

EXHIBIT A

SCOPE OF SERVICES PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDIES

Financial Project ID: **417878-1-22-01**

Work Program Item No.: **N/A**

Federal Aid Project No.: **TBD**

County Section No.: **00000**

Description: **SR 29 from CR 80-A (Cowboy Way) to US 27
Hendry/Glades Counties**

Bridge Nos.: **070033 (Bascule over Caloosahatchee River)**
050941 (N. Okaloachoochee)
050035 (Lone Pine Creek)
050033 (Cypress Branch)
050032 (York Branch)
050031 (Turkey Branch)

AS PER NEGOTIATIONS OF NOVEMBER 8, 2007

EXHIBIT A

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SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDIES

This Exhibit forms an integral part of the agreement between the State of Florida Department of Transportation (hereinafter referred to as the **DEPARTMENT**) and **URS CORPORATION** (hereinafter referred to as the **CONSULTANT**) relative to the transportation facility described as follows:

Financial Project Number: **417878-1-22-01**
Federal Aid Project No.: **N/A**
County: **Hendry/Glades**
Description: **SR 29 from CR 80-A (Cowboy Way) to US 27**
Bridge Nos.: **070033, 050941, 050035, 050033, 050032, and 050031**

PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the **CONSULTANT** and the **DEPARTMENT** in connection with the Preliminary Engineering (Conceptual Design), and Environmental Studies necessary to comply with Department procedures and to obtain Federal Highway Administration (FHWA) Location and Design Concept Acceptance (LDCA) of proposed improvements to this transportation facility.

The Project Development Process shall follow the **DEPARTMENT'S** publication titled "Project Development and Environment Manual", published **02/02/2007** and all subsequent revisions. Throughout this Scope of Services portion of this **CONSULTANT** Contract, the publication will be referred to as the "PD&E Manual". All tasks identified in this scope of work will be done in accordance with the Department's PD&E Manual, unless otherwise stated.

The PD&E Manual incorporates all the requirements of the National Environmental Policy Act (NEPA); Federal law and executive orders; applicable Federal regulations included in the Federal Highway Administration Federal-Aid Policy Guide; and applicable State laws and regulations including Chapter 339.155 of the Florida Statutes. The project documentation prepared by the **CONSULTANT** in accordance with the PD&E Manual shall therefore be in compliance with all applicable State and Federal laws, executive orders, and regulations.

The **CONSULTANT** shall perform those engineering services required for LDCA studies, including consideration of all social, economic, environmental effects, and mitigation as required by the FHWA and/or the Project Development and Environment (PD&E) Manual, along with the required environmental documents, engineering reports, preliminary plans, public 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 additionally which of the items of work will be the responsibility of the **CONSULTANT** or the **DEPARTMENT**.

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

STUDY OBJECTIVE

The **CONSULTANT** is to study the widening of SR 29 from CR 80-A (Cowboy Way) to US 27, Hendry and Glades Counties, Florida.

Included in the study will be consideration of a minimum of two four lane alternatives, special treatment and/or additional lanes at major intersections where necessary to provide intersection operation at Level of Service D or higher, and the placement of a new bridge structure.

STUDY REQUIREMENTS AND PROVISIONS FOR WORK

Governing Regulations

The services performed by the **CONSULTANT** shall comply with all applicable **DEPARTMENT** Manuals and Guidelines. The **DEPARTMENT'S** Manuals and Guidelines incorporate, by requirement or reference, all applicable State and Federal regulations. The current edition, including updates, of the following **DEPARTMENT** Manuals and Guidelines shall be used in the performance of this work. It is understood that AASHTO criteria shall apply as incipient policy.

- Florida Statutes
- Florida Administrative Codes
- Applicable Federal Regulations, U.S. Codes and Technical Advisories
- Project Development and Environment Manual
- ETDM Planning and Programming Manual
- Sociocultural Effects Evaluation Handbook
- Public Involvement Handbook
- Plans Preparation Manual
- Interchange Handbook (525-030-160)
- Design Standards (625-010-003)
- Highway Capacity Manual
- Manual on Uniform Traffic Studies (MUTS)
- Minimum Standards for Design, Construction, and Maintenance Streets and Highways (Florida Greenbook) (625-000-015)
- Guide for the Design of Bicycle Facilities (AASHTO)
- Florida Pedestrian Facilities Planning & Design Handbook
- Right-of-Way Mapping Handbook (550-030-015)
- Right-of-Way Procedures Manual (575-000-000)
- Location Survey Manual (550-030-101)
- EFB User Guide
- Drainage Manual
- Department's Stormwater Facilities Handbook
- Outline Specifications - Aerial Surveys/Photogrammetry
- Structures Design Guidelines (625-020-154)
- CADD Manual (No. 625-050-001)
- CADD Production Criteria Handbook
- FDOT Quality/Level of Service Standards Handbook Software & Tables
- K-Factor Estimation Process
- Project Traffic Forecasting Procedure (525-030-120)
- FDOT Highway Landscape Guide
- Basis of Estimates Manual

Liaison Office

The **DEPARTMENT** will designate a Liaison Office and a Project Manager who shall be the representative of the **DEPARTMENT** for the Project. While it is expected the **CONSULTANT** shall seek and receive advice from various State, regional, and local agencies, the final direction on all matters of this Project remain with the Project Manager.

Key Personnel

The **CONSULTANT'S** work shall be performed and directed by the key personnel identified in the proposal presentations by the **CONSULTANT**. Any changes in the indicated personnel shall be subject to review and approval by **DEPARTMENT**.

Meetings and Presentations

The **CONSULTANT** shall attend a Notice to Proceed Meeting with **DEPARTMENT** representatives, where relevant project information will be provided by the **DEPARTMENT**, along with procedures for administering the contract. The **CONSULTANT** and his staff shall also be available with no more than a five (5) workday notice to attend meetings or make presentations at the request of the **DEPARTMENT**. Such meetings and presentations may be held at any hour between 8:00 A.M. and 12:00 midnight on any day of the week. The **CONSULTANT** may be called upon to provide maps, press releases, advertisements, audiovisual displays and similar material for such meetings.

Quality Control

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

Prior to submittal of the first invoice, the **CONSULTANT** shall submit to the **DEPARTMENT'S** Project Manager for approval the proposed method or process of providing Quality Control for all work products. The Quality Control Plan shall identify the products to be reviewed, the personnel who perform the reviews, and the method of documentation.

Correspondence

Copies of all written correspondence between the **CONSULTANT** and any party pertaining specifically to this study shall be provided to the **DEPARTMENT** for their records within one (1) week of the receipt of said correspondence.

Submittals

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

<u>Public Involvement</u>	<u>Copies:</u>
Public Involvement Plan	02
Advance Notification Package	CD ONLY
Public Hearing Transcript	02
<u>Engineering Items:</u>	<u>Copies:</u>
Utilities Coordination Package	02
Typical Section Package	N/A
Location Hydraulics Report	02
Drainage/Pond Siting Report	02
Geotechnical Report	02
Conceptual Design Roadway Plan Set	03
Design Variations and Exceptions Package	03
Value Engineering Information Report	03
Boat Survey	03
First Draft Project Development Summary Report	03

Second Draft Project Development Summary Report	03
Final Project Development Summary Report (Signed and Sealed)	03

<u>Environmental Items:</u>	<u>Copies:</u>
Draft Environmental Assessment	03
Environmental Assessment	03
Finding of No Significant Impact	03
Conceptual Stage Relocation Plan	02
Cultural Resource Assessment	03
Section 4(f) Determination of Applicability (recreational)	03
Section 4(f) Evaluation	03
Wetlands Evaluation Report	03
Water Quality Impact Evaluation	01
Endangered Species Biological Assessment	03
Permits Coordination Memo	02
Noise Study Report	03
Air Quality Report	NA
Contamination Screening Evaluation Report	03

Upon completion of the study, the **CONSULTANT** shall deliver to the **DEPARTMENT**, in an organized manner, all project files, maps, sketches, worksheets, and other materials used or generated during the study process.

