

NOTICE TO CONTRACTORS
OFFICE OF THE STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
801 N. BROADWAY AVENUE
BARTOW, FLORIDA 33830

September 10, 2010

District Procurement Office
District One

ADDENDUM NUMBER FOUR

PROJECT DESCRIPTION: US 41 Radar Animal Detection System (RADS)
FINANCIAL PROJECT NOS.: 195338-2-52-01
COUNTIES: Collier
CONTRACT NO.: E1I41

The following is a list of the revisions made to the Request for Proposal Package.

Request For Proposal	Page	
	4	Section I Introduction, Project Specifics, No. 18, added the following to the paragraph. <i>The training material shall include a Manual covering the total system and components of the system and be adequate for a minimum of ten (10) people.</i>
	4	Section I Introduction, Project Specifics, No. 21, revised the sixth sentence and added the following: <i>a minimum of three (3) to a maximum of five (5) hours per day and the hours for the study are from 5:00 am to 10:00 pm each day.</i> Added a sentence after the seventh sentence: <i>The Design Build Firm shall choose three (3) separate locations of approximately 300' within the project limits for the camera monitoring.</i>

Attached to Addendum Number 04 are the following documents: Revised copy of the Request for Proposal package (dated September 10, 2010) and the Type II Cat. Ex. dated May 15, 2010.

Acknowledge receipt of Addendum Number Four in the space provided on the proposal.

Felipe Alvarez

Felipe Alvarez

Design Build Administrator

PLEASE SIGN BELOW IN RECEIPT OF THIS NOTICE AND ADDITIONAL DOCUMENTS ANNOTATED ABOVE.

Signature

Date

Company Name
E1I41
Addendum No. 04

1 of 1

FPID No. 195338-2-52-01
September 10, 2010



Florida Department of Transportation
District One

**DESIGN/BUILD
REQUEST FOR PROPOSAL**

For

Roadside Animal Detection System along US 41

Collier County

Financial Projects Number(s):195338-2-52-01

Federal Aid Project Number(s): 3011 021 P

Contract Number: E1I41

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ATTACHMENTS

- Attachment "A" - Division I Design Build Specifications
- Attachment "B" - Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273)

The attachments listed in the table of contents are by this reference hereby incorporated into and made a part of this RFP as though fully set forth herein.

OTHER DOCUMENTS

The following documents are being provided with this RFP. Except as specifically set forth in the body of this RFP, these documents are provided for general information only. They are not being incorporated into and are not being made a part of the RFP, the contract documents or any other document that is connected or related to this project except as otherwise specifically stated therein. Nothing contained in these documents shall be construed as a representation of any field condition or any state of facts upon which the Design / Build Firm can rely in performing under the contract. All information contained in these documents must be verified by a proper factual investigation and no claims for damages, time or any other impacts may be based on these documents.

Fish and Wildlife Service Letter dated January 29, 2010
Huisjer (2009), The Comparison of Animal Detection Systems in a Test-Bed
Policy of Aboriginal People

I. Introduction.

The Florida Department of Transportation (Department) has issued this Request for Proposal (RFP) to solicit competitive bids and proposals from Proposers for the installation of a Roadside Animal Detection System (RADS) along both sides of U.S. Highway 41 from 840 feet west of the entrance to the Skunk Ape Research Headquarters and Trail Lakes Campground to 440 feet east of the intersection of Turner River Road, Collier County, Florida (a distance of approximately 1.3 miles).

Description of Work

The RADS employs electronic motion and/or thermal infra-red sensors installed along both sides of a stretch of roadway to detect large animals (*e.g.*, panther, deer, black bear) as they approach the road. The triggering of a sensor activates warning message signs alerting drivers to the presence of animal(s) on or near the roadway. Early warning can result in increased driver's awareness and reductions in speed that increase the probability of avoiding collisions with wildlife. Manufacturers of the commonly employed detection technologies have stated that the active signals used to detect large mammals operate at a very low power level and are safe to humans, animals, and the environment. Research has shown RADS to be effective in reducing vehicle speeds and vehicle collisions with wildlife such as large ungulates (*i.e.*, hoofed mammals).

Most RADS are comprised of electronic sensors installed on poles above the ground along both sides of a section of roadway. The "above ground" detection systems consist of either "area-cover" or "break-the-beam" sensors. Area-cover sensors are designed to detect animals based on body heat and motion within a certain area and range from a sensor. The detection area is typically cone-shaped and narrow close to the sensor, and wider as the distance from the sensor increases. Break-the-beam sensors consist of a transmitter that sends a signal to a receiver. The sensor is triggered when an animal's body blocks the signal. Break-the-beam systems use infrared, laser or microwave radio signals. Depending on the detection technology and manufacturer, the maximum range of a sensor can vary from 90 feet to over 1,000 feet. Longer distances can be covered by installing several sensors in series along the roadway. Above ground sensors require a clear line-of-sight between the transmitter and the receiver.

