



EXPANDED LETTER OF INTEREST (ELOI) P-00220

PROJECT DEVELOPMENT & ENVIRONMENTAL (PD&E) STUDY SERVICES

for

NEBRASKA AVENUE

ELOI Issue Date: 2/07/20

ELOI Response Due Date: 3/03/20

RESPONSIBLE DEPARTMENT

Robert M. Frey, AICP
Director of Planning & Innovation

PROCUREMENT DEPARTMENT

Man Le, PMP
Procurement Manager
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I. SCOPE OF SERVICES

See "Scope of Services ~ ELOI P-00220" attachment.

II. INSTRUCTIONS TO FIRMS

1. The Authority must receive all submittals at the locations stated below, **no later than 2:00 PM Eastern on March 03, 2020**. Any submittal received after the stated time and date shall not be considered. It shall be the sole responsibility of the firm to have its package delivered to the Authority by U.S. Mail, hand delivery, or any other method available to them; however, facsimile or telegraphic submittals will not be accepted. Delay in delivery shall not be the responsibility of the Authority. Submittals received after the deadline shall not be considered, and may be returned only at the firm's expense.
2. Each firm shall examine all documents and shall determine all matters relating to the interpretation of such documents.
3. Type size shall not be less than 10 point font. The proposal shall be indexed and all pages sequentially numbered. All pages and appendices/attachments must be firmly bound or stapled. The maximum number of pages allowed is Five (5) (with a single-sided 8.5" x 11" counting as one page). The Organizational Chart in III.B. shall not count against the maximum page limit.
4. One (1) original, four (4) signed copies and one (1) electronic CD/USB copy of the submittal must be delivered to the Authority's Procurement Department in one package, clearly marked on the outside, "**ELOI P-00220 for PD&E Nebraska Avenue for the Tampa Hillsborough County Expressway Authority**," with date sent or delivered to:

Man Le ~ Procurement Manager
1104 East Twiggs Street, Suite 300
Tampa, FL 33602

5. The Authority shall not be liable for any expenses incurred in the preparation of the proposals.
6. The Authority reserves the right to accept or reject any or all proposals, to waive irregularities and technicalities, and to request resubmission or to re-advertise for all or any part of the services. The Authority shall be the sole judge of the submittals and the resulting negotiated agreement that is in the Authority's best interest, and the Authority's decision shall be final.
7. Joint proposals will not be accepted.

8. The successful firm shall be required to execute an agreement, in form and content acceptable to the Authority, indemnifying and holding harmless the Authority, its officials, officers, employees, and agents from all claims.
9. **Firms, their agents, or associates shall refrain from contacting or soliciting any Authority staff or members of the Board directly or indirectly regarding this ELOI during the selection process. Failure to comply with this provision may result in the disqualification of the firm. All requests for clarification or additional information should be made in writing via email to:**
Man.Le@tampa-xway.com

III. QUALIFICATIONS:

This ELOI shall include, but not be limited to, responses to the following requirements:

- A. Expanded Letter of Interest.** The letter should include the following (Five (5) page limit):
 1. Understanding of scope:
 - a. Approach to project delivery
 - b. Identification of major issues
 - c. Schedule
 - d. Work Plan
 2. Team:
 - a. Staff experience
 - b. Staff availability
 - c. Use of team/subs
 - d. Current Workload/On-going projects
 3. Environmental Assessment Approach:
 - a. Social and Economic impacts
 - b. Physical Effects
 - c. Natural
 - d. Cultural
 - e. Documentation
 4. Engineering Approach
 - a. Design/engineering
 - b. Alternatives development/Project Sequencing
 - c. Traffic analysis/modeling
 - d. Emerging technologies
 - e. Structures
 - f. Drainage
 - g. Maintenance of Traffic

- h. Minimizing Additional Right-of-Way
 - i. Cost Estimating
- 5. Public Involvement Approach
 - a. Stakeholder Coordination
 - b. Interaction/Coordination with THEA
- 6. Project Management:
 - a. Project Manager
 - b. Communication skills
 - c. Team dynamics/relationship
 - d. Coordination with adjacent/ongoing projects
 - e. Quality Management Process

B. Organizational Chart – attach an organizational chart that includes the following:

- A one page organizational chart along with one page resumes for up to 5 key personnel may be included.

Only those members of the team who will **actively** participate under the potential work assignments should be included. Individuals who would be available on an "as-needed" basis should be omitted.

A maximum of 1 page will be allowed for the "Organization Chart" element. The Organizational Chart may be submitted on 11" x 17" paper if folded neatly to 8½" x 11."

C. Complete all required forms (EXHIBITS A – C).

IV. SELECTION PROCESS

Firms will be shortlisted from the 5-page Expanded Letter of Interest (ELOI). Shortlisted firms will prepare a 15 minute **project specific** presentation with 15 minute Q&A. However, the Authority reserves the right to provide written questions for written responses/clarifications to any or all of the submitting firms during review of the ELOI's.

EVALUATION CRITERIA:

The Presentations and Q&A will be scored by the Evaluation Committee. The maximum points to be earned in the evaluation are one hundred (100) points per evaluator.

The following evaluation criteria will be used to determine the best qualified firms:

Evaluation Areas		Points
1.	Understanding of scope: a) Approach to project delivery b) Identification of major issues c) Schedule d) Work Plan	0-15
2.	Team: a) Staff experience b) Staff availability c) Use of team/subs d) Current Workload/On-going Projects	0-15
3.	Environmental Assessment Approach: a) Social and Economic impacts b) Physical Effects c) Natural d) Cultural e) Documentation	0-10
4.	Engineering Approach: a) Design/engineering b) Alternatives development/Project Sequencing c) Traffic analysis/modeling d) Emerging technologies e) Structures f) Drainage g) Maintenance of Traffic h) Minimizing Additional Right-of-Way i) Cost Estimating	0-35
5.	Public Involvement Approach a) Stakeholder Coordination b) Interaction/Coordination with THEA	0-10
6.	Project Management: a) Project Manager b) Communication skills c) Team dynamics/relationship d) Coordination with adjacent/ongoing projects e) Quality Management Process	0-15
TOTAL		100

FINAL SELECTION:

The ranking of firms based on the Evaluation Committee's scoring will be presented to the Authority's Board for consideration and approval with a recommendation that the highest-ranked firm be selected on the date, time and at the location stated per the Timetable schedule. Firms are not required to attend; however, the meeting is open to the public. The Authority's Board has the right to correct any errors in the evaluation and selection process that may have been made. The Authority is not obligated to award the contract and the Authority's Board may decide to reject all proposals.

After approval of the final ranking of the firm and award of the contract by the Authority's Board, the results will be posted no later than the date at the locations referenced in the Timetable.

V. TIMETABLE

EVENT	DATE/TIME
Release of ELOI/Project Advertisement	February 7, 2020
Deadline for Questions/Request for Clarification	February 20, 2020
Deadline for THEA to respond to firm's questions	February 24, 2020
ELOI Due Date/Time (Deadline) <i>Location:</i> Transportation Management Center (TMC) 1104 East Twiggs Street, Suite 300 Tampa, FL 33602	March 03, 2020 by 2 p.m. EST
Evaluation Committee Meets to Shortlist Firms @ TMC (Firms not required to attend, however, the meeting is open to the public.)	March 05, 2020 10:00 a.m.
Post Notice of Shortlist to the Authority's website & Demandstar.	March 05, 2020
Presentations (15 minutes) & Question and Answer (15 minutes)	March 13, 2020
Evaluation Committee Meets for Final Ranking @ TMC, 3 rd floor Conference Room (Firms not required to attend, however, the meeting is open to the public.)	March 13, 2020
Post Notice of Intended Ranking to the Authority's website and Demandstar.	March 16, 2020

Board Approval of Final Ranking & Award of Contract @ TMC, Board Room	March 23, 2020 @ 1:30 p.m.
Posting of Notice of Board Approval & Award of Contract to the Authority's website and Demandstar.	March 24, 2020

VI. TERMS AND CONDITIONS

The Authority reserves the right to reject all proposals, any proposal not conforming to this procurement, and to waive any irregularity or informality with respect to any proposal. The Authority further, reserves the right to request clarification of information submitted and to request additional information from one or more firms.

The Authority requires that the firm selected will not discriminate under the contract against any person in accordance with federal, state, and local governments' regulations. The Authority requires the firm selected make an affirmative statement to the effect that their retention shall not result in conflict of interests with respect to the Authority.

The Authority requires that the firm make an affirmative statement to the effect that they have not contacted, or attempted to contact, any member of the Board, or the Authority staff, except as expressly permitted in the ELOI.

VII. STATEMENT ON PUBLIC ENTITY CRIMES

Failure of the firm to certify the firm as free from any "public entity crime" as defined in the Florida Statutes, Subsection 287.133 shall result in rejection or disqualification of your proposal. (See Exhibit A)

VIII. DRUG-FREE WORKPLACE

Failure of the firm to certify the firm as a drug-free workplace in accordance with Florida Statutes, Subsection 287.087 shall result in rejection or disqualification of your proposal. (See Exhibit B).

EXHIBIT A

SWORN STATEMENT UNDER SECTION 287.133 (3)(a) FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

1. This sworn statement is submitted by _____ as
_____ of
_____ whose business address is
_____ and (if applicable)
its Federal Employer Identification Number (FEIN) is _____.
2. I understand that a “public entity crime” as defined in Section 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity in Florida or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
3. I understand that “convicted” or “conviction” as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
4. I understand that “affiliate” as defined in Paragraph 287.133(1)(a), Florida Statutes, means:
 - A. A predecessor or successor of a person convicted of a public entity crime; or
 - B. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm’s length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.
6. Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members or agents who are active in the management of _____, the entity, nor any affiliate of the entity have been convicted of a public entity crime subsequent to July 1, 1989.

By

Date

STATE OF
COUNTY OF

The foregoing instrument was acknowledged before me this _____ day
of _____, 20____, by
_____ who is personally known to me or who produced
a _____ as identification and who did take an oath.