Computer Automation

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. The **DEPARTMENT** makes available software to help assure quality and conformance with the policy and procedures regarding CADD. 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. Additional related information is found in the ***FDOT Plans Preparation Manual***.

All computer disks shall be scanned for viruses prior to submitting to FDOT. Failure to scan for viruses may result in a lower Consultant work performance evaluation.

Coordination with Other Consultants and Entities

The **CONSULTANT** is to coordinate their work with any ongoing and/or planned projects that may affect this study.

The **CONSULTANT** is to 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.

Project Commitments from ETDM

1. The **CONSULTANT** is to coordinate with any agencies and/or entities that require further coordination through the ETDM Process.
2. The FFWCC and a large property owner are engaged in development of a conservation plan. The Department will initiate and continue coordination with the parties involved to determine how we may integrate our improvement with their plan.
3. The **DEPARTMENT** will ensure that the Glades County Comprehensive Plan is updated to reflect this project.
4. Bilingual public involvement will be conducted for this project.

Optional Services

At the **DEPARTMENT'S** option, the **CONSULTANT** may be requested to provide final design and plans preparation services or expert witness services for right-of-way acquisition. The fee for these services shall be negotiated 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). A supplemental agreement for the additional services shall be executed in accordance with paragraph 2.00 of the standard consultant agreement.

At the **DEPARTMENT'S** option and authorization, the **CONSULTANT** may be required to perform certain unforeseen engineering, environmental and/or public involvement services that are not covered under this scope of services.

1.0 PUBLIC INVOLVEMENT

Public involvement includes communicating to and receiving input from all interested persons, groups, and government organizations regarding the development of the project. The **CONSULTANT** shall coordinate and perform the appropriate level of public involvement for this project as outlined in **Part 1, Chapter 11, and Part 2, Chapter 9 of the PD&E Manual, the FDOT Public Involvement Handbook** and the following sections.

The **CONSULTANT** shall provide to the **DEPARTMENT** drafts of all Public Involvement collateral (i.e., newsletters, property owner letters, advertisements, etc.) associated with the following tasks for review and approval at least five (5) business days prior to printing and / or distribution.

1.1 Public Involvement Program

The **CONSULTANT** will prepare a Public Involvement Program for the project. The program must be in written form and incorporated into the project file.

1.2 Public Involvement Data Collection

The **CONSULTANT** shall assist the **DEPARTMENT** with data collection and in preparing responses to any public inquiries from the public involvement process.

1.3 Notice of Intent

N/A

1.4 Advance Notification

At the beginning of the project, the **CONSULTANT** shall prepare the Advance Notification and transmittal letter as per the new, updated Part 1, Chapter 3 of the PD&E Manual. Distribution of the AN Package will be via CD.

1.5 Scheduled Public Meetings

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

- Elected Officials/Agency Kick-off /Letter (including Federally Recognized Tribes) LETTER ONLY
- City and County Officials
- Stakeholder's Group Meetings
- Corridor Workshop – This meeting will have NO VIDEO or POWERPOINT. Boards and simple graphic displays ONLY.
- Alternatives Public Meeting – This meeting will have a VIDEO PRESENTATION to include still renderings of alternatives from the perspective of (1) facing north on Main Street and NW from Baron Park

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

- Scripts or agenda for presentation
- Handouts
- Graphics for presentation
- Meeting equipment set-up and tear-down
- Legal and/or display advertisements. (The **CONSULTANT** will pay the cost of publishing.)
- Letters for notification of elected and appointed officials, property owners and other interested parties (The **CONSULTANT** will pay the cost of first class postage.)

- News releases, for use three to five days prior to meeting
- Summary notes of meetings to be provided to the Department no later than 5 business days after the meeting.
- Briefing and debriefing of Department staff

The **CONSULTANT** will investigate potential meeting sites to advise the **DEPARTMENT** on their suitability. The **CONSULTANT** 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 **DEPARTMENT'S** Project Manager.

It is estimated that there will be one (1) Public Workshop during the study.

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 or public agencies. The **CONSULTANT'S** participation will be limited to participation during the meeting, note taking, and summarizing the meeting in a memo to the file. It is estimated that there will be eight (8) meetings.

1.7 Public Hearing

The **CONSULTANT** shall provide all the support services listed in Sections 1.2 and 1.5 above, and in addition shall prepare:

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

- All elements of the multi-media presentation, which will include a video. This meeting will have a VIDEO PRESENTATION to include still renderings of alternatives from the perspective of (1) facing north on Main Street and NW from Baron Park
- Graphics (to be mounted on boards)
- Displays of plans and report(s) for the public display
- Brochures or handouts
- Public advertisements
- Court Reporter(s)
- Briefing and debriefing of Department staff

The **CONSULTANT** will procure a verbatim transcript of the Public Hearing. The **CONSULTANT** will combine the transcript with any other comments received by the DEPARTMENT as part of the public hearing record, and affidavits of publication of legal ads, and will provide copies of the transcript for the **DEPARTMENT'S** use. The **CONSULTANT** will also prepare a Public Hearing Summary attached to the Public Hearing Transcript.

1.8 Location and Design Concept Acceptance

A Location and Design Concept Acceptance notification shall be prepared by the **CONSULTANT** according to Part 1, Chapter 8 of the PD&E Manual. This notice requires a quarter-page legal

display advertisement to be published in the areas newspaper(s) having the largest daily circulation (the same newspaper(s) the Public Hearing was advertised in). This notice is published and paid for by the CONSULTANT. DEPARTMENT review prior to publication is required.

1.9 Special Public Involvement Requirements

- Identify and Inspect Public Meeting Sites: Prospective sites for any public meetings to be held shall be inspected for suitability. Consideration shall be given to location, seating capacity, sound system, lighting, display space and any other physical characteristics, which would influence the viability of this site, including compatibility with the terms of the Americans with Disabilities Act of 1990. The CONSULTANT shall make all arrangements for use of the meeting facility for the Public Information Workshop(s) and Public Hearing including payment of any rental fees, if applicable.
- Correspondence: Within three days of the receipt or mailing of all written correspondence between the **CONSULTANT** and any party pertaining to this study, copies shall be provided to the **DEPARTMENT** for their records. The **CONSULTANT** shall assist the **DEPARTMENT** in preparing responses to any public inquiries as a result of the public involvement process.
- Newsletters: The **CONSULTANT** shall prepare newsletters at various key points during the study. The newsletters shall be mailed by the **CONSULTANT** to elected officials, property owners, businesses and interested persons included on the mailing list compiled by the **CONSULTANT**. **DEPARTMENT** review prior to mailing is required. **Four (4) newsletters will be produced.**
- Comments and Coordination Report: The Comments and Coordination Report shall contain, as a minimum, all documentation of the public participation accomplished throughout the study period. This report should summarize and respond to the comments received from the Public Involvement, Advance Notification, coordination with local officials and agencies, public meetings, etc. as part of Part 2, Chapter 31 of the PD&E Manual. The Comments and Coordination Report shall be submitted as part of the final PDSR. Large amounts of comment forms may be attached as pdf files on a disk. This is not a stand-alone document. It is simply the bound collection of comments and responses from the project.
- Project Web Site: The **CONSULTANT** will create a project web site for this project. The project is expected to take up to 30 months. This site will have a distinct address on the World Wide Web (www.SR29LaBelle.com). The address must be usable for the entire life of the project, not just the PD&E phase. A link will be established on the Florida Department of Transportation home page as well as the **CONSULTANT'S** home page. To allow for input via E-mail links, meeting information and report summaries will be available for viewing and downloading. Limited graphics will be available due to the size and downloading time for many graphical applications. The web site must be updated monthly. The web site will contain a minimum of six pages:
 - 1) A facts page (home page) - The facts page will consist of a brief overview of the project, and the need for the project.
 - 2) A Project Overview page – This page is the plain language page that appears first.
 - 3) A PD&E definition page - A link to this site will appear wherever the acronym PD&E appears on any of the subsequent pages. Give a brief overview of how PD&E is done and the possible outcomes.
 - 4) A project information page - The project information page will have specific project information as well as results of workshops, hearings, etc. This will be updated to add or delete alternatives being considered as necessary.
 - 5) A public involvement page - The public involvement page will contain a general overview of proposed meetings. This will include Public Information Meetings,

