separated median concrete barrier and an amendment will be issued that will revise the concept plans to show this.

11. The inside widening within the superelevation transition at approximately Sta 85+00 to 88+00 will remove much of the grassy median that currently serves as an infiltration area. Considering that the roadway and median grade within the transition is only 0.2%, drainage inlets will be needed to avoid ponding within the inside travel lanes and a potential hydroplaning issue. Given the flat longitudinal grade, a trench drain inlet would provide a cost effective method of draining this area as opposed to a series of closely spaced area inlets or overbuild of the roadway to increase the grade and provide positive drainage flow. Although the RFP specifically prohibits the use of trench drains for pavement drainage on the expressway, would THEA consider a variance for this short median section.

Answer: THEA will not consider a variance for the use of trench drain.

12. Q&A dated 01/19/23 included a set of RGB plans. Amendment issued on 03/07/23 also includes a set of RGB plans included in Reference Document R_35 – UAO RGBREV022023. However, these plans appear to be the same as the plans issued on 01/19/23. Please clarify if additional RGB plans will be provided in a future Amendment.

Answer: Amendment posted 3/23/23 (dated 3/17/23) includes an updated zipped file with all UAO RGBs and other documents received through 3/17/23. The file name is "R_35 – UAO RGB Plans_Rev031723.zip" Additional RGB plans, if any, will be provided in future Amendments as received by THEA.

13. The FDOT Modifications to LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals (LRFDLTS-1), Section 2.4.2.2 Size, Height, and Location of Signs, requires that span type overhead sign structures in urban locations shall be designed for the actual signs shown on the signing plans and a minimum sign area of 120 sq. ft. (12ft. W x 10 ft. H) per lane. The minimum sign area applies to lanes without signs and lanes with sign sizes smaller than the minimum. Please confirm that THEA will require that the overhead sign structures on this project be designed for the signs provided on the concept plans which include the two outside lanes as well future signs for the two inside lanes (one to be provided with this interim project and one to be added in the future ultimate condition, using FDOT specified minimum sign area of 120 sq. ft). The overhead structures would then be designed to accommodate signs for four lanes.

Answer: Yes, THEA requires that the overhead sign structures on this project be designed to accommodate signs for four lanes as per FDOT Modifications to LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals (LRFDLTS-1), Section 2.4.2.2.

14. The ITS concept plan (reference document - R_07.05 - ITS Conceptual Development Plan_2022-07-28REV022223) includes four cantilever DMS structures (Sta 201+00 WB, Sta 201+00 EB, Sta 535+70 WB, and Sta 535+70 EB). Please note that the FDOT Modifications to LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals (LRFDLTS-1) recommends that span sign structures should be used for walk-in overhead DMS whenever possible because cantilevered walk-in overhead DMS structures are more susceptible to fatigue. Span structures will also allow the DMS to be better centered above the interim and ultimate travel lanes. Please confirm that it is THEA's intent to use cantilevered DMS sign structures rather than span structures.

Answer: It is anticipated that the walk-in DMS will be supported on a tri-chord cantilever sign structure in accordance with Index 700-040. The DBF shall include all fatigue concerns within their signed and sealed calculations, details, etc.