Notary Public

My commission expires:

EXHIBIT B

DRUG-FREE WORKPLACE FORM

The undersigned firm, in accordance with Florida Statute 287.087 hereby certifies that _____ does:

Name of Business

1. Publish a statement of notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in Paragraph 1.
4. In the statement specified in paragraph 1, notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employees will abide by the terms of a statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Florida Statute 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction of, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs 1 thru 5.

As the person authorized to sign this statement, I certify that this firm complies with the above requirements.

Firm's Signature

Date

EXHIBIT C

ANTICIPATED SBE PARTICIPATION STATEMENT

Project: _____

Prime Bidder Name: _____

It is our intent to subcontract _____% of the project to SBE(s).

Listed below are the proposed SBE sub bidders _____ (to the extent known, please indicate whether the company holds, Minority, Women or Disadvantaged Business Enterprise Status.):

<u>SBE(s) Name</u>	<u>Type of Work/Specialty</u>	<u>Dollar Amount/Percentage</u>	<u>Minority Status</u>
--------------------	-------------------------------	---------------------------------	------------------------

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Submitted by: _____ Title: _____

E-mail Address: _____ Telephone number: _____

Date: _____

Tampa Hillsborough Expressway Authority
STATE ENVIRONMENTAL IMPACT REPORT
(SEIR)

PROJECT DESCRIPTION AND PURPOSE AND NEED:

Project Information:

Project Name: Meridian Ultimate – Nebraska Avenue Improvements
Project Development and Environment Study

Project Limits: Nebraska Avenue from south of Twiggs Street to Cass Street

County: Hillsborough

ETDM Project Number: XXXXXX

Tampa Hillsborough Expressway Authority Number: HI-00160

Project Manager: Bob Frey

The Tampa Hillsborough Expressway Authority intends to conduct a Project Development and Environment (PD&E) Study to evaluate the needs, costs, and effects of constructing improvements which will increase the traffic capacity on Nebraska Avenue from south of Twiggs Street to Cass Street. Depending on the needs, this study is expected to identify short-term operational improvements to improve traffic flow and implementation of Intelligent Transportation Systems (ITS), Transportation Systems Management and Operation (TSM&O) strategies and use of other transportation technology to improve traffic flow. It is preferred that right of way impacts for this project are minimized.

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**SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDIES
STATE ENVIRONMENTAL IMPACT REPORT (SEIR)**

This Exhibit forms an integral part of the agreement between the Tampa Hillsborough Expressway Authority (hereinafter referred to as the **(AUTHORITY)** and the **CONSULTANT** relative to the transportation facility described as follows:

AUTHORITY Project Number: HI-0140

Description: Meridian Ultimate – Nebraska Avenue from south of Twiggs Street to Cass Street

PURPOSE

The Project Development Process will follow the **DEPARTMENT's** most recent version of the publication titled *Project Development and Environment Manual (PD&E Manual)* (650-000-001). The Scope of Services portion of this **CONSULTANT** contract will refer to this publication as the *PD&E Manual*. The **CONSULTANT** will complete all tasks identified in this scope of work in accordance with the **FDOT PD&E Manual** unless otherwise stated.

The *PD&E Manual* incorporates all requirements of Federal law, executive orders, and applicable State laws and regulations including Chapter 339.155 of Florida Statutes and Chapter 14 of the Florida Administrative Code (FAC). The **CONSULTANT** will prepare all project documentation in accordance with the *PD&E Manual* and therefore, in compliance with all applicable State and Federal laws, executive orders, and regulations as applicable.

The **CONSULTANT** will perform engineering services required for PD&E studies including consideration of all social, economic, environmental effects, and mitigation as required by the *PD&E Manual* along with the required environmental documents, engineering reports, preliminary plans, public involvement, and hearing and right-of-way maps.

Sections 1 through 4 of the Scope of Services will establish which items of work described in the *PD&E Manual* are specifically included in this contract and which of the items of work will be the responsibility of the **CONSULTANT** or the **AUTHORITY**.

The **AUTHORITY** will provide contract administration, management services, and technical reviews of all work associated with development and preparation of engineering/ environmental study reports for the transportation facility.

STUDY OBJECTIVE

The **CONSULTANT** will study Nebraska Avenue from south of Twiggs Street to Cass Street to evaluate additional capacity needs on Nebraska Avenue based on traffic needs, identify short-term operational improvements, intersection improvements, use of ITS, TSM&O, and other transportation technology and strategies to improve traffic flow. The study will ultimately recommend a preferred alternative configuration of travel lanes, turn lanes, and intersections, and an implementation plan for feasible traffic management strategies. The project is anticipated to use a 24-month schedule and be completed as a State Environmental Impact Report (*SEIR*).

STUDY REQUIREMENTS AND PROVISIONS FOR WORK

Governing Regulations

Services performed by the **CONSULTANT** will comply with all applicable **FDOT** Manuals and Guidelines. **FDOT's** Manuals and Guidelines incorporate, by requirement or reference, all applicable State and Federal regulations. The **CONSULTANT** understands that the American Association of State Highway and Transportation Officials (AASHTO) criteria will apply as incipient policy. The **CONSULTANT** will use the current edition of the following **FDOT** Manuals and Guidelines, as applicable, to perform of this work:

- Florida Statutes
- Florida Administrative Codes
- Applicable Federal Regulations, U.S. Codes and Technical Advisories
- Project Development and Environment Manual (650-000-001)
- Efficient Transportation Decision Making (ETDM) Manual (650-000-002)
- Sociocultural Effects Evaluation Handbook
- Public Involvement Handbook
- Plans Preparation Manual Volume 1 (625-000-007) & Volume 2 (625-000-008)
- FDOT Design Manual
- Interchange Access Request Users Guide
- Standard Plans (625-010-003)
- Highway Capacity Manual
- Manual on Uniform Traffic Studies (MUTS)
- Manual of Uniform Traffic Control Devices (MUTCD)
- Minimum Standards for Design, Construction, and Maintenance Streets and Highways (Florida Greenbook) (625-000-015)
- Guide for the Design of Bicycle Facilities (AASHTO)
- AASHTO Guide for the Development of Pedestrian Facilities
- AASHTO Highway Safety Manual
- Right-of-Way Mapping Handbook (550-030-015)
- Right-of-Way Procedures Manual (575-000-000)
- Location Survey Manual (550-030-101)
- Soils and Foundation Handbook
- EFB User Guide
- Drainage Manual (625-040-002)
- FDOT Drainage Design Guide
- Aerial Survey Standards for Transportation
- Structures Design Guidelines (625-020-154)
- CADD Manual (No. 625-050-001)
- CADD Production Criteria Handbook (CPCH)
- FDOT Quality/Level of Service Standards Handbook Software & Tables
- FDOT Standard K-Factor
- Project Traffic Forecasting Procedure (525-030-120)
- FDOT Highway Landscape Guide
- Basis of Estimates Manual (600-000-002)
- FDOT Traffic Engineering Manual
- FDOT Accessing Transit Design Handbook

Liaison Office

The **AUTHORITY** will designate a Project Manager who will be the representative of the **AUTHORITY** for the Project. Although the **CONSULTANT** will seek and receive advice from various state, regional, and local agencies, the final direction on all matters of this project remain with the **AUTHORITY's** Project Manager.

Key Personnel

The **CONSULTANT** will use key personnel identified in the proposal to perform and direct the work of this project. Any changes in the indicated personnel will be subject to review and approval by the **AUTHORITY**.

Meetings and Presentations

The **CONSULTANT** will attend a Notice to Proceed Meeting with **AUTHORITY** representatives where the **AUTHORITY** will provide relevant project information and procedures for administering the contract. The **CONSULTANT** and staff will also be available with no more than five business days' notice to attend meetings or make presentations at the request of the **AUTHORITY**. The **AUTHORITY** may hold such meetings and presentations at any hour between 8:00 A.M. and 12:00 midnight on any day of the week. The **AUTHORITY** may call on the **CONSULTANT** to provide maps, press releases, advertisements, audiovisual displays, and similar material for such meetings.

Correspondence

The **CONSULTANT** will provide copies of all written correspondence between the **CONSULTANT** and any party pertaining specifically to this study to the **AUTHORITY** for their records within one week of the receipt of said correspondence.

Submittals

The **CONSULTANT** will provide electronic and hard copies of the required documents as listed below. These are the anticipated printing requirements for the project. The **CONSULTANT** will use this tabulation for estimating purposes, and the Project Manager will determine the number of copies required prior to each submittal.

Public Involvement:

Public Involvement Plan	Copies: 02
Advance Notification Package	02
Public Hearing Transcript	02
Comments and Coordination Package	02

Engineering Items:

Design Traffic Technical Memorandum / Report	Copies: 03
Draft Preliminary Engineering Report	03
Preliminary Engineering Report (Signed and Sealed)	03
Location Hydraulics Report	02
Drainage/Pond Siting Report	02
Geotechnical Report (if applicable)	03

Conceptual Design Roadway Plan Set	03
Typical Section Package	03
Design Variations and Exceptions Package	03

Environmental Items:

Copies:

Sociocultural Effects Report	03
Cultural Resource Assessment	05
Natural Resource Evaluation (NRE) Memorandum	05
Contamination Screening Evaluation Report	03
Noise Study Report	03
Air Quality Report	03
State Environmental Impact Report (SEIR)	03

Upon completion of the study the **CONSULTANT** will deliver to the **AUTHORITY**, in an organized manner, all project files, maps, sketches, worksheets, and other materials used or generated during the study process. The **CONSULTANT** will also submit all documents as PDF files.

Computer Automation

The **CONSULTANT** will develop this project utilizing Computer Aided Drafting and Design (CADD) systems. It is the responsibility of the **CONSULTANT** to meet the requirements in the ***FDOT CADD Manual***. The **CONSULTANT** will submit final documents and files as described therein. The **CONSULTANT** will find additional related information in the ***FDOT Design Manual***.

The **CONSULTANT** will scan all computer disks and drives for viruses prior to submitting files to the **AUTHORITY**. Failure to scan for viruses may result in a lower **CONSULTANT** work performance evaluation.