Public Workshops, Speaker's Bureau, Neighborhood Homeowners Association Meetings, Public Hearing, and any other meeting the **DEPARTMENT** would like added to the site. The page will also contain an area where viewers may enter their name and address (both are to be mandatory inputs) to be added to the mailing database. The Project Manager's name will be listed as a contact with his FDOT mailing, and E-mail addresses listed as well as his telephone and fax at the District Office. This page will also contain all above information listed for the Department's Project Manager on the subscription page. All pages will be linked to the public involvement page.

- 6) A project schedule page - The project schedule will contain a brief generalization of the milestones for this project. Milestones will be taken from the schedule developed by the **CONSULTANT**, as approved by the **DEPARTMENT**. List milestones by seasons of the year rather than by actual dates. Shifts in the schedule will be reflected in this page as they occur.

- 7) Will contain a secured password protected page for agency coordination.

- Linkage: This project will be linked to the FDOT web site and the ETDM Public Access Site in accordance with **DEPARTMENT** rules and specifications. The **CONSULTANT** is directed to contact District One's Office of Information Services (OIS) through the Project Manager before setting up the web site. All web site development activities will be coordinated with OIS in the Bartow District One Headquarters Office. In addition, the Website will have a participating agency page, accessible to only registered participants, that can be used to share documents for review.
- Videos, Renderings, etc.: The **CONSULTANT** shall prepare two (2) audio visual presentations for public meetings. See Section 1.5 and 1.7 for presentation requirement related to the Public workshop and hearing. All renderings will be from two (2) perspectives (1) facing north on Main Street and (2) facing NW from Baron Park. A total of 14 renderings will be produced.
- Presence at Local Events: The **CONSULTANT** will set up and man a booth at specified large events in the LaBelle area, for example, the annual Swamp Cabbage Festival, which is held in February of each year. Two (2) URS staff will attend three (3) festivals.

1.10 Quality Control

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

2.0 ENGINEERING ANALYSIS AND REPORTS

The **CONSULTANT** shall coordinate and perform the appropriate level of engineering analysis for this project as outlined in *Part 1, Chapter 9 of the PD&E Manual* and the following sections.

Data Collection

Upon notice to proceed, the **CONSULTANT** shall begin preliminary assessments of the study corridor from an engineering standpoint. This task is largely of a data gathering nature. This activity consists of collecting various information and materials relative to the performance of engineering analyzes within the study area. The information should include all data necessary to perform adequate evaluation of the location and design of a transportation facility.

2.1 Field Review

The **CONSULTANT** shall conduct all anticipated field trips needed to collect engineering data.

2.2 Aerial Photography

Use Aerial Photography as a basis for plotting various data necessary for both engineering and environmental analysis, alternative corridor and design studies, and the development of the 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 furnish the necessary aerial photography for use in the study. Aerial photography shall be prepared for the following uses at the noted scales:

Overall Project Location Map	1"=400'
Drainage Map	1"=400'
Concept Plans	1"=200'
Downtown Area	1"=50'

2.3 Survey Coordination

This task is for the **CONSULTANT** to coordinate with survey regarding project requirements, review of survey data, and scheduling. Additional spot elevations may be needed in support of the traffic noise analysis discussed in Section 3.15 (Noise). As stipulated in Section 3.15, the need for and number of additional spot elevations will be determined by the **CONSULTANT** in coordination with the **DEPARTMENT**. Assume up to twenty (20) spot elevations will be required.

2.4 Existing Roadway Characteristics

The **CONSULTANT** shall collect all available data on the existing conditions and characteristics of the roadway. The **DEPARTMENT** shall provide (when possible) all as-built or similar plans.

2.5 Existing Structure Characteristics

The **CONSULTANT** shall collect all available data on the existing conditions and characteristics of the structures in the project. The **DEPARTMENT** shall provide (when possible) all as-built or similar plans.

The CONSULTANT shall develop a Technical Memorandum to discuss the viability of the rehabilitation of the existing bascule bridge. This discussion will be based on the results of concrete core sample compression tests and chloride testing of those cores.

2.6 Traffic Data

The DEPARTMENT will furnish the traffic memorandum:

The CONSULTANT will analyze the traffic projections provided initially by the DEPARTMENT, and report to the Project Manager concerning apparent inconsistencies. The CONSULTANT will provide the Project Manager with support and advice in procuring acceptable revised Traffic Projections.

2.7 Crash Data

The **CONSULTANT** shall obtain available data from **DEPARTMENT'S** Database and local sources for various highway segments required. Obtain data for previous five years. The data collected shall include the number and type of crashes, crash locations, number of fatalities and injuries, and estimates of property damage and economic loss. This information will not be published for public consumption.

2.8 Existing Signage Inventory (Limited Access Only)

N/A

2.9 Utilities & Railroads

The **CONSULTANT** shall obtain information in accordance with Part 2, Chapter 10 of the PD&E Manual. The DEPARTMENT will provide ALL coordination with the railroad.

2.10 Transportation Plans

The **CONSULTANT** shall obtain plans for all modes of transportation including surface, transit and non-motorized modes. The following plans or studies should be obtained:

- Urban Area Transportation Study, and if applicable, County Cost Feasible and Needs Plans
- Local Comprehensive Plans; city and county
- Transit; rail, bus, other
- Non-motorized modes, including bikeways and pedestrian walkways

The **CONSULTANT** shall identify all condemnation relief ordinances adopted by the cities and counties affected by the project and the consultant shall provide copies of the ordinances to the Department. Condemnation relief ordinances generally include but are not limited to provisions in zoning codes and other land use regulations which provide that (1) non-conformities created by acquisitions by condemnation or under threat of condemnation are deemed conforming without further action (or with approval by the zoning administrator), or (2) the proposed reconstruction of the site ("cure") is deemed conforming without further action (or with approval by the zoning administrator) as long as the "cured" non-conformity is no more non-conforming than the uncured condition.

2.11 Soils

The **CONSULTANT** shall review the United States Department of Agriculture, Geological Survey, Natural Resource Conservation Service (formerly Soil Conservation Service) Maps and summarize the findings.

The CONSULTANT shall perform 2, 125-ft deep SPT borings and provide foundation discussion for structural alternatives.