Another RADS technology employing an "underground" electronic sensor is available and currently being tested in Colorado. This system uses an underground buried cable that emits an electromagnetic field calibrated to detect large animals. A large animal passing over the field triggers the warning signs to alert motorists.

A mandatory onsite meeting with the Council of the Original Miccosukee Simanolee Nation Aboriginal People (People) will be held on August 9, 2010 at 11:00 am at the Turner River Picnic Area on US 41. Design Build Team can have up to a maximum of three (3) representatives from each team. This meeting will update the Design/Build Firms upon the necessity to limit all project improvements and construction activities to the US 41 right of way in order not to disturb the People's burial grounds and other sacred lands.

Project Specifics

1. The project location is a 1.3-mile segment of U.S. Highway 41 from approximately 840 feet west of the entrance to the Skunk Ape Research Headquarters and Trail Lakes Campground (latitude 25.895535,° longitude -81.280639°) to the intersection of Turner River Road in Collier County, Florida (latitude 25.887213,° longitude -81.261338°) (Figure 1).
2. A RADS will be installed within the existing Department's right-of-way along the north and south sides of the roadway. An above-ground or underground system, or a combination of both, may be used. An adequate number of sensors must be installed to cover the entire segment of roadway, without gaps, from 400 feet west of the entrance to the Skunk Ape Research Headquarters and Trail Lakes Campground to the intersection of Turner River Road. The electronic sensors will be located as close to the property boundary of Big Cypress National Park (BCNP) as possible to maximize the warning time to drivers.
3. The RADS system employed must be able to operate reliably under normal south Florida environmental conditions including adverse weather (*e.g.*, wind, rain, fog, *etc.*). If possible, the system should be designed to identify periods of extreme rain or fog, and shut down during unfavorable conditions for accurate detection, and avoid false detections which may negatively affect driver response to the system.
4. If an above ground RADS system is employed, the electronic sensors will be mounted at a height of approximately eighteen (18) inches above the ground. This height requirement was based on the height of the sensor(s) needed to detect an adult Florida panther. Any vegetation or other obstruction that blocks the sensors must be removed and maintained to ensure that the system functions properly. The Design/Build Firm shall maintain the vegetation for the length of the value added period. Once this period is over, the maintenance requirements will revert to the local maintenance authority. However, removal of native vegetation should be minimized to the greatest extent practicable, and limited only to that necessary to maintain an unobstructed path between sensors.
5. The RADS system employed must be able to log the date, time, and location (or zone) of each detection made.
6. An informational sign shall be installed within the Department's right-of-way in the following locations: 1) approximately ½ mile east of the first electronic warning sign and ½ mile west of the last warning sign adjacent to the westbound lane of the U.S. Highway 41 segment; and 2) approximately ½ mile west of the first electronic warning and ½ mile east of the last warning sign adjacent to the eastbound lane of the U.S. Highway 41 segment. The signs shall be designed to comply with the FDOT's current standards and policies. The two informational signs situated before the first electronic warning signs shall display the message "Entering Wildlife Sensor Detection Area." The two informational signs situated after the last electronic warning signs shall display the message "Leaving Wildlife Sensor Detection Area."
7. Electronic warning signs shall be installed along the north and south sides of the roadway within the Department's right-of-way of the 1.3-mile U.S. Highway 41 road segment. The number of signs shall be the number necessary to ensure that drivers are adequately warned of the presence of wildlife on or near the road across the entire expanse of the 1.3 miles. All signs will be designed to comply with the Department's current standards and policies, and positioned so that

the lighted flashing message is visible to motorists when the sign is activated. For the eastbound lane of U.S. Highway 41, the first warning sign will be installed approximately 840 feet west of the intersection of the Skunk Ape Research Headquarters and Trail Lakes Campground. For the westbound lane of U.S. Highway 41, the first warning sign will be installed approximately 440 feet east of the intersection of Turner River Road.

8. Each warning sign will display the following message:

Warning-Wildlife on Roadway
Reduce Speed

The warning sign may be either a variable message sign or a static sign with flashers. The sign shall meet FDOT criteria for font and spacing of the message.