Coordination with Other Consultants and Entities

The **CONSULTANT** will coordinate work with any ongoing and/or planned projects that may affect this study. The **CONSULTANT** must coordinate with the following adjacent projects:

- Project #HI-0112 - South Selmon PD&E (PEIR)
- Project #HI-0002 – East Selmon PD&E (PEIR/SEIR)
- Project #HI-0140 - Meridian Ultimate:
 - Twiggs Design-Build
- Project #HI-0141 - Whiting Street Ultimate PD&E (PEIR)

The **CONSULTANT** will coordinate with local governmental entities to ensure design and right-of-way requirements for the project are compatible with local public works improvements and right-of-way activities.

The **CONSULTANT** will coordinate with any agencies and/or entities which require further coordination through the Advance Notification process. The **CONSULTANT** will include the **AUTHORITY'S** Project Manager in coordination activities.

Optional Services

At the **AUTHORITY's** option and authorization, the **CONSULTANT** may be required to perform certain unforeseen engineering, environmental, and/or public involvement services not currently covered in the scope of services for the PD&E study. Additionally, the **AUTHORITY** may request the **CONSULTANT** to provide final design and plans preparation services or conceptual design plans for design-build procurement. The **AUTHORITY** may request the **CONSULTANT** to provide expert witness services for right-of-way acquisition. The **AUTHORITY** will negotiate the fee for additional services with the **CONSULTANT** in accordance with the terms detailed in *Exhibit B; Method of Compensation*, for a fair, competitive, and reasonable cost, considering the scope and complexity of the project(s). The **AUTHORITY** will execute a supplemental agreement adding the additional services in accordance with paragraph 2.0 of the **AUTHORITY's** Standard Consultant Agreement.

1.0 PUBLIC INVOLVEMENT

Public involvement includes communicating to, and receiving input from, all interested persons, groups, and government organizations regarding development of the project. The **CONSULTANT** will coordinate and perform the appropriate level of public involvement for this project as outlined in *Part 1, Chapter 11 of the PD&E Manual* and the *FDOT Public Involvement Handbook*.

The **CONSULTANT** will provide the **AUTHORITY** drafts of all Public Involvement materials (i.e., newsletters, property owner letters, advertisements, handouts, exhibits, etc.) associated with the following tasks for review and approval at least five business days prior to printing and/or distribution due dates.

1.1 Public Involvement Program

The **CONSULTANT** will prepare, in accordance with *Part 1, Chapter 11 of the PD&E Manual*, a written Public Involvement Program (PIP), outlining each element of the Public Involvement Process. The **CONSULTANT** will update and amend the PIP throughout the Project Development Process. The plan will indicate the basic Public Involvement approach the **CONSULTANT** will take with the project. The PIP will generally list the contact information for media officials/agencies and the means the **CONSULTANT** will use to involve them in the process. The PIP will also outline whether bilingual materials and speakers are necessary for this project.

1.2 Public Involvement Data Collection

The **CONSULTANT** will be responsible for collecting Public Involvement data and preparing mailing lists. Mailing lists should include:

- Any affected or possibly affected parties
- Elected and appointed officials in the area (City, County, State) and community leaders
- Possible permit and review agencies
- Media in the project area (to be used for news releases, advertisements or any concerns)
- Any person or institution expressing an interest in the project

The **CONSULTANT** will assist the **AUTHORITY** with preparing responses to inquiries because of the Public Involvement Process.

1.3 Notice of Intent

Not Applicable.

1.4 Advance Notification

At the beginning of the project the **CONSULTANT** will prepare the Advance Notification and transmittal letter as indicated in *Part 1, Chapter 3 of the PD&E Manual*.

1.5 Scheduled Public Meetings

The **CONSULTANT** will provide all support necessary for the **AUTHORITY** to hold or participate in various public meetings, which may include, but not limited, to the following:

- Alternatives Public Meeting
- Public Hearing

For any of the above type meetings, the **CONSULTANT** will prepare and/or provide as necessary:

- Public officials and Agency letters: After review by the **AUTHORITY**, the **CONSULTANT** will prepare the letters, insert them in envelopes, and address the envelopes. The **CONSULTANT** will pay for first class postage.
- Property owner letters: The **CONSULTANT** will provide marked tax maps of the project alternatives and identify the names and addresses of property owners from county tax rolls. The **CONSULTANT** will prepare the letters, insert them in envelopes, and address the envelopes. The **CONSULTANT** will pay for first class postage.
- Scripts or agenda for presentation
- Handouts
- Graphics for presentations
- Videos and renderings
- Meeting equipment (setup and take down)
- The **CONSULTANT** will prepare the legal and/or display advertisements The **AUTHORITY** will pay the cost of publishing.
- The **AUTHORITY** will provide hosting services to conduct Small Group Meetings, the Alternatives Public Meeting, and the Public Hearing via a virtual meeting, in addition to meeting site requirements.
- Letters for notification of elected and appointed officials and interested parties: After review by the **AUTHORITY**, the **CONSULTANT** will prepare the letters, insert them in envelopes, and address the envelopes. The **CONSULTANT** will pay for first class postage.
- News releases: The **CONSULTANT** will provide draft news release content to the **AUTHORITY** for use three to five days prior to scheduled meetings for review and distribution. The **AUTHORITY** will handle distribution to news media.

- Meeting notes: The **CONSULTANT** will provide summary notes of public and agency meetings to the **AUTHORITY** no later than five business days after each meeting.
- Briefing and debriefing of **AUTHORITY** staff regarding all public meetings related to this project.

The **CONSULTANT** will assist the **AUTHORITY** in the identification of potential meeting sites. The **AUTHORITY** will pay all costs for meeting site rental and insurance.

The **CONSULTANT** will attend the meetings with an appropriate number of personnel to assist the **AUTHORITY's** Project Manager.

It is estimated there will be two public meetings for this project; one public alternatives meeting and one public hearing during the study.

Alternatives Public Meeting

The purpose of the Alternatives Public Meeting is to present to the public the results of the study to date and obtain comments on the design alternatives. There is a possibility that the citizens may suggest additional alternatives. It is anticipated there will be one public meeting held for this project.

The **AUTHORITY** will advertise and conduct the Alternatives Public Meeting as an informational meeting. **CONSULTANT** participation may be required for any portion of the presentation. The **CONSULTANT** will attend the workshop and prepare all necessary displays, maps, scripts, etc. The **AUTHORITY** will review and authorize all presentations, scripts, graphics, media releases, legal display advertisements, and general property owner letters.

A black-and-white, quarter-page legal advertisement announcing the meeting will be prepared and submitted to the **AUTHORITY** for approval. The **CONSULTANT** will have the advertisement published in area newspapers having the largest daily circulation. The **AUTHORITY** will make notification to elected and appointed officials by letter on the **AUTHORITY's** stationery 14 days before the meeting.

The **CONSULTANT** will write and send a letter or newsletter on the **AUTHORITY's** stationery announcing the meeting to all property owners whose property lies whole or in part within 300 feet of the centerline of any design alternative at least 10 days before the scheduled date of the meeting. At the **AUTHORITY's** discretion, the **CONSULTANT** will e-mail letters in lieu of or in addition to those sent by U.S. Mail for elected and appointed officials, public officials, agency contacts, and interested parties. All advertising and mailing costs are the responsibility of the **CONSULTANT**. The **CONSULTANT** will prepare and submit news releases for publication during the week of the workshop. Mailing costs are the responsibility of the **CONSULTANT**.

The **CONSULTANT** will develop the meeting format and submit to the **AUTHORITY** for approval. The **CONSULTANT** will prepare displays and/or wall graphics of the design alternatives for use during the meeting. These include typical sections, aerials, renderings, charts, and graphs as needed. The **CONSULTANT** will write and use a PowerPoint

presentation script in association with the graphics. The **CONSULTANT** will prepare a project brochure for distribution at the meeting.

The **CONSULTANT** will handle meeting equipment setup and take down, using staff members familiar with audiovisual equipment and amenities available at the meeting site. Prior to the meeting, the **CONSULTANT** will brief all staff attending and ensure the team understands the project information that will be communicated during the meeting and will be able to discuss and answer questions from the public. Conducting the meeting requires enough knowledgeable staff to handle the number anticipated to attend the meeting. The **CONSULTANT** will have staff available before and/or after the meeting to maintain public contact or for media interviews, etc. All audiovisual equipment costs and facility rental costs will be the responsibility of the **AUTHORITY**.

A debrief meeting will be held after the Alternatives Public Meeting with all **CONSULTANT** staff in attendance at the meeting. The **CONSULTANT** will identify issues from the meeting and determine their significance. The **CONSULTANT** will determine if the issues requires further consideration. The **CONSULTANT** will be responsible for preparing draft responses to comments collected at the meeting for the **AUTHORITY**'s review and approval.

1.6 Other/Unscheduled Public and Agency Meetings

In addition to scheduled public meetings, the **CONSULTANT** may be required to participate in other meetings with the public, elected officials, special interest groups, homeowner association, or public agencies. The **CONSULTANT**'s participation during the meeting will include, but not be limited to, technical participation as needed, note taking, and summarizing the meeting in a memo for the **AUTHORITY**. It is estimated there will be up to thirty (30) meetings during the study.

1.7 Public Hearing

The **CONSULTANT** will provide all support services listed in Sections 1.2 and 1.5 above and prepare:

Elected and Appointed Officials, Interested Parties Letters

The **CONSULTANT** will prepare the letters, insert them in envelopes and address the envelopes. The **CONSULTANT** will pay for first class postage. At the **AUTHORITY**'s discretion, the **CONSULTANT** will e-mail letters in lieu of or in addition to those sent by U.S. Mail.

Public Officials and Agency Letters

The **CONSULTANT** will prepare the letters, insert them in envelopes and address the envelopes. The **CONSULTANT** will pay for first class postage. At the **AUTHORITY**'s discretion, the **CONSULTANT** will e-mail letters in lieu of or in addition to those sent by U.S. Mail.

Property Owner Letters

The **CONSULTANT** will provide a list of names and addresses of the property owners from county tax rolls in a format specified by the **AUTHORITY**. The **AUTHORITY** will prepare the letters, insert them in envelopes and address the envelopes. The **AUTHORITY** will pay for first class postage.