2.12 Base Map

The **CONSULTANT** shall develop a CADD database that includes existing characteristics. CADD data base information shall be compatible for use on aerial photography used for public hearing presentations, corridor maps, and concept plans. A total of 27 sheets will be developed as part of the Base Mapping.

Needs

2.13 Safety

Based on the information obtained from the crash data and from information gathered and presented in the purpose and need statement of the ETDM Programming Screening Summary Report, the **CONSULTANT** shall identify project needs associated with the safety of the existing facility.

2.14 Analysis of Existing Conditions

The **CONSULTANT** shall analyze the existing conditions in order to identify any deficiencies that are to be identified in the Needs section.

2.15 Purpose and Need Statement

The **CONSULTANT** shall update and verify the purpose and need for the project from the Programming Summary Report as outlined in *Part 2, Chapter 5 of the PD&E Manual*.

Design Analysis

Utilizing the data collected as part of this Scope of Services, the **CONSULTANT** shall perform the engineering analysis necessary to complete the project development process. The task of engineering analysis will be ongoing throughout the duration of the project and will be performed with consideration to the results of the environmental impacts analysis.

After selection of viable corridor(s), the **CONSULTANT** shall develop and analyze alternate conceptual design alternatives. The development of the design alternatives shall consider context sensitive solutions. The **CONSULTANT** shall develop and evaluate all viable alternatives in order to address the project needs.

2.16 Corridor Analysis

The CONSULTANT shall investigate the area surrounding the existing facility to determine reasonable corridor alternative considerations. This work will be done as a Land Suitability Mapping exercise, using GIS. No more than three alternative corridors will be investigated and developed.

The **CONSULTANT** shall use aerial photography to identify possible corridor locations while giving consideration to the following alignment controls which may influence corridor location:

- Available right-of-way through which an improvement providing acceptable service could be routed
- Cultural features including public and private development
- Natural features which could be impacted by the project
- Logical termini giving consideration to directness, length, and service

The CONSULTANT shall use Land Suitability Mapping to analyze and evaluate each corridor alternate to a point of rejection or selection as a viable corridor. The impacts for each alternative shall be identified and expressed in a form suitable for comparison to other corridor alternatives. It will be necessary to analyze in sufficient detail to identify enough differences to select the most viable corridor(s) that would be in the best overall public interest.

- Corridor Report: The CONSULTANT shall include a discussion of the corridor analysis in the Environmental Assessment and the PDSR. This will document the results of the corridor analysis. The discussion shall summarize the project need, discuss the corridors evaluated, and provide a recommendation for the best corridor.
- Corridor Base Maps: The CONSULTANT will draw Corridor Base Maps on Aerial Photography. The Base Maps will be prepared at a scale of 1"= 400'.

2.17 Traffic Analysis

N/A

2.18 Typical Section Analysis (Development)

The **CONSULTANT** shall develop all appropriate typical section alternatives for the project. These will include the department's standard typical sections, and any typical sections that may result in minimizing right of way, and incorporating context sensitive solutions. No Typical Section Memorandum will be produced.

Typical sections to be evaluated are as follows:

- Bridge (5 total)– (1) moveable on existing structure, (2) moveable on existing piers, (3) high-level fixed [new structure, and (4) the existing 5 fixed structures
- Roadway [4 total] – (1) one-way pair [Main and Bridge Streets], (2) 4-lane urban, (3) 4-lane suburban, and (4) 4-lane rural,

2.19 Roadway Design Alternatives

The CONSULTANT shall develop three (3) alternatives at a minimum.

2.20 Prepare Alternative Concept Plans

The **CONSULTANT** will prepare alternative concept plans.

2.21 Drainage and Floodplain Analysis and Pond Siting Report

The **CONSULTANT** shall perform preliminary drainage design in order 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 all viable alternate alignments.

The **CONSULTANT** shall prepare a Pond Siting Report for the project in accordance to the Department's Stormwater Facilities Handbook. The **CONSULTANT** shall identify one pond per basin.

The **CONSULTANT** shall prepare a Location Hydraulics Report for the project in accordance with Part 2, Chapter 24 of the PD&E Manual. This document shall meet the requirements of Chapter 7 of the Drainage Manual. An assessment of floodplain encroachment will be included in the document. THE LHR shall include:

- Crossdrain analysis – 12 crossdrains

- Analysis of 5 fixed bridges

The **CONSULTANT** shall identify any historic maintenance problems involving drainage or flooding. Data Collection shall include scour reports and other information where available. The history and past hydraulic performance should be noted on all structures.

The **CONSULTANT** shall coordinate with FEMA, the appropriate Water Management District and local agencies to obtain and evaluate hydraulic/hydrologic models of the existing canal/control structures system and to estimate/determine consistency with regulated flood ways. This includes a methodology meeting with the Water Management District to determine upcoming rule changes that may affect the permitting of this project. This meeting shall be documented by the CONSULTANT and include the following:

- List of attendees
- Issues raised and appropriate resolutions
- Clarifications of criteria and methodologies

The **CONSULTANT** shall determine the risk and significance of the encroachment. The encroachment categories are to be listed in the report. These can be found in the PD&E Manual, Part 2, Ch. 24.

The CONSULTANT shall define the Drainage effort in the following way:

- Rural Drainage – assumes 14 basins.
- Urban Drainage – assumes 4 basins, and the investigation of alternative methodologies.

2.22 Structures

The **CONSULTANT** will evaluate conceptual structures vertical and horizontal alignments.

Alternatives to include:

- Two (2) movable
- One (1) high-level fixed
- One (1) bascule rehabilitation
- Five (5) fixed structures

ETDM Issues:

- The USCG has determined that “if a fixed bridge is pursued and the selected alternative, a CG Bridge Permit will be required.” The Guide clearance for a fixed bridge on the Caloosahatchee River is 90 feet horizontal and 65 feet vertical above high water. A Coast Guard Bridge Permit will be required for this project.
- The Downtown LaBelle Historic District and community have a strong desire to preserve the existing historic bridge in the historic district.

2.23 Access Management

The **CONSULTANT** shall review the Department's State Highway System Access Management Classification System and Standards (Rule 14-97) and determine their application to the project.

The **CONSULTANT** shall determine the proper access classification and standard to be applied to the project and coordinated with the Districts' Access Management Review Committee.

The proposed access management plan shall be presented as part of the public involvement process. If an Access Management Classification/Reclassification Public Hearing is required, it will be combined with another public meeting.

NO CHANGE TO ACCESS MANAGEMENT ARE ANTICIPATED

2.24 Multi-modal Accommodations

The **CONSULTANT** will coordinate with transit and local government officials in order to determine what multi-modal accommodations will be studied and evaluated as part of the project alternatives. This task only includes existing and planned multi-modal facilities.

2.25 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, the cost estimate will be included in the cost estimate for that alternative.

2.26 Geotechnical Coordination

This task is for the **CONSULTANT** to coordinate with the geotechnical staff regarding project requirements, review of geotechnical data, and scheduling.

2.27 Intelligent Transportation Systems

N/A

2.28 Utilities and Railroads

Based on the coordination with the utility companies along the project the **CONSULTANT** shall prepare a Utility Assessment Package as described in Part 2, Chapter 10 of the PD&E Manual. The **CONSULTANT** will also address impacts to existing and proposed railroads. The DEPARTMENT will provide ALL coordination with the railroad.