9. The warning signs must deactivate five (5) minutes following the latest detection. When warning signs are not activated they shall display a completely blank screen and not display any other symbol or message. If a static sign is proposed, the lights must stop blinking and go dark.
10. An adequate electrical power system powered by the local electrical grid will be used to provide power to the RADS within the corridor. The RADS shall be powered and operational twenty-four (24) hours per day. A backup battery system will also be installed by the Design/Build Firm in the event of a power outage. The backup battery system shall be capable to run the system for a minimum of eighteen (18) hours.
11. All equipment shall be designed and installed to minimize the potential for vandalism to the greatest extent practicable.
12. Data showing the independent evaluation of the reliability of the RADS system chosen must be provided by the manufacturer. Measures of reliability include the number of false positives and false negatives over a standard time period in service and the amount of downtime due to equipment malfunction. Important environmental factors must include performance under high heat and humidity and periodic high winds.
13. It is important that warning signs not be activated until after system reliability is established, as high numbers of false positives may erode motorist confidence. Systems need to be calibrated so that warning signs are only triggered when the likelihood of a large animal crossing the road is high, otherwise drivers may become apathetic, ignoring the warning signs and less willing to slow down. Following installation on-site and prior to making the warning sign operational to the public, all sensors and warning signs must be tested to ensure that they are operating correctly. The Fish and Wildlife Service requests the opportunity to provide comments on the proposed verification technique. The system shall be able to detect all passages (100 percent) across the detection line correctly during the burn-in period. Warning signs should be masked from motorists during calibration and reliability testing and unveiled only when the system is ready to be operational. A thirty (30) day burn-in period shall be required prior to activating the system for the public. During this period, all elements of the system must be replaced, repaired or a new element proposed. The burn-in period will restart after each event for an additional thirty (30) days until the system is functioning as designed.
14. The selected system shall be adaptive and have the ability to adjust sensor sensitivity in order to detect the targeted animals (*i.e.*, Florida panther, white-tail deer, Florida black bear), while

minimizing false positives caused by blowing vegetation or debris. The American alligator (*Alligator Mississippiensis*) occurs in the project area, but is not a targeted animal.

15. We are aware that intersections occur within the U.S. Highway 41 roadway segment at the entrance to the BCNP canoe launch access and the entrance to the Skunk Ape Research Headquarters and Trail Lakes Campground. If possible, the RADS employed shall be designed to detect animals in these areas accurately without a significant number of false detections due to vehicles triggering the sensors.
16. The Design/Build Firm will be responsible for verifying project site conditions to ensure that the proposed RADS will operate correctly. Specifically, we are aware of site conditions (*e.g.*, guard rail, canal, and vegetation) that may present difficulties for the installation of a RADS.
17. Any RADS system chosen shall meet the following minimum performance standards described in Huisjer (2009): 1) Animal detection systems should detect at least 91 percent of all large animals that approach the road; and 2) Animal detection systems shall have fewer than 10 percent of all false detections.
18. The Design/Build Firm shall develop training for the system which includes but not limited to the troubleshooting, maintenance and repair of the selected system. This training will be developed for the Department and Collier County, Asset Manager for the Department. The training must be approved and completed by the time of final acceptance for the project. The training material shall include a Manual covering the total system and components of the system and be adequate for a minimum of ten (10) people.
19. The Design/Build Firm shall mow the US 41 project limits a minimum of twice a month during the project and the warranty period. Additional mowing may be required if the vegetation grows higher than the maximum height set for the system. The Design/Build Firm shall not be responsible for other types of maintenance (guardrail repair, should repair, spraying, etc.) during the warranty period.
20. The Design/Build Firm shall supply one complete system, less the signs, to Collier County for spare parts or replacement parts after the warranty period is over.
21. The Design/Build Firm shall monitor the project area for a minimum of three (3) months prior to beginning installation of the RADS to determine what animals are crossing US 41 in the project limits. The Design/Build Firm shall be required to have a qualified biologist on the Team to gather, prepare and finalize the study. The study shall be conducted within the limits of the right of way of US 41 and the project limits. The study parameters include but are not limited to documenting the number of road-killed species, date of survey, begin and end times of survey, weather conditions, type of each dead animal observed by species and GPS location of the dead animal. Also, note any live animals crossing US 41 during the survey and any animal tracks observed within the corridor. The study shall be conducted on various days of the week, a minimum of three (3) days, a minimum of three (3) to a maximum of five (5) hours per day and the hours for the study are from 5:00 am to 10:00 pm each day. The Design/Build Firm shall also set up motion sensitive cameras to monitor the travel of animals in the project limits. The Design Build Firm shall choose three (3) separate locations of approximately 300' within the project limits for the camera monitoring. The biologist must have a Bachelor of Science in Wildlife or related studies with a minimum of three (3) years experience.