Notification

The **CONSULTANT** will prepare and submit a black-and-white, quarter-page legal advertisement announcing the Public Hearing and provide to the **AUTHORITY** for approval. The **AUTHORITY** will have the advertisement published in area newspapers with the largest daily circulation. The Public Hearing must be advertised twice in a local, general circulation newspaper. The first notice will appear at least 15 days, but no more than 30 days, before the scheduled hearing date. The second advertisement will appear 7 to 12 days prior to the scheduled hearing date.

Additional Items

- All elements of a multi-media presentation which will include:
 - Videos
 - Graphics
- Displays of plans and report(s) for the public display
- Brochures or handouts
- Public advertisements
- Court Reporter(s)
- Briefing and debriefing of **AUTHORITY** staff

The **CONSULTANT** will procure a verbatim transcript of the Public Hearing. The **CONSULTANT** will combine the transcript with any additional comments received by the **AUTHORITY** as part of the official Public Hearing record. The official record will include affidavits of publication of legal ads. Copies of the transcript and official record files will be provided to the **AUTHORITY**. The **CONSULTANT** will also prepare a summary of the public hearing to be include in the Comments and Coordination Package. The Public Hearing Transcript will be attached.

1.8 Location and Design Concept Acceptance

Not Applicable.

1.9 Special Public Involvement Requirements

Identify and Inspect Public Meeting Sites

The **CONSULTANT** will assist the **AUTHORITY** in identifying and inspecting prospective sites for suitability to use as a venue for any public meeting. The **CONSULTANT** will consider location, seating capacity, sound system, lighting, display space, and any other physical characteristics which would influence the viability of the site, including compatibility with the terms of the Americans with Disabilities Act of 1990. The **AUTHORITY** will make all arrangements for use of meeting facilities including payment of rental fees if applicable.

Correspondence

The **CONSULTANT** will provide copies of all written correspondence sent by the **CONSULTANT** to all inquiries about this project to the **AUTHORITY** within three business days of receipt or mailing. The **CONSULTANT** will assist the **AUTHORITY** in managing and preparing responses to all public inquiries that were a result of the public involvement process.

Newsletters

The **CONSULTANT** will prepare newsletters/e-newsletters at various key points during the study. The **AUTHORITY** will mail/email the newsletters to elected officials, property owners, businesses, and interested persons included on the mailing list compiled by the **CONSULTANT**. The **AUTHORITY** will review the mailing list prior to mailing. A maximum of three newsletters are anticipated throughout the life of this project.

Public Involvement Summary Report (PISR)

The **CONSULTANT** will prepare a Comments and Coordination Package, which will contain, at a minimum, all documentation of the public participation accomplished throughout the study period. This package will summarize and respond to the comments received from Public Involvement, Advance Notification, coordination with local officials and agencies, public meetings, etc. as indicated in *Part 1, Chapter 11 of the PD&E Manual*. The Comments and Coordination Package will be submitted with and summarized in the PEIR document.

Project Web Site

The **CONSULTANT** will coordinate with the **AUTHORITY's** web developer to create project web pages within the existing **AUTHORITY** website. The **AUTHORITY** expects this project to take approximately 24 months. The web pages will allow for input via email links and provide meeting information and report summaries for viewing and downloading. Limited graphics will be available due to the size and downloading time for many graphical applications. The **CONSULTANT** will coordinate with the **AUTHORITY's** web developer to provide content to update the web pages monthly.

The web site will contain a minimum of six pages:

- *Facts page/Project home page* - The facts page will be a brief synopsis of the project and pictures of the project location. Additionally, key information will be posted on this page, such as, but not limited to, start date, estimated completion date, estimated project cost, length and limits of the project, the name of the **AUTHORITY** Project Manager, the name of the **CONSULTANT** Project Manager, Project Map, etc.
- *Project Overview page* - The Project Overview page will contain an overview of the project with more detail than the facts page and include a Consistency with

Transportation Plan Goals and Objectives description and the purpose and need for the project.

- *Project Development & Environmental (PD&E) definition page* - A link to the PD&E definition page will appear wherever the acronym PD&E appears on any of the subsequent pages. It will give a brief overview of the PD&E process.
- *Public involvement page* - The public involvement page will contain a general overview of proposed meetings. This will include Public Information Meetings, Public Workshops, Public Hearing and any other meetings the **AUTHORITY** would like added to the page. The page will also contain an area where viewers may enter their name and address as mandatory inputs to be added to the mailing database. The name and contact information for the **AUTHORITY's** Project Manager will be shown on this page.
- *Project schedule page* – The project schedule will contain a brief generalization of the milestones for this project. The **CONSULTANT** will take project milestones, as approved by the **AUTHORITY**, from the developed schedule and place them on this page. The **CONSULTANT** will list milestones by seasons of the year rather than by actual dates. The **CONSULTANT** will reflect shifts in the schedule on this page as they occur.
- *Photograph page* – The photograph page will include a selection of photographs obtained from the project area with a short accompanying description of the location, direction, and/or other important details contained within the photo. The photograph page can be in the form of an index, slideshow, or map with hyperlinked photograph locations.

Videos, Renderings, etc.

The **CONSULTANT** will prepare PowerPoint presentations, videos, and renderings for public meetings as needed. See Section 1.5 and 1.7 for presentation requirements related to the Public Meeting and Hearing.

The **CONSULTANT** will produce up to six photo renderings depicting the existing and proposed conditions at locations along the corridor to be determined by the **AUTHORITY**. The **CONSULTANT** will produce one 3D animation along the length of the project corridor. This animation will visualize the preferred alternative for purposes of public display and presentation at the Alternatives Public Workshop and Public Hearing. The final project deliverables will include a master DVD suitable for duplication and an internet ready video file suitable for posting on the project website. The animation will be of enough detail and accuracy, so the viewer can see a realistic depiction of the project from multiple viewpoints. The **CONSULTANT** will photograph the existing structures and landmarks along the project corridor to provide backgrounds for the animations. Updated aerial imagery will be obtained. Survey data will be used to determine building heights.

1.10 Quality Control

The **CONSULTANT** will be responsible for insuring that all work products conform to the **AUTHORITY's** standards and criteria. This will be accomplished through an internal

quality control process performed by the **CONSULTANT**. This quality control process will ensure that objective and qualified individuals who were not directly responsible for performing the initial work achieve quality through checking, reviewing, and surveillance of work activities.

Prior to submittal of the first invoice, the **CONSULTANT** will submit the proposed method or process of providing quality control for all work products to the **AUTHORITY's** Project Manager for approval. The Quality Control Plan will identify the reviewed products, the personnel who perform the reviews and the method of documentation. The **CONSULTANT** will be responsible for inclusion of the Quality Assurance Checklist indicating the **CONSULTANT's** quality control process was completed. The **CONSULTANT** will review all reports prepared by sub-consultants.

The **CONSULTANT** will include a QA/QC sheet in the front of all documents showing that the documents went through an internal review prior to submission to the **AUTHORITY**.

2.0 ENGINEERING ANALYSIS AND REPORTS

The **CONSULTANT** will coordinate and perform the appropriate level of engineering analysis for this project as outlined in *Part 2, Chapter 3 of the PD&E Manual*.

Upon notice to proceed, the **CONSULTANT** will begin preliminary assessments of the study corridor from an engineering standpoint. This activity consists of collecting various information and materials within the study limits as relative to engineering analysis to be performed. The information should include all data necessary to perform adequate evaluation of the location and design of a transportation facility. Utilizing the data collected, the **CONSULTANT** will perform the engineering analysis necessary to complete the project development process. The **CONSULTANT** will continue the engineering analysis throughout the duration of the project with consideration to the results of the environmental impacts analysis.

After selection of viable alternatives, the **CONSULTANT** will develop and analyze alternate conceptual design alternatives. The development of the design alternatives will consider context sensitive solutions. The **CONSULTANT** will develop and evaluate all viable alternatives to address the project needs. The **AUTHORITY** will determine which viable alternative(s) to further evaluate through the public involvement process and environmental analysis. The **AUTHORITY** understands that the selection of the No-Build alternative is a possibility.

2.1 Field Review

The **CONSULTANT** will conduct field work to collect data.

2.2 Survey

Aerial Photography

The use of Aerial Photography as a basis for plotting various data is necessary for both engineering and environmental analysis, alternative corridor, and design studies and development of preliminary plans of conceptual design. Copies of aerial photography are

the prime source of information used to convey project considerations to the public at public meetings.

The **CONSULTANT** will obtain and utilize the most recent Hillsborough County aerials from the Hillsborough County Property Appraiser's Office. Aerial photography will be prepared for the following uses at the noted scales:

Overall Project Location Map	1" = 100'
Drainage Map	1" = 100'
Concept Plans	1" = 40'

Survey Coordination

The **CONSULTANT** will coordinate with the **AUTHORITY** regarding project survey requirements, review of existing survey data, and scheduling of additional survey efforts. The **CONSULTANT** will request existing project control, benchmarks, and reference points for the project baseline from the **AUTHORITY**. The **CONSULTANT** will also collect elevation data required to perform the noise study and structures analysis for this Project.

2.3 Geotechnical

Soils

The **CONSULTANT** will review the United States Department of Agriculture, Geological Survey, Natural Resource Conservation Service Maps/GIS and summarize the findings. The **CONSULTANT** will review data from existing soil borings and perform additional standard penetration test (SPT) borings to evaluate and complete geotechnical analyses for bridge foundation alternatives and retaining walls. The **CONSULTANT** will prepare a Geotechnical Report that summarizes the available field data, subsurface conditions, and engineering recommendations.

Geotechnical Coordination

The **CONSULTANT** will coordinate with **AUTHORITY** geotechnical staff regarding project requirements, review of geotechnical data, and scheduling.

2.4 Traffic

Traffic Data

The **CONSULTANT** will obtain the available initial traffic data from the **AUTHORITY**, FDOT, City of Tampa, and Hillsborough County. Such data may include:

- Current corridor traffic counts
- Historic traffic counts with K, D and T factors
- Heavy vehicle traffic data; trucks (medium and heavy) and buses

The **CONSULTANT** will also perform vehicle turning movement counts (TMCs) within project limits at ramp terminal intersections. The TMCs will be conducted for three hours in the AM peak period and three hours in the PM peak period.