2.29 Other Engineering Services

- IMR/IJR – N/A
- Lighting Justification Report – N/A
- Other Design Services – N/A
- Survey

Additional spot elevation may be needed in support of the traffic noise analysis discussed in Section 3.19 (Noise). As stipulated in Section 3.19, the need for and number of additional spot elevations will be determined by the CONSULTANT in coordination with the DEPARTMENT. Assume up to twenty (20) spot elevations will be required.

Comparative Analysis of Alternatives

The **DEPARTMENT** will determine which viable alternative(s) to further evaluate through the public involvement process and environmental analysis. The possibility exists that the No-Build alternative may be selected at this point.

2.30 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** shall present their recommendations to the **DEPARTMENT** for consideration.

2.31 Selection of Preferred Alternative(s)

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

2.32 Conceptual Design Plans (Preferred)

The **CONSULTANT** will finalize concept plans for the preferred alternative that include refinements from the public hearing.

2.33 Identify Construction Segments

N/A

2.34 Value Engineering

This project will be subject to a Value Engineering (VE) review during the study prior to the Public Hearing. VE reviews will be conducted by a multi-disciplined team of personnel selected by the **DEPARTMENT** whose purpose will be to consider value improvements to proposed concepts and designs.

Prior to initiating the value engineering study(ies), the **CONSULTANT** shall provide to the **DEPARTMENT** any information that is pertinent to the selection of the **DEPARTMENT'S** preferred concept. The information needs to be logically organized in order to facilitate the value engineering teams understanding of the project. At a minimum, the information given to the value engineering team will consist of:

- Traffic information, including latest traffic projections and if applicable design traffic analysis
- Aerial photography depicting project concepts prepared to the scales specified in this scope
- Support and backup information for R/W estimates which may include if applicable:
 - Square foot market value for areas affected by each proposed conceptual design.
 - R/W to be purchased (no. parcels & cost)
 - Business relocations (no. locations & cost)
 - Residential relocations (no. locations & cost)
 - Business damages (no. locations & est. cost)
- Construction cost estimate for each alternative developed
- Any environmental analysis associated each of the alternatives under consideration
- Results of any public involvement associated with the project
- Any commitments to the local governments
- Provide a decision matrix that shows the criteria and the weighted impact used by the **CONSULTANT** to make decisions on the preferred concept. Criteria such as safety, operation and public acceptance must be fully documented.

Value Engineering is an event oriented function and will occur at specific times in the development process of the project. The information described above will vary in degree of detail depending on the point in time when the value engineering study is conducted.

The **CONSULTANT** Project Manager and Project Engineer shall meet with the VE team to explain development of initial concepts and the rationale for such. The **CONSULTANT** Project Manager and Project Engineer will be available to the value engineering team for clarification of the information used during the value engineering study.

VE team recommendations concerning modified or additional concepts, approved by District Management, will be carried forward to the alternatives analysis phase of the PD&E study.

2.35 Construction Cost Estimates

The **CONSULTANT** shall develop construction cost estimates and updates for design alternatives. The cost estimates are to be developed using the Department's long range estimating (LRE) program. The LRE will updated as follows:

- Initial estimates will include – 3 initial rdwy alternatives + 2 movable bridge alts + 1 rehab alt + 1 high-level + 5 fixed structures
- 2 updates of the initial (as detailed in bullet 1)
- 1 updated of the preferred alternative
- These are INCLUSIVE of WORK PROGRAM UPDATES

2.36 Right Of Way Cost Estimates

The **CONSULTANT** is to prepare maps and parcels for the **DEPARTMENT'S** ROW staff to prepare estimates.

ROW Mapping to include initial 3 alts plus preferred alternative

2.37 Typical Section Package

N/A

2.38 Design Exceptions and Variations

The DEPARTMENT will prepare any Design Exception and Variations Package as appropriate.

2.39 Project Development Summary Report (PDSR)

If required, the **CONSULTANT** shall prepare a Project Development Summary Report in accordance with Part 1, Chapter 4 in the PD&E Manual.

2.40 Quality Control

The CONSULTANT shall include a QA/QC sheet in the front of all documents showing that the documents went through an internal review prior to submittal to the DEPARTMENT.

3.0 ENVIRONMENTAL ANALYSIS AND REPORTS

The **CONSULTANT** shall coordinate and perform the appropriate level of environmental analysis for this project as outlined in the PD&E Manual and the following references.

The **CONSULTANT** shall utilize the Programming Summary Report and graphical information from the Environmental Screening Tool (EST) available at <http://www.dot.state.fl.us/emo>, or other appropriate database. Data base information shall be compatible for use on base maps used for public presentations, corridor maps, and alternative plans.

The level of effort for the following work activities shall be commensurate with the level of impact identified in the final Programming Summary Report. If the Summary Degree of Effect from the Final Programming Summary Report is "No Involvement", or "None", for an activity, the activity will be marked N/A in the PDSR.

Sociocultural Effects

The CONSULTANT shall collect data regarding the following Sociocultural issues. Pertinent data shall be collected, analyzed and summarized in the appropriate section of the Project Development Summary Report (PDSR). Pertinent data shall also be displayed on the base map, as applicable. These issues shall be analyzed in accordance with Part 2, Chapter 9 of the PD&E Manual and the Sociocultural Effects Evaluation Handbook (available at <http://www.dot.state.fl.us/emo>).

3.1 Land Use Changes

The ETDM Screening has resulted in a Summary Degree of Effect of Moderate. Issues identified as needing further study include:

- The project is not consistent with Hendry or Glades Counties Comprehensive Plans.

In addition, the CONSULTANT shall identify any developments that have the potential for dedication of highway right-of-way or joint use ponds and bring these to the attention of the DEPARTMENT.

3.2 Social

The ETDM Screening has resulted in a Summary Degree of Effect of Moderate. Issues identified as needing further study include:

- Many community facilities and focal points, such as schools, churches, parks, emergency facilities, social services, day care facilities, retirement centers, community centers, and retail locations are located adjacent to the project.
- There is a large (greater than 40%) Hispanic population in the project areas. Bilingual public involvement will be required for this project.
- The residents associate with downtown LaBelle with old town charm. Context sensitive solutions may be appropriate.

3.3 Economic

The ETDM Screening has resulted in a Summary Degree of Effect of Enhanced. Issues identified as needing further study include:

- An Enterprise Zone covering Hendry and Glades counties, goods and freight circulation and the use of SR 29, outreach to the business community.

3.4 Mobility

The ETDM Screening has resulted in a Summary Degree of Effect of Enhanced. Issues identified as needing further study include:

- SIS facility, emergency evacuation route, transportation disadvantaged access, and bicycle and pedestrian facilities.

3.5 Aesthetics

The ETDM Screening has resulted in a Summary Degree of Effect of Moderate. Issues identified as needing further study include: noise and vibration sensitive sites, and preservation of the existing historic bridge.

3.6 Relocation Potential

The ETDM Screening has resulted in a Summary Degree of Effect of Minimal. Issues identified as needing further study include:

- Right-of-way maybe needed for some portions of the roadway, depending upon which alternative is selected.
- Conceptual Stage Relocation Plan: The **CONSULTANT** shall collect the data and perform the analysis necessary to complete a Conceptual Stage Relocation Plan for the proposed alternatives, if applicable.

Cultural Resources

3.7 Archaeological and Historic Resources

ETDM Issues:

- Coordination with the Miccosukee and Seminole Tribes will be a part of this project.
- 130 previously recorded historic resources, 4 potentially eligible. 5 previously recorded historic bridges, 1 potentially eligible. 8 previously recorded archaeological sites, one that may be a shipwreck.

The **CONSULTANT** shall implement a Cultural Resources study to completely analyze the impacts to all cultural resources by all proposed alternatives, including all viable ponds. All work shall be conducted by a professional qualified under the provisions of 36 CFR 61, and be done in compliance with the National Historic Preservation Act of 1966 (Public Law 89-665, as amended) and the implementing regulations (36 CFR 800) as well as with the provisions contained in Chapter 267, Florida Statutes.

This task includes identifying and analyzing impacts to archaeological sites and historic resources within the project Area of Potential Effects, including documentation and coordination with appropriate agencies as per Part 2, Chapter 12 of the PD&E Manual. In addition, attendance at public meetings may be required. The CONSULTANT will also review and address any resources listed in the Environmental Screening Tool (EST) by the SHPO ETAT member.

- a. Research Design Methodology: The CONSULTANT will prepare a Research Design and Survey Methodology for the project, to be submitted to the DEPARTMENT for approval prior to the initiation of field work. The CONSULTANT shall identify and map out the zones of probability for the project study area, and identify any previously recorded resources. The Area of Potential Effect (APE) will be determined (including pond sites).

- b. Cultural Resources Assessment Survey (CRAS): Field Work: The CONSULTANT shall identify any archaeological sites within the project area, both previously recorded and potentially eligible, and excavate the appropriate number of test pits. The CONSULTANT shall identify any existing historic resources within the project area, both previously recorded and potentially eligible. The CONSULTANT will also locate, identify and bound any additional cultural resources included on the Florida Master Site File (FMSF) and all structures 45 to 50 years older (depending upon the length of time anticipated before construction). Enough data will be collected to document each site's significance in terms of eligibility for listing on the National Register of Historic Places (NRHP).
- c. Documentation: The CRAS will be prepared with appropriate documentation detailing the results of the survey and the final assessments of resource significance, and including a FMSF form for all identified resources. The Research Design Methodology and the Pond Site Technical Memorandum will be included in the CRAS appendix.
- d. Pond Site Technical Memorandum: The CONSULTANT will identify and clear pond sites for the preferred project alternative. The results of this work are to be documented in a technical memorandum, which will be included as an appendix to the CRAS.
- e. Determination of Eligibility (DOE): If required, the CONSULTANT will prepare a DOE for each resource determined to be significant. The DOE package will include an NRHP registration form, and the DOEs will be included as a CRAS appendix. One (1) DOE is assumed.
- f. Case Study Report: If required, a Section 106 Case Study Report, documenting the application of the Criteria of Effect, will be prepared. The Case Study Report will include:
- The LaBelle Historic District
 - Caldwell House
 - Forrey Building and Annex
 - Hendry County Courthouse
- g. Memorandum of Agreement (MOA): The CONSULTANT will assist the DEPARTMENT with the preparation of a Section 106 MOA, if required.
- h. Section 4(f) Evaluation: The CONSULTANT will prepare and coordinate a Section 4(f) Evaluation, if required. (This document will be separate from the parks and recreation 4(f) document.) The Section 4(f) Evaluation will include:
- The LaBelle Historic District
 - Caldwell House
 - Forrey Building and Annex
 - Hendry County Courthouse
- i. Section 106 Consultation Meetings: The CONSULTANT will assist the DEPARTMENT with coordination of four (4) Section 106 Consultation meetings.
- j. Native American Coordination: The CONSULTANT will assist the DEPARTMENT of one (1) coordination meeting with any Native American tribes that have or wish to have involvement or input on the project or any site of relevance to them.

3.8 Section 4(f)

ETDM Issues: The Fisheating Creek Wildlife Management Area (WMA), Fisheating Creek Board of Trustees (BOT) Florida Forever land acquisition project, Fisheating Creek Canoe Trail, and the Okeechobee Waterway Canoe Trail are adjacent to the project, and may need a Section 4(f) Determination of Applicability.

In accordance with Part 2, Chapter 13 of the PD&E Manual, the CONSULTANT shall prepare Determinations of Applicability (DOAs) for all properties potentially affected by any proposed design alternatives. There will be one DOA prepared that will address all of the potential recreational properties within the project area. Section 4(f) applicable cultural resources will be addressed separately.

If section (4f) is determined to be applicable by the FHWA, the CONSULTANT, will evaluate and document the impacts to the Section 4(f) property as described in Part 2, Chapter 13 of the PD&E Manual. The CONSULTANT will be responsible for preparing any correspondence required.

6 resources will discussed in the DOA

3 resources under the review of 2 agencies (2 documents) will be discussed in the Evaluation if applicable.

Natural Resources

3.9 Wetlands and Essential Fish Habitat

In accordance with Part 2, Chapters 11 and 18 of the PD&E Manual, the CONSULTANT will identify, analyze and document wetlands and Essential Fish Habitat within the project area. This includes the following tasks and deliverables:

- a. Wetlands Evaluation Report: The Wetlands Evaluation Report will include the Florida Land Use, Cover and Forms Classification System (FLUCCS) Code for all described wetlands. Impacts will be listed in table form in the report, along with the acreage of impact anticipated and the FLUCCS code, for each wetland impacted. The CONSULTANT shall take reproducible photographs and prepare graphics for the development of this report. A detailed assessment, using the new state approved method, UMAM (Unified Mitigation Assessment Method) will be completed for each wetland (or wetland type), and the assessment forms will be included in the report.
- b. Pond Siting Analysis: The CONSULTANT shall collect the necessary data to completely assess the impacts on wetlands by all viable proposed storm water management alternatives and their respective infall and outfall locations as described in Part 2, Chapter 18 of the PD&E Manual. This information will be used in developing the project's preferred storm water management and mitigation design. The CONSULTANT shall determine the potential for wetland involvement and include this analysis in the Preliminary Pond Siting Report and in an addendum to the Wetlands Evaluation Report. A general assessment of these wetland areas shall be made, including the size, type and function of each area. A detailed assessment, using the new state approved method, UMAM (Unified Mitigation Assessment Method) shall only be required under extenuating circumstances when avoidance alternatives cannot be achieved.
- c. Essential Fish Habitat: N/A
- d. Conceptual Mitigation Plans: The CONSULTANT shall prepare conceptual mitigation alternatives, if required, as described in Part 2, Chapter 18, of the PD&E Manual. The CONSULTANT shall document any potential mitigation options that they become aware of

during the project. The conceptual mitigation will be documented as part of the Wetland Evaluation Report and in the Permits Coordination Memo (Section 3.13).

3.10 Water Quality

In accordance with Part 2, Chapter 20 of the PD&E Manual.

3.11 Special Designations

In accordance with Part 2, Chapters 19, 21, 23, and 26 of the PD&E Manual, respectively

- Outstanding Florida Waters
- Wild And Scenic Rivers
- Aquatic Preserves
- Coastal Barrier Resources

3.12 Wildlife and Habitat

ETDM Issues:

- The USFWS has requested the portion of the polygon located immediately east of SR 29 and north of the Caloosahatchee River be removed from the study area due to largely undeveloped lands contiguous with the Service's Focus Area for the Florida Panther located to the east.
- Species identified within the polygon include caracara, grasshopper sparrow, Florida panther and scrub jay, gopher tortoise, indigo snake, Florida pine snake, gopher frog, Florida black bear, wood stork, bald eagle, southeastern kestrel, sandhill crane, snail kite, and manatee.
- The project is located within the Primary and Secondary ranges of the Glades/Highlands bear population, and within the Secondary range of the Big Cypress bear population.
- The USFWS will be interested in habitat compensation and wildlife crossings (possibly 3).