- Traffic count locations will be submitted graphically to the **AUTHORITY** and approved prior to the counts being performed. At the minimum the counts shall be conducted at the following locations:
 - 72-hour approach counts south of Twiggs Street
 - 72-hour approach counts between Twiggs Street and Zack Street
 - 72-hour approach counts between Zack Street and E Cass Street
 - 72-hour approach counts north of E Cass Street
 - 8-hour TMC at Nebraska Avenue @ Twiggs Street
 - 8-hour TMC at Nebraska Avenue @ Zack Street
 - 8-hour TMC at Nebraska Avenue @ Cass Street
- Counts should only be done Tuesday, Wednesday, and Thursday. No counts will be allowed Monday or Friday
- All counts used in this study will be less than one-year old from the time of collection
- The **CONSULTANT** will obtain signal timings for all signalized intersections
- The **CONSULTANT** will obtain/collect existing Roadway Characteristics Inventory data including number of lanes, turning lane storage lengths, speed limits, lane width, presence of lighting and sidewalks
- The **CONSULTANT** will collect operational data including travel time runs eastbound and westbound on the mainline within the project limits during the peak periods for the AM and PM, queue length observations at the ramp terminal intersections, and off-peak (for desired speed) and peak (for calibration) spot travel speed data at select locations eastbound and westbound on the mainline within the project limits
- The **CONSULTANT** will process collected data and prepare summaries

Origin-Destination Data (Streetlight)

The **CONSULTANT** will purchase StreetLight O/D data to supplement and validate the Bluetooth detection O/D data. The **CONSULTANT** will conduct the O/D analysis, post-process, and summarize this data.

The **AUTHORITY** will use both data sets to adjust the Tampa Bay Regional Planning Model (TBRPM).

Traffic Analysis

The **CONSULTANT** will develop a proposed traffic methodology statement prepared in accordance with the **FDOT Project Traffic Forecasting Procedure (#525-030-120)** for the **AUTHORITY's** approval. The traffic methodology will include a description of proposed data collection, analysis procedures and techniques, formats for documentation, and reporting analysis results. The traffic methodology statement will address all

traffic/transportation related concepts within this scope of services in summary detail for presentation, submittal, and approval by the **AUTHORITY**.

Existing Traffic Volumes

Any daily counts collected or received will be converted to normalized AADT volumes by use of appropriate peak season factors. All traffic counts will be adjusted to reflect the existing conditions. Adjustments will be determined based on an analysis of historic traffic count data for the corridor. Information will be presented in tabular and graphic formats. The **CONSULTANT** should develop all forecasts and verify all traffic volumes for reasonableness of results prior to finalizing the existing AADT and Directional Design Hourly Volumes (DDHVs).

The **CONSULTANT** will perform a check of all traffic count data collected for this project. This check will include, but not be limited to:

- Consistency of volume flows between count locations with no major drops or additions of traffic between count locations
- Total daily directional traffic flows should be approximately equal and balanced in both directions. If results do not show a balance a reasonable explanation should be provided.

Existing Traffic Operations Analysis

Based on the data collection efforts, the **CONSULTANT** will develop traffic factors to use for the analysis and to develop DDHVs. Peak hour factors (PHFs) for the existing conditions analysis will be based on an average overall factor from the traffic count data collection. Future year PHFs may be modified based on guidelines as found in the **Highway Capacity Manual (HCM)** and other technical resources to reflect anticipated conditions.

The **CONSULTANT** will develop traffic characteristics (K, D and T factors) in accordance with FDOT's **Project Traffic Forecasting Procedure (525-030-120)**. A standard K factor may be approved for use in this project under the direction of the **AUTHORITY**. The D factors will be developed based on the traffic count data collected. The **AUTHORITY** will accept rational adjustments to overall K and D factors for uniformity. Adjusted values must maintain the minimum acceptable values as defined in the FDOT **Project Traffic Forecasting Procedure (525-030-120)**. Traffic factors and characteristics will be summarized and provided in the report along with supporting documentation of adjustments.

Truck percentages and vehicle composition for daily and design hour volumes will be obtained from FDOT traffic count stations and compared to the counts collected for this study.

The **CONSULTANT** will evaluate the segment of Nebraska Avenue from south of Twiggs Street to Cass Street, including the intersections at Twiggs Street, Zack Street, and Cass Street. The **CONSULTANT** will use the VISSIM microsimulation program to conduct the traffic analysis. The **CONSULTANT** may use SYNCHRO for preliminary timing scheme

optimization for the ramp terminal intersections and other adjacent intersections within the study limits.

The existing conditions VISSIM model will be based on existing as built plans, aerial photography, photographs, signal timing parameters, existing traffic volumes, and operational characteristics. Once the existing conditions simulation models are constructed, they will be calibrated to reasonably match traffic operations observed in the field. The objective of model calibration is to obtain the best match possible between model performance and field measurements of performance. The existing conditions VISSIM traffic simulation models will be calibrated to existing three-hour AM and PM peak periods. The hours before and after the peak hour will be developed by globally scaling the peak hour by ratios obtained from the existing traffic count profiles. The scaling factor will be adjusted if certain areas of the network or O/D pairs have a different loading than the traffic count profiles. Default traffic factors in the modeling software will be adjusted to a reasonable degree of accuracy to obtain similar results to conditions observed in the field. This will be accomplished using methods and guidance from the *FDOT Traffic Analysis Handbook* and *FHWA Traffic Analysis Toolbox Volume III*. The calibration effort will focus on the VISSIM model realistically reflecting the performance (travel speed/travel time) on Nebraska Avenue. The calibration parameters will be applied to the future conditions model(s).

Documentation will include the basic methodology, coding, and output for Nebraska Avenue speed profiles, travel time tables, tables showing volume, speed, and density.

Origin Destination Matrix Estimation (ODME) will be performed for existing, 2026, 2036, and 2046 AM/PM periods using VISSIM. Seed matrices provided by O/D study and targets from balanced hourly volume will be used for ODME process.

Traffic Alternatives Analysis

The **CONSULTANT** may analyze the following Alternatives for the AM and PM peak periods:

- a) No-Build Alternative – This includes the existing configuration of the study limits for the existing year and existing plus committed improvements for future analysis years.
- b) Build Alternative – Build Alternative may include adding a northbound lane on Nebraska, modify intersection at Nebraska and Cass to include dual NB lefts onto Cass and convert center lane on Cass to a WB lane west at least to Pierce Street and any other intersection improvements as needed to achieve desirable operations. The following analysis years will be used for each Alternative, as applicable, shown in Table 2.4.1:

- Existing Year – 2020
- Opening Year – 2026
- Interim Year – 2036
- Design Year – 2046

Travel Demand Forecasting

The **AUTHORITY** will provide the **CONSULTANT** with an updated version of the TBRPM that has been developed specifically for the **AUTHORITY**. The updated TBRPM will contain a 2015 Base Year as well as a 2030 Interim and 2040 Forecast Year model set. The 2015 TBRPM will be validated within the study limits and cost feasible growth will be accounted for in the 2030 and 2040 models. Therefore, no further updates will be necessary to the socio-economic data of the base and future year TBRPM model sets. The 2030 and 2040 models that are provided to the **CONSULTANT** will also include all cost feasible network improvements.

The **CONSULTANT** will conduct a cursory review of the TBRPM to confirm that the model is replicating travel patterns in the study limits of influence at a reasonable and acceptable level. A cursory review of the 2015, 2030 and 2040 No-Build model runs will be conducted to confirm the reasonableness of future traffic projections within the study limits, which means the **CONSULTANT** will compare the No-Build model volume outputs to existing year counts and verify that the model shows positive growth. In cases where the model does not produce reasonable volumes, the **CONSULTANT** will make post-model adjustments as part of the peak period volume development process. The **CONSULTANT** will code the network geometry for the Build Alternatives described in the Traffic Alternatives section. The **CONSULTANT** will perform TBRPM model runs for the No-Build and Build Alternatives to obtain Annual Average Daily Traffic (AADT) volumes for 2015, 2030 and 2040.

Future Traffic Forecasts

Based on the 2015, 2030 and 2040 model runs and existing year counts, the **CONSULTANT** will develop traffic forecasts for existing, opening, interim and design years for the No-Build and Build alternatives.

Design Traffic

The **CONSULTANT** is responsible for developing traffic projections for all roadways and intersections within the study limits. The design traffic forecasts will be developed as described in the Travel Demand Forecasting section. The design traffic will be developed for analysis years 2026, 2036, and 2046 through interpolation and extrapolation. The DDHVs will be developed for the No-Build and Build Alternatives.

The **CONSULTANT** will use these volumes to summarize demand and level of service (LOS) at LOS C for future noise modeling. Noise traffic data will be prepared in table and graphical format.

Future Traffic Operations Analysis

Based on the future year traffic forecasts with and without the proposed improvement alternative scenarios, the **CONSULTANT** will analyze design hour and daily traffic conditions using the same applicable procedures used to determine existing levels of service. The **CONSULTANT** will perform operational analyses for the Build scenarios for 2026, 2036, and 2046 using the VISSIM microsimulation program. The

CONSULTANT may use SYNCHRO for preliminary timing scheme optimization for intersections within the study limits.

The **CONSULTANT** will evaluate traffic for LOS conditions for the following roadway segments and intersections for each scenario:

- Nebraska Avenue from south of Twiggs Street to Cass Street
- Nebraska Avenue @ Twiggs Street
- Nebraska Avenue @ Zack Street
- Nebraska Avenue @ Cass Street

Initially, the **CONSULTANT** will identify deficient movements or roadway links based on the current geometry and operational performance of Nebraska Avenue and the intersections with Twiggs and Cass Streets. The **CONSULTANT** will note all roadway links and/or approaches and movements that do not operate in an acceptable manner. Information will be summarized in graphic and tabular format.

The **CONSULTANT** will summarize future year operational analyses for AM and PM peak hour conditions and include the results of adjacent hours for the multi-period analysis in the appendices. Each of the future year analysis for 2026, 2036 and 2046 will include intersection simulated volume, delay, and maximum queue lengths. Network-wide delay, travel time, and speed will also be summarized. Information will be summarized in graphic and tabular format.