In accordance with Part 2, Chapter 27 of the PD&E Manual, the consultant shall survey and analyze the project corridor for the presence of federally or state designated threatened or endangered species. The CONSULTANT shall coordinate with appropriate Federal, State and local agencies as to specific permits required, significance of impacts, required mitigation, and any specific concerns about the project or its impacts. Much of this coordination has already been completed through the ETDM process, and will require coordination to update the issues.

The consultant will be expected to attend several coordination meetings with the regulatory agencies regarding these project issues.

a. Endangered Species Biological Assessment (ESBA): The CONSULTANT will conduct and prepare the Endangered Species Biological Assessment (ESBA or other appropriate document) in accordance with Part 2, Chapter 27 of the PD&E Manual. The ESBA will include an 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 detailing all agency requirements that must be met before construction begins.

b. Pond Siting Analysis: The CONSULTANT shall collect the necessary data to completely analyze the impacts on all protected floral and faunal species by all viable proposed storm water management alternatives and their respective infall and outfall locations, as described in Part 2, Chapter 27 of the PD&E Manual. The CONSULTANT shall determine the potential for

involvement with protected floral and faunal species and include this analysis in the Preliminary Pond Siting Report and in an addendum to the ESBA.

c. Scheduling: The CONSULTANT shall begin coordination and preparation of this task as early in the schedule as is feasible, recognizing the potential for schedule impacts associated with this issue.

d. Wildlife Crossings: The CONSULTANT shall analyze and document the feasibility of a wildlife crossing for the project. This analysis shall be based on the following DOT connectivity criteria: a) USFWS or FFWCC scientific data exists that indicates listed species between established habitats if the crossing were in place, b) sufficient publicly owned lands exist on either side of the roadway to ensure the future viability of any proposed crossings, and c) the state or federal agency has requested a crossing, based on the applicability of a) and b) above.

Wildlife crossings and other measures of protecting listed species will be considered and presented as part of the project, if required by those agencies and approved by the DEPARTMENT.

e. Mitigation Plan: The **CONSULTANT** will prepare conceptual mitigation alternatives for listed species impacts. This effort will consist of the identification of alternative possibilities only. This task will be included in the ESBA.

3.13 Identify Permit Conditions

In accordance with the PD&E Manual, Part 1, Chapter 10, the CONSULTANT shall identify permit conditions, type of permits required, mitigation options and coordination conducted during the project. This task includes the review of maps and data in order 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 to consider during permit acquisition or design. Much of this information has been gathered through the ETDM process, and will need to be verified and updated.

The consultant will present the information gathered in the form of a Permit Coordination Memo. Any applicable correspondence and clearance letters should be attached. Additional information discovered during the project that may be applicable to permitting should also be presented to the Permits Department in this Memo.

For projects where permits are required as part of the PD&E Study, see Section 4.3.

3.14 Farmlands

N/A

Physical

3.15 Noise

The **CONSULTANT** shall perform the noise impact analysis and noise abatement evaluation as described in Part 2, Chapter 17 of the PD&E Manual.

Noise Traffic Forms and Methodology Meetings: Traffic will be prepared by the **CONSULTANT** based upon the approved Traffic Technical Memorandum. Traffic data will be documented on standard forms, which will be provided by the **DEPARTMENT**. The completed forms must be reviewed by the **DEPARTMENT** before proceeding with the Analysis. In addition, a methodology meeting with the **DEPARTMENT** will be required prior to the initiation of activities. The noise impact analysis and noise abatement evaluation shall be performed by or supervised/reviewed by a person(s) who has attended and is certified through the Department's Traffic Noise Analysis training course. The FHWA approved Noise Model, TNM (Traffic Noise Model) version 2.5 (or most current version) will be used for noise analysis. At the noise methodology meeting with the

DEPARTMENT, the noise specialist will be provided examples and information on the traffic noise component of the public involvement process.

Elevational Accuracy: The **CONSULTANT** shall make a determination as to the availability and accuracy of elevation data needed to perform the noise impact analysis and noise abatement evaluation. The **CONSULTANT** shall review existing elevation data and elevation data to be provided under Section 2.3 (Survey) to determine if elevations for roadways, existing berm/walls, receiver points and ground level where noise barriers may be evaluated can be established within +/- 2 feet of the actual field conditions observed through a field review. In coordination with the **DEPARTMENT**, the **CONSULTANT** shall determine the location of additional spot elevations needed to adequately simulate project conditions in the noise model.

Outdoor Advertising Identification: The **CONSULTANT** shall identify potential visual impacts that any potential noise barrier may have on existing legally permitted outdoor advertising signs consistent with the requirements of Part 2, Chapter 17 of the PD&E Manual and Florida Statute 479.25. The **CONSULTANT** shall perform a search of the Outdoor Advertising database found at <http://www2.dot.state.fl.us/RightOfWay/dbhome.asp> to verify whether any identified outdoor advertising sign in the vicinity of a potential noise barrier is legally permitted under the requirements of 479.25 F.S. The results of this determination will be coordinated with the Outdoor Advertising Section of the Office of Right of Way in Tallahassee. The **CONSULTANT** shall document potential conflicts for each reasonable and feasible noise attenuation barrier in the Noise Study Report.

Workshop and Hearing Requirements: The **CONSULTANT's** certified noise specialist shall be present at the Public Workshop and the Public Hearing. The noise specialist shall have a designated station at the Public Workshop and the Public Hearing, identified by a placard, to address public comment. The **CONSULTANT** will be prepared to discuss the potential for noise impacts at the Public Workshop, utilizing generalized noise contours and/or field review data identifying noise sensitive sites. The **CONSULTANT** will be prepared to discuss the results of the traffic noise impact analysis and noise abatement evaluation at the Public Hearing through reference to a draft Noise Study Report.

Additional Meetings: In addition to the Public Workshop and Public Hearing, the **CONSULTANT** may be required to hold and/or attend up to four (4) additional Public Meetings with the adjacent communities to discuss the **DEPARTMENT's** policies and procedures and other technical issues concerning noise. The Noise Specialist and the Project Manager will be expected to attend these meetings. The **CONSULTANT** will be responsible for required presentation materials.

Noise Handout: The **CONSULTANT** shall prepare the following to aid the public in understanding the noise evaluation process. All materials are to be reviewed and approved by the **DEPARTMENT** prior to the Public Workshop and Hearing.

- Handout giving a brief overview of the traffic noise evaluation process and the Traffic Noise Evaluation Schedule (example available from the **DEPARTMENT**)
- A set of arials identifying noise sensitive sites
- Concept plans which adequately display each viable alternative and the location of noise sensitive sites. Concept plans will include community and road names. All communities and roads discussed in the report will be shown on the concept plans.
- For the Public Hearing, a table summarizing the noise sensitive sites that would be affected by each alternative
- Other materials as requested by the **DEPARTMENT**.

Report: The **CONSULTANT** will document all of the above work in a Noise Study Report in accordance with Part 2, Chapter 17 of the PD&E Manual.

3.16 Air Quality

N/A

3.17 Construction Impact Analysis

In accordance with Part 2, Chapter 30 of the PD&E Manual.

3.18 Contamination

ETDM Issue: DEP has indicated a new rule that went into effect on April 17, 2005, 62-780 F.A.C. The CONSULTANT will research this rule and report its applicability to this project.