VISSIM Microsimulation Analysis

The following tasks are necessary to perform a traffic operational analysis of the study limits using advanced microsimulation traffic models created by PTV's VISSIM software.

No-Build Conditions VISSIM Modeling & Analysis (2026, 2036, 2046 AM/PM)

VISSIM models will be developed by the **CONSULTANT** with future 2026 and 2046 AM/PM traffic conditions for the No-Build scenario. Each of the VISSIM traffic simulation models will be run for three hours, not including network loading time, with multiple runs having different random number seeds due to the stochastic nature of traffic simulation models. Ten runs will be performed for each analysis case. The average of the output from these model runs will be summarized and averaged in tabular format. Measures of Effectiveness (MOEs) will include processed volume, speed, and density, and network-wide output including total delay, total travel time, average speed, etc. Intersection MOEs will include delay and maximum queue lengths.

Build Conditions VISSIM Modeling & Analysis (2026, 2036, 2046 AM/PM)

VISSIM models will be developed by the **CONSULTANT** with future 2026, 2036, 2046 AM/PM traffic conditions for the applicable Build alternatives. VISSIM modeling will be conducted for two 2026 Build alternatives, two 2036 Build alternatives and two 2046 Build alternatives. Each of the VISSIM traffic simulation models will be run for three hours, not including network loading time, with multiple runs having different random number seeds due to the stochastic nature of traffic simulation models. Ten runs will be performed for

each analysis case. The average of the output from these model runs will be averaged and summarized in tabular format. MOEs will include processed volume, speed, and density, and network-wide output including total delay, total travel time, average speed, etc. Intersection MOEs will include delay and maximum queue lengths.

Project Traffic Analysis Report

The **CONSULTANT** will prepare a Project Traffic Analysis Report (PTAR). The PTAR will document all data collection efforts, travel demand modeling, and development of future traffic volumes and traffic operational analysis of the existing conditions, no-build conditions, and build alternatives. The design traffic will be prepared in accordance with the *Project Traffic Forecasting Procedure (#525-030-120)*. The results of the operational analysis conducted for all viable alternatives will be documented and compared within the PTAR. The PTAR will include recommendations for the phased implementation of the improvement alternative(s) identified in this study.

2.5 Safety

Crash Data

The **CONSULTANT** will obtain available data from the **AUTHORITY's** database and local sources for various highway segments required. The **CONSULTANT** will obtain data for the previous five years. The data collected will include the number and type of crashes, crash locations, number of fatalities and injuries, and estimates of property damage and economic loss.

Safety Analysis

Based on the safety data collected, the **CONSULTANT** will identify project needs associated with safety of the existing facility and summarize the crash history in graphic and tabular format.

The **CONSULTANT** will conduct analysis in accordance with the *Part 2, Chapter 2 of the PD&E Manual* and the *Highway Safety Manual (HSM), Part C* and predictive methods according to *HSM Implementation Policy, Topic Number 000-500-001* to objectively estimate safety performance measures.

The **CONSULTANT** will conduct safety analysis for the design year 2046 No Build and Preferred Build alternatives for the Nebraska Avenue segment and intersections by quantifying the anticipated change in crash frequency and/or severity as the result of changes in geometric features or traffic conditions.

2.6 Utilities & Railroads

Data Collection

The **CONSULTANT** will obtain information in accordance with *Part 2, Chapter 21 of the PD&E Manual*.

Analysis and Report

Based on coordination with utility companies within the project limits, the **CONSULTANT** will prepare a Utility Assessment Package as described in **Part 2, Chapter 21 of the PD&E Manual**. The **CONSULTANT** will also address impacts to existing and proposed railroads.

2.7 Needs

Transportation Plans

Not Applicable.

Planning Consistency Form

Not Applicable.

Analysis of Existing Conditions

The **CONSULTANT** will analyze the existing conditions to identify any deficiencies that would be included in the Needs section.

Purpose and Need Statement

The **CONSULTANT** will prepare and verify the purpose and need for the project as outlined in **Part 2, Chapter 1 of the PD&E Manual**.

2.8 Corridor Analysis

The **CONSULTANT** will perform a feasibility analysis for the extension of Nebraska Avenue from the southern terminus of the study to Whiting Street. A determination of number of lanes needed along with the potential intersection configuration at Nebraska Avenue and Whiting Street/Meridian Avenue will be developed. Impacts and modifications to Whiting Street within the Channel District to Channelside Drive will also have to be evaluated as part of the analysis. Current and future development within the Channel District will also need to be included in the analysis. Potential right-of-way impacts will be assessed, and planning level concepts will be developed in conjunction with construction cost estimates to identify any constructability issues.

2.9 Roadway Concepts

Existing Location Characteristics

The **CONSULTANT** will collect the existing location/roadway characteristics in accordance with **Part 2, Chapter 3 of the PD&E Manual**.

Typical Section Analysis

The **CONSULTANT** will develop appropriate typical section alternatives for the project. These will include the **AUTHORITY's** standard typical sections and any typical sections that may result in minimizing right-of-way and incorporate context sensitive solutions.

Design Alternatives

The objective of the conceptual design and preliminary engineering analysis is to develop viable design alternatives based on standard engineering practice which provide an appropriate connection of design with social, economic, and environmental impacts. The CONSULTANT will develop at least three roadway alternatives in addition to a No-Build alternative. These alternatives will be developed based on the additional capacity needs from the traffic analysis and the number of lanes will be determined based on demands during the design year 2046. If such a design is determined not be feasible by the AUTHORITY, the CONSULTANT will recommend to the AUTHORITY the most feasible design alternative for the proposed facility.

The CONSULTANT will identify, develop, and analyze feasible design alternatives as outlined in Part 2, Chapter 3 of the PD&E Manual. The purpose of this early coordination is to determine the feasibility of concepts addressing level of service needs and to minimize environmental impacts. For each design alternative the CONSULTANT will determine:

- Horizontal and vertical alignment
- Typical sections
- Preliminary right-of-way costs
- Preliminary drainage; to the extent of identifying required outfalls
- Existing and proposed utility location; to the extent they affect the decision process
- Soils data
- Acreage involved
- Preliminary structure concepts and locations
- Location of detention/retention basins as may be required

Access Management

The **CONSULTANT** will determine the proper access classification and standards to apply to the project using the ***FDOT State Highway System Access Management Classification System and Standards (Rule 14-97)***. The **CONSULTANT** will coordinate with the **DEPARTMENT's** Access Management Review Committee.

The **CONSULTANT** will present the proposed access management plan as part of the public involvement process. If a public hearing is required for access management classification/reclassification, this item will be addressed during the scheduled public hearing for the entire project.

Identify Construction Segments

The **CONSULTANT** will provide a recommended plan for project implementation to include sequencing of proposed improvements.

2.10 Structures

Existing Structure Characteristics

The **CONSULTANT** will collect the existing structure characteristics in accordance with *Part 2, Chapter 3 of the PD&E Manual*.

Structures Typical Section Analysis

The **CONSULTANT** will develop all appropriate structural typical section alternatives for the project. These will include FDOT standard typical sections and any typical sections that may minimize right-of-way, environmental impacts, and incorporate context sensitive solutions.

2.11 Drainage

Drainage and Floodplain Analysis

The **CONSULTANT** will perform preliminary drainage design to determine potential outfall locations and preliminary sizes (volume and area) of required detention and/or retention facilities for storm water treatment or attenuation. The location and size of potential detention/retention areas will be determined for the typical section that yields the largest amount of treatment/attenuation requirement. It is the intent of the **AUTHORITY** for stormwater management to be accomplished, to the maximum extent possible, within existing right-of-way. The **CONSULTANT** will advise the **AUTHORITY** as soon as possible of areas that may need additional right-of-way to accommodate storm water management. If additional right-of-way is needed the **CONSULTANT** will identify three potential stormwater management options for those drainage basins and incorporate the analysis into a Pond Siting Report (PSR). As part of this effort, the **CONSULTANT** will meet with the local government with jurisdiction over the location to explore opportunities for joint drainage improvements or joint-use facilities to address the project's stormwater management needs. The PSR will include SWFWMD arials, existing permits, geotechnical considerations, roadway profiles, calculation spreadsheets, and right-of-way costs.

Location Hydraulics Report

The **CONSULTANT** will prepare a Location Hydraulics Report for the project in accordance with *Part 2, Chapter 3 of the PD&E Manual*.

2.12 Concept Plans

Base Map

The **CONSULTANT** will develop a CADD database that includes existing characteristics. CADD database information will be compatible for use on aerial photography used for public hearing presentations, corridor maps, and concept plans.

The **CONSULTANT** will plot, delineate, and label pertinent cultural, natural, and geopolitical features bordering the existing alignment on 1"=100' scale aerial photography for subsequent use in the evaluation and development of Conceptual Design Plans. The Corridor Base Map(s) must include:

- Number of lanes, signals, crosswalks, cross drains, existing intersections, and drainage easements
- Street names and highway numbers
- All pertinent cultural and natural features
- Land use information
- Locate north arrow, scale, and aerial flight date at upper-mid portion of the plan sheets
- Existing and proposed rights of way, and platted property lines
- All public and private development, as well as archeological or historic sites
- Significant features which could be impacted by the project, especially wetlands and endangered species habitat, floodplain, and flood prone areas
- Hazardous material and petroleum use sites
- Railroad right-of-way and utility easements
- All land use information (names of establishments, etc.), current zoning, and future land use (per Comprehensive Plan) for vacant properties
- New data as it becomes available to keep the Corridor Base Map(s) up to date

Alternative Concept Plans

The **CONSULTANT** will prepare alternative concept plans. At a minimum, the concept plans should include existing and proposed right-of-way, elevations, and architectural features for the design alternatives.

Preferred Alternative

The **CONSULTANT** will finalize concept plans, both roadway for the preferred alternative based on review and analysis of all engineering, environmental, and public involvement issues related to the project, including refinements made because of input from the public hearing.

2.13 Typical Section Package

The **CONSULTANT** will prepare the Typical Section Package in accordance with the *FDOT Design Manual*, excluding pavement design. The **CONSULTANT** will provide an approved typical section package to the **AUTHORITY** 45 days prior to the public hearing.

2.14 Design Exceptions and Variations

Identify Design Exceptions and Variations

The **CONSULTANT** will identify exceptions and variations for approval in accordance with the *FDOT Design Manual*.

Prepare Design Exception and Variation Package(s)

The **CONSULTANT** will prepare exception and variations package(s) for approval in accordance with the *FDOT Design Manual*. The **CONSULTANT** will provide an approved Design Exception and Variation Package to the **AUTHORITY** 45 days prior to the public hearing.

2.15 Multi-modal Accommodations

The **CONSULTANT** will coordinate with transit and local government officials to determine which multi-modal accommodations to evaluate as part of the project alternatives. This task only includes existing and committed multi-modal facilities.

2.16 Park and Ride-Lots

Not applicable.

2.17 Maintenance of Traffic Analysis

The **CONSULTANT** will analyze the design alternatives for constructability and the ability to maintain traffic. If the constructability analysis indicates that there will be a substantial cost to maintain traffic, those costs will be included in the cost estimate for that alternative.

2.18 Comparative Analysis and Evaluation Matrix

After developing the viable alternatives and costs, the **CONSULTANT** will prepare a matrix comparing the impacts and costs of the alternatives evaluated with a recommendation of the most viable alternative(s). The **CONSULTANT** will present the recommendations to **AUTHORITY** for consideration.

2.19 Selection of the Preferred Alternative(s)

The **CONSULTANT** will recommend a preferred alternative based on review and analysis of all engineering, environmental, and public involvement issues related to the project.

2.20 Value Engineering

Not Applicable

2.21 Risk Management

The **CONSULTANT** will define the level of Risk Management performed based on the *FDOT Risk Management Guidelines*. If required, this will be an Optional Service.

2.22 Construction Cost Estimates

The **CONSULTANT** will develop construction cost estimates and updates for design alternatives using the FDOT long-range estimating (LRE) program as a basis. Construction

cost estimates will be refined through current bid tabulations and schedules of values at the time of estimation.

2.23 Right-of-way Cost Estimates

The **CONSULTANT** will prepare maps of the project area showing all related right-of-way and affected parcels on all alternatives to be included in the project matrix. The **CONSULTANT** will be required to prepare right-of-way estimates.

2.24 Preliminary Engineering Report

The **CONSULTANT** will prepare a Preliminary Engineering Report (PER) in accordance with *Part 2, Chapter 3 in the PD&E Manual*. The **CONSULTANT** will provide the Draft PER to the **AUTHORITY** 45 days prior to the public hearing.

2.25 Quality Control

The **CONSULTANT** will follow the Quality Control Plan as described in Section 1.10. The **CONSULTANT** will include a QA/QC sheet in the front of all documents to show that the documents went through an internal review prior to submittal to the **AUTHORITY**.

3.0 ENVIRONMENTAL ANALYSIS AND REPORTS

The **CONSULTANT** will coordinate and perform the appropriate level of environmental analysis to prepare a PEIR for this project as outlined in the *PD&E Manual*. The **CONSULTANT** will utilize the appropriate databases. Database information will be compatible for use on base maps used for public presentations, corridor maps and alternative plans.

Sociocultural Resources

The **CONSULTANT** will collect data regarding the following sociocultural issues as needed:

3.1 Land Use Changes

Document future land use changes as needed.

3.2 Social and Economic:

- Community Cohesion
- Community Services
- Title VI
- Demographics
- Community Goals and Quality of Life
- Safety and Emergency Response

3.3 Economic

Document commerce and tax base within the project limits as needed.

3.4 Mobility

Document accessibility and connection to other modes of transportation as needed.

3.5 Aesthetics

Document as needed.

3.6 Relocation Potential

The **CONSULTANT** will evaluate right of needs and notify the **AUTHORITY** of potential impacts to business property, residential property, and right of needs for ponds and stormwater management.

The **CONSULTANT** will collect, analyze and summarize pertinent all environmental data in the appropriate section of the PEIR. The **CONSULTANT** will display pertinent data on the base map as applicable. The **CONSULTANT** will analyze these issues in accordance with *Part 2, Chapter 4 of the PD&E Manual* and the *Sociocultural Effects Evaluation Handbook* available at <http://www.dot.state.fl.us/emo>.

Cultural Resources

3.7 Archaeological and Historic Resources

The **CONSULTANT** will implement a Cultural Resources study analyzing the impacts to all cultural resources by all proposed alternatives including viable ponds, as described in *Part 2, Chapter 8 of the PD&E Manual*. All work will be conducted by a professional who is qualified under the provisions of *36 CFR 61* and will be accomplished in compliance with the *National Historic Preservation Act of 1966 (Public Law 89-665, as amended)* and implementing regulations *36 CFR 800*, as well as with provisions contained in *Chapter 267, Florida Statutes*.

This task includes identifying and analyzing impacts to archaeological sites and historic resources within the project limits, known as the Area of Potential Effects (APE), including documentation and coordination with appropriate agencies per *Part 2, Chapter 8 of the PD&E Manual* and the *FDOT Cultural Resource Management Handbook*. Attendance at public meetings may be required.

Research Design Methodology

The **CONSULTANT** will prepare a Research Design and Survey Methodology for the project. The **CONSULTANT** will submit the Research Design and Survey Methodology to the **AUTHORITY** for approval prior to initiating fieldwork. The **CONSULTANT** will identify and map out the zones of probability for the project study area and identify previously recorded resources. The APE will be determined by the **AUTHORITY**.

Cultural Resources Assessment Survey (CRAS)

Field Work – The **CONSULTANT** will identify archaeological sites within the project area, both previously recorded and potentially eligible, and excavate the appropriate number of test pits and identify existing historic resources within the project area. The **CONSULTANT** will also locate, identify, and bound additional cultural resources included on the *Florida Master Site File (FMSF)* and structures 45 to 50 years and older depending on the length of time anticipated before construction. The **CONSULTANT** will collect enough data to document each site's significance in terms of eligibility for listing on the *National Register of Historic Places (NRHP)*.

Documentation – The CRAS will be prepared with appropriate documentation detailing the results of the survey, final assessments of resource significance, and include the FMSF form for all identified resources. The Research Design Methodology and the Pond Site Technical Memo, if required, will be included in the CRAS appendix.

Pond Site Technical Memorandum

If required, the **CONSULTANT** will identify archaeological probability and potential NRHP eligible resources for pond sites for the preferred alternative. The **CONSULTANT** will document the results of this work in a technical memorandum and include as an appendix to the CRAS.

Determination of Eligibility (DOE)

If required, the **CONSULTANT** will prepare a DOE for each resource determined to be significant. The DOE package will include the NRHP registration form and will be included as a CRAS appendix.

Case Study Report

If required, the **CONSULTANT** prepare a Section 106 Case Study Report to document the application of the Criteria of Effect.

Memorandum of Agreement (MOA)

If required, the **CONSULTANT** will assist the **AUTHORITY** with preparation of a Section 106 MOA.

State Historic Preservation Office (SHPO) Consultation Meetings

If required, the **CONSULTANT** will assist the **AUTHORITY** with coordination of a consultation meeting with SHPO.

Native American Coordination

Coordination with Native American Tribes is not required for an PEIR, however, if it is determined that the proposed improvements would impact cultural or archaeological resources which are of cultural or religious importance to Native American Tribes the **CONSULTANT** will assist the **AUTHORITY** to inform them.

Cultural Resource Committee Meetings

If required, the **CONSULTANT** will assist the **AUTHORITY** with meeting coordination with the Cultural Resource Committee.

3.8 Recreational Areas

The **CONSULTANT** will inventory all recreational properties potentially affected by any of the proposed design alternatives. The **CONSULTANT** will coordinate with the public entity with jurisdiction should impacts to public recreation areas occur. One inventory list will be prepared to address all the potential recreational properties within the study area. Cultural resources will be addressed separately.

Natural Environment

3.9 Wetlands

In accordance with *Part 2, Chapters 9 of the PD&E Manual* a Conceptual Mitigation Plan, if applicable, will be included. The level of effort for this task will be commensurate with the level of impact from the proposed improvements.

The **CONSULTANT** will survey and analyze the study area for the presence of wetlands and surface waters. The **CONSULTANT** will coordinate with the appropriate federal, state, and local agencies regarding specific permits required, significance of impacts, required mitigation, and specific concerns about the project or its impacts.

The **CONSULTANT** will attend coordination meetings with regulatory agencies regarding project issues as needed.

Natural Resource Evaluation (NRE) Memorandum

As applicable, the **CONSULTANT** will conduct and prepare an NRE Evaluation Memorandum that summarizes the effects the project will have and include a section on wetlands and/or surface waters in accordance with *Part 2, Chapter 9 of the PD&E Manual*. The Wetlands and Surface Waters section of the NRE Memorandum will include analysis of wetlands and/or surface waters within the study area, a wetland and/or surface water impact assessment, alternatives analysis, avoidance and minimization, conceptual mitigation, agency coordination, and commitments and recommendations. The **AUTHORITY** will complete the commitments and recommendations before construction begins.

Pond Siting Analysis

The **CONSULTANT** will collect necessary data to fully analyze impacts on wetlands and/or surface waters using all viable proposed storm water management alternatives and the respective infall and outfall locations as described in *Part 2, Chapter 9 of the PD&E Manual*. The **CONSULTANT** will determine the potential involvement with wetlands and/or surface waters and include this analysis in the Pond Siting Report.

3.10 Aquatic Preserves and Outstanding Florida Waters

In accordance with *Part 2, Chapters 10 of the PD&E Manual*

3.11 Water Quality

In accordance with *Part 2, Chapter 11 of the PD&E Manual*.

3.12 Wild and Scenic Rivers

In accordance with *Part 2, Chapter 12 of the PD&E Manual*.

3.13 Coastal Barrier Islands

Not applicable.

3.14 Floodplains

In accordance with *Part 2, Chapter 13 of the PD&E Manual*.

3.15 Wildlife and Habitat

In accordance with *Part 2, Chapter 16 of the PD&E Manual*, the level of effort for this task will be commensurate with the level of impact from the proposed improvements.