In accordance with Part 2, Chapter 22 of the PD&E Manual, the **CONSULTANT** shall conduct a comprehensive assessment of contamination involvement within the project corridor, and potential ponds upon Notice to Proceed in an attempt to avoid serious project impacts and delays. As part of the assessment, the **CONSULTANT** shall perform a regulatory database search using one of several available search services. Much of this information may have already been gathered during the ETDM process and will be contained in the Programming Summary Report. The CONSULTANT shall not rely primarily on the data from either of these sources. They are merely two of many tools that should be used in evaluating the potential contamination impacts of the project and upon the project. All information gathered will be used in developing the project's proposed typical section and Design Alternatives(s).

a. **Meetings:** A minimum of two meetings must take place between the **CONSULTANT** and the District Contamination Impact Coordinator (DCIC) during the course of the project. These meetings shall take place at the following times: 1) Prior to initiation of the data gathering phase of the project; and 2) Prior to performance of soil borings. The only person from the **CONSULTANT'S** office who shall be required to attend these meetings shall be the person actually performing the work. An additional meeting will be necessary if historical aerials prior to 1970 are not available, or if aerials are not of sufficient clarity to discern individual suspect sites. This meeting must take place prior to production of a draft report.

b. **Required Activities:** Subsurface investigations are required rather than optional, at all potential petroleum contamination sites. At other potential contamination sites, they are also required unless there is substantial, verifiable evidence that there is no contamination upon or beneath the proposed right-of-way. Such evidence must be documented in the CSER.

The **CONSULTANT** shall take color photographs of all suspect sites and color reproduce them into the CSER, and identify the street address of each site.

All available tank registration numbers, hazardous waste generator numbers, etc. shall be included in the CSER. For sites that receive contamination rankings, these numbers shall be included as part of the site description, and not merely referenced in the appendices. It is important to note that sites may not be registered in their present name.

The **CONSULTANT** shall provide an estimate of costs to clean up contamination within the proposed right-of-way at each contaminated parcel. This estimate shall include costs to excavate and treat contaminated soil and costs to treat any contaminated groundwater discharge from proposed de-watering operations. The contamination clean up costs shall be a line item of project cost in the PDSR.

For all sites that have Contamination Assessment Reports (CARS), excerpts such as maps showing the extent of groundwater contamination, the extent of soils contamination, groundwater elevation contours and direction of groundwater flow, and table or text indicating depth to

groundwater shall be incorporated into the CSER. This information should be available within the Oculus section of the FDEP website.

For each site ranked medium or high, the **CONSULTANT** shall prepare a graphical representation of the extent of soil and/or groundwater contamination plume taken from the CAR or Remedial Action Plan (RAP) for the site. If no CAR/RAP has been completed, the **CONSULTANT** shall project a "worst case" extent of contamination within existing/proposed right-of-way based upon available information combined with professional judgment. These depictions shall be of sufficient detail that they can be easily transferred onto the design plans for the project. These graphic representations and a key location map shall be included in the CSER and the PDSR.

It shall be the responsibility of the **CONSULTANT**, or the designated sub-consultant, to obtain all materials, documents, information and equipment necessary to perform the contamination screening evaluation. This includes, but is not limited to, historical aerial photography, agency file information, and testing equipment.

c. Pond Sites: The **CONSULTANT** shall conduct a comprehensive assessment of contamination involvement within the vicinity of all viable proposed storm water management alternatives and their respective infall and outfall locations. The **CONSULTANT** shall determine the potential for involvement with contamination features and include this analysis in the CSER, and in an addendum to the Preliminary Pond Siting Report.

d. Report: The **CONSULTANT** shall perform the necessary analysis to complete the Contamination Screening Evaluation for all viable alternatives, in accordance with Part 2, Chapter 22, of the PD&E Manual.

Environmental Reports

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

3.20 Class of Action Determination

N/A

3.21 Environmental Assessment

In accordance with Part 1, Chapter 6 of the PD&E Manual.

3.22 Finding of No Significant Impact

In accordance with Part 1, Chapter 7 of the PD&E Manual.

3.23 Draft Environmental Impact Statement

N/A

3.24 Final Environmental Impact Statement

N/A

3.25 Quality Control

The CONSULTANT shall include a QA/QC sheet in the front of all documents showing that the documents went through an internal review prior to submittal to the DEPARTMENT.

4.0 MISCELLANEOUS SERVICES

4.1 Contract and Project Files

The CONSULTANT shall organize the project files as per the DEPARTMENT'S central file organization. The DEPARTMENT shall provide a current version of the central file architecture.

This task includes the Project Management efforts for complete setup and maintenance, development of monthly progress reports and schedule updates, and the work effort to develop and execute sub-consultant agreements. Progress reports shall be delivered to the **DEPARTMENT** in a format as prescribed by the **DEPARTMENT** and no less than 10 days prior to submission of the corresponding invoice. The Project Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

Within ten (10) days after the Notice to Proceed, the **CONSULTANT** shall provide a schedule of calendar deadlines accompanied by an anticipated payout curve. Said schedule and anticipated payout curve shall be prepared in a format prescribed by the **DEPARTMENT**.

4.2 Project Management Meetings and Coordination

The **CONSULTANT** shall meet with the **DEPARTMENT** as needed throughout the life of the project. It is anticipated thirty-six (36) monthly progress meetings will be needed. These meetings will include progress and miscellaneous review and other coordination activities with the Department.

4.3 Additional Services

Additional Services include design-related activities required to support project evaluations and/or to accelerate project development. Cases where additional services may be needed include (not limited to):

- Need to develop more detail to identify impacts including right-of-way.
- Special project feature(s) (bridge structures, roadway, drainage, geotechnical, etc.) that require engineering analysis beyond the PD&E Study level of detail.
- Permitting is included during the PD&E Study on all or portions of the project.

Preparation of scope and staff hours for the additional services will involve reference to the Standard Scope of Services, Staff Hour Estimation Forms, and Staff Hour Estimation Basis for Highway and Bridge/Structures Design.

Permitting services may include consideration of the following design activities: Roadway Analysis, Roadway Plans, Drainage Analysis, and Environmental Permits, Survey, Photogrammetry, Mapping and Geotechnical.

5.0 METHOD OF COMPENSATION

Payment for the work accomplished will be in accordance with Exhibit B of this contract. Invoices shall be submitted through the **DEPARTMENT'S** web enabled Consultant Invoice Transmittal System (CITS) Internet application. The **DEPARTMENT'S** Project Manager and the **CONSULTANT** shall monitor the cumulative invoiced billings to insure the reasonableness of the billings compared to the project schedule and the work accomplished and accepted by the **DEPARTMENT**.

Payments will not be made that exceed the percentage of work identified in the approved payout curve and schedule provided in accordance with Section 4.1.

6.0 SERVICES TO BE PERFORMED BY THE DEPARTMENT

The **DEPARTMENT** will provide those services and materials as set forth below:

- Project data currently on file
- All available information in the possession of the **DEPARTMENT** pertaining to utility companies whose facilities may be affected by the proposed construction.
- All future information that is in possession or may come to the **DEPARTMENT** pertaining to subdivision plans, so that the **CONSULTANT** may take advantage of additional areas that can be utilized as part of the existing right-of-way
- Processing of all environmental and engineering documents
- Coordination with the State Historic Preservation Officer
- Existing FDOT right-of-way maps
- The **DEPARTMENT** will permit the **CONSULTANT** to utilize the **DEPARTMENT'S** computer facilities upon proper authorization as described in the **DEPARTMENT** Procedure No. 325-060-401
- The **DEPARTMENT** will provide available FDOT crash data