The **CONSULTANT** will survey and analyze the study area for the presence of federal or state designated threatened or endangered species. The **CONSULTANT** will coordinate with appropriate federal, state and local agencies for specific permits required, significance of impacts, required mitigation, and specific concerns about the project or its impacts.

The **CONSULTANT** will attend coordination meetings with regulatory agencies regarding project issues as needed.

Natural Resource Evaluation (NRE) Memorandum

As applicable, the **CONSULTANT** will conduct and prepare an NRE Evaluation Memorandum summarizing threatened and endangered species in accordance with *Part 2, Chapter 16 of the PD&E Manual*. The Threatened and Endangered Species section of the NRE Evaluation Memorandum will include analysis of potential impacts to federal and state listed species and other wildlife and habitat, conceptual mitigation requirements, standard protection measures where applicable, and a commitments and recommendations section. The **AUTHORITY** will complete the commitments and recommendations before construction begins.

Pond Siting Analysis

The **CONSULTANT** will collect necessary data to fully analyze impacts on protected floral and faunal species using all viable proposed storm water management alternatives and the respective infall and outfall locations as described in *Part 2, Chapter 16 of the PD&E Manual*. The **CONSULTANT** will determine the potential for involvement with protected floral and faunal species and include the analysis in the Pond Siting Report.

Mitigation Plan

If required, the **CONSULTANT** will prepare conceptual mitigation alternatives for impacts to listed species. This effort will consist of identification of alternative possibilities only. This task will be included in the Natural Resource Evaluation Memorandum.

3.16 Farmlands

Not applicable.

3.17 Essential Fish Habitat

In accordance with *Part 2, Chapter 17 of the PD&E Manual*.

Physical Effects

3.18 Noise

The **CONSULTANT** will perform noise analysis, noise abatement evaluation, and assessment of construction noise and vibration in accordance with the *Part 2, Chapter 18 of the PD&E Manual* and the current version of *FDOT's Traffic Noise Modeling and Analysis Practitioner's Handbook (TNM)*. The **CONSULTANT** will attend a noise study methodology meeting with the **AUTHORITY** prior to beginning analysis. The **CONSULTANT** will document the methodology and results of the noise analysis and noise abatement evaluation in the Noise Study Report (NSR). The **CONSULTANT** will provide an electronic copy of the NSR, in PDF format, as well as all TNM input/output files, and a "readme" file which supports the information documented in the report.

3.19 Air Quality

In accordance with *Part 2, Chapter 19 of the PD&E Manual*.

3.20 Contamination

The **CONSULTANT** will conduct a comprehensive assessment of contamination involvement within the study area and potential pond sites to avoid serious project impacts and delays. As part of the assessment the **CONSULTANT** will perform a regulatory database search. The **CONSULTANT** will not solely rely on the results of the database search. The **CONSULTANT** will perform the necessary analysis to complete the Contamination Screening Evaluation for all viable alternatives and use the Contamination Screening Evaluation Report (CSER) to document as described in *Part 2, Chapter 20 of the PD&E Manual*.

The **CONSULTANT** will take color photographs of all suspect sites and produce the photos in color to include in the CSER. Street addresses for each site should be identified.

The **CONSULTANT** will conduct a diligent search for monitoring wells which could be impacted during construction and mark the locations on maps and appropriate plan sheets.

3.21 Construction Impact Analysis

The **CONSULTANT** will document potential construction impacts of the project.

3.22 Identify Permit Conditions

The **CONSULTANT** will identify permit conditions and types of permits required for the project. This task includes reviewing maps and data to determine permit related information for the project. The intent of this task is to identify all needed permits and any special issues or conditions that must be considered during permit acquisition or design.

Environmental Reports

The Environmental Documents prepared by the **CONSULTANT** will comply with procedures listed in *Part 1 of the PD&E Manual* and follow the format and include content described in *Part 2 of the PD&E Manual*. The task of documentation includes preparing draft and interim reports for review and comment by the **AUTHORITY** prior to the **CONSULTANT** producing final reports and documents.

3.23 Class of Action Determination

Not Applicable.

3.24 Categorical Exclusion Type II

Prepare as necessary.

3.25 State Environmental Impact Report (SEIR)

Prepare a SEIR in accordance with *Part 1, Chapter 10 of the PD&E*

3.26 Environmental Assessment

Not Applicable.

3.27 Finding of No Significant Impact

Not Applicable.

3.28 Draft Environmental Impact Statement

Not Applicable.

3.29 Final Environmental Impact Statement

Not Applicable.

3.30 Quality Control

The **CONSULTANT** will follow the Quality Control Plan as described in Section 1.10 and include a QA/QC sheet at the front of all documents to show internal review was conducted prior to submittal to the **AUTHORITY**.

4.0 MISCELLANEOUS SERVICES

4.1 Contract and Project Files

The **CONSULTANT** will be responsible for Project Management efforts including complete setup and maintenance of a project file, monthly progress reports, schedule updates, and work effort to develop and execute sub-consultant agreements etc. The **CONSULTANT** will deliver progress reports to the **AUTHORITY** in a format as prescribed by the **AUTHORITY** no less than 10 days prior to submission of the corresponding invoice. The **AUTHORITY** Project Manager will compare the reported percentage of work completed against actual work accomplished to ensure the work is of enough quality and quantity.

Within 10 days after the Notice to Proceed the **CONSULTANT** will provide a schedule due dates to complete key milestones and tasks for the project, accompanied by an anticipated payout curve. The schedule and anticipated payout curve will be prepared in a format prescribed by the **AUTHORITY**.

4.2 Project Management Meetings and Coordination

The **CONSULTANT** will meet with **AUTHORITY** staff as needed throughout the life of the project. The **AUTHORITY** anticipates up to 24 meetings. These meetings will include progress, miscellaneous review, and other project coordination activities with the **AUTHORITY**.

4.3 Additional Services

The following services are examples of tasks which may be considered optional services. If any of these services are requested, the **AUTHORITY** project manager will coordinate with the responsible office for the appropriate scope language.

Engineering

The **AUTHORITY** may require the **CONSULTANT** to perform certain unforeseen and/or additional engineering services not currently covered under the scope of services but may be necessary for successful completion of the PD&E study. Some examples of these types of additional services may include, but not be limited to:

- *Typical Section Analysis* – The **CONSULTANT** may be required to prepare typical section alternatives which go beyond the number or scale identified in this scope of services.
- *Roadway Design Alternatives* – The **CONSULTANT** may be required to develop and evaluate additional alignment or interchanges alternatives.
- *Alternative Concept Plans* – The **CONSULTANT** may be required to develop additional concept plans for additional alignment alternatives.
- *Risk Management* – The **CONSULTANT** may need to provide Risk Management services defined by the **AUTHORITY**.

- *Pavement Type Selection Report* – The **CONSULTANT** may be required to prepare a Pavement Type Selection Report instead of a Pavement Type Selection Memo.

Other tasks not specifically mentioned may also be required.

Environmental

The **AUTHORITY** may require the **CONSULTANT** to perform certain unforeseen and/or additional environmental services not currently covered under the scope of services but are necessary for the successful completion of the PD&E study. Some examples of these types of additional services may include, but not be limited to:

- *Conceptual Stage Relocation Plan* – If relocations are required, the **CONSULTANT** may be asked to prepare a Conceptual Stage Relocation Plan.
- *Archaeological and Historical Resources* – If the project is determined to have an adverse effect on a Section 106 resource the **CONSULTANT** may be required to prepare a Section 106 Memorandum of Agreement.
- *Section 4(f) Applicability and Evaluation* – The **CONSULTANT** may be required to prepare a Section 4(f) Determination of Applicability, as well as a Section 4(f) Evaluation separately separate from the parks and recreation 4(f) document) if the project is determined to have an adverse effect on 4(f) property.

Other tasks not specifically mentioned below may also be required:

Design-Related activities

The **AUTHORITY** may require the **CONSULTANT** to perform certain unforeseen and/or additional design-related services not currently covered under the scope of services but are necessary for the successful completion of the PD&E study. Some examples of these types of additional services may include, but not be limited to:

- Develop more detail to identify impacts including right-of-way
- Special project feature(s) such as bridge structures, roadway, drainage, geotechnical, etc. which require engineering analysis beyond the PD&E study level
- Prepare a Bridge Technical Memo (BTM) with a goal of establishing the anticipated superstructure thicknesses, bridge widths, and bridge spans to support the concept plan. BTM discussion only includes bridge length and width, span arrangement, minimum clearances, one viable superstructure type, and superstructure depths. Only minimal discussion of substructure and foundation type, aesthetics, and constructability issues is needed. A preliminary bridge plan, elevation, and typical section for each bridge will be included as part of the BTM
- Detailed Bridge Hydraulic Report to include survey
- Permitting during the PD&E phase on all or portions of the project
- Permitting services may include consideration of Roadway Analysis, Roadway Plans, Drainage Analysis, and Environmental Permits, Survey, Photogrammetry, Mapping, and Geotechnical.

Other tasks not specifically mentioned below may also be required:

5.0 METHOD OF COMPENSATION

Payment will be in accordance with *Exhibit B* of this contract. Invoices will be submitted to the **AUTHORITY's** Project Manager. The **AUTHORITY's** Project Manager and the **CONSULTANT** will monitor cumulative invoiced billings to ensure reasonableness of work billed compared to the project schedule and work accomplished. Payment is subject to acceptance and approval of these items by the **AUTHORITY'S** Project Manager. If the percentage of work exceed the payout curve and schedule outlined in Section 4.1, payment will not be approved by the **AUTHORITY'S** Project Manager.

6.0 SERVICES TO BE PERFORMED BY THE AUTHORITY

The **AUTHORITY** will provide the following services and materials:

- Project data and plans relevant to project area currently on file
- All available information in the possession of the **AUTHORITY** pertaining to utility companies whose facilities may be affected by the proposed construction
- All future information in the possession of the **AUTHORITY** or obtained by the **AUTHORITY** pertaining to subdivision plans so that the **CONSULTANT** may fully evaluate and maximize the use of existing right-of-way
- Process all environmental and engineering documents including the Permit Coordination Package
- Coordinate with the State Historic Preservation Officer
- Existing **AUTHORITY** right-of-way maps
- The **AUTHORITY** will provide available FDOT crash data