A. Design/Build Responsibility

The Design/Build Firm shall be responsible for survey, geotechnical investigation, design, acquisition of all permits not acquired by the Department, any required modification of permits acquired by the Department, maintenance of traffic, demolition, and construction on or before the date indicated in their proposal. The Design/Build Firm will coordinate all utility relocations.

The Design and Construction Criteria (Section VI) sets forth requirements regarding survey, design, construction, and maintenance of traffic during construction, requirements relative to project management, scheduling, and coordination with other agencies and entities such as state and local government, utilities and environmental permitting agencies, and the public.

The Design/Build Firm shall demonstrate good project management practices while working on this project. These include communication with the Department and others as necessary, management of time and resources, and documentation.

B. Department Responsibility

The Department will provide contract administration, management services, construction engineering inspection services and quality acceptance reviews of all work associated with the development and preparation of the contract plans and construction of the improvements. The Department will provide job specific information and/or functions as outlined in this document.

II. Schedule of Events.

Below is the current schedule of the remaining events that will take place in the selection process. The Department reserves the right to make changes or alterations to the schedule as the Department determines is in the best interests of the public. Proposers will be notified sufficiently in advance of any changes or alterations in the schedule. Unless otherwise notified in writing by the Department, the dates indicated below for submission of items or for other actions on the part of a Proposer shall constitute absolute deadlines for those activities and failure to fully comply by the time stated shall cause a Proposer to be disqualified.

Date	Event
<u>August 2, 2010</u>	Pre-Proposal Meeting at 9:00 am p.m., local time, in the Mike Rippe Auditorium, District One Headquarters, 801 N. Broadway Ave., Bartow FL. 33830
<u>September 1, 2010</u>	Final deadline for submission of questions/information
<u>September 28, 2010</u>	Technical Proposals due in District Office by 4:00 p.m., local time
<u>October 26, 2010</u>	Question and Answer Session. Times will be assigned during the pre-proposal meeting. One hour will be allotted for questions and responses.
<u>November 3, 2010</u>	Price Proposals due in District Office by 2:00 p.m. local time.
<u>November 3, 2010</u>	Public announcing of Technical Scores and opening of Price Proposals at 2:00 p.m., local time, in District One Headquarters, 801 N. Broadway Ave., Bartow FL. 33830
<u>November 9, 2010</u>	Public Meeting of Selection Committee to determine intended Award
<u>November 9, 2010</u>	Posting of the Department's intended decision to Award (will remain posted for 72 hours)

November 16, 2010	Anticipated Award Date
December 8, 2010	Anticipated Execution Date

III. Threshold Requirements.

A. Qualifications

Proposers are required to be pre-qualified in all work types required for the project. The technical qualification requirements of Florida Administrative Code (F.A.C.) Chapter 14-75 and all qualification requirements of F.A.C. Chapter 14-22, based on the applicable category of the project, must be satisfied.

B. Joint Venture Firm

Two or more firms submitting as a Joint Venture must meet the Joint Venture requirements of Section 14-22.007, Florida Administrative Code. Parties to a joint venture must submit a Declaration of Joint Venture and Power of Attorney Form No. 375-020-18, prior to the deadline for receipt of proposals.

If the Proposer is a joint venture, the individual empowered by a properly executed Declaration of Joint Venture and Power of Attorney Form shall execute the proposal. The proposal shall clearly identify who will be responsible for the engineering, quality control, and geotechnical and construction portions of the Work.

C. Price Proposal Guarantee

A bid guaranty in an amount of not less than five percent of the total bid amount shall accompany each Proposer's Price Proposal. The guaranty may, at the discretion of the Proposer, be in the form of a cashier's check, bank money order, bank draft of any national or state bank, certified check, or surety bond, payable to the Department. The surety on any bid bond shall be a company recognized to execute bid bonds for contracts of the State of Florida. The guaranty shall stand for the Proposer's obligation to timely and properly execute the contract and supply all other submittals due therewith. The amount of the guaranty shall be a liquidated sum, which shall be due in full in the event of default, regardless of the actual damages suffered. The bid guaranty of all Proposers' shall be released at such time as the successful Proposer has complied with the condition stated herein, but not prior to that time.

D. Pre-Proposal Meeting

Attendance at the pre-proposal meeting is mandatory and any short listed Proposer who fails to attend will be deemed non-responsive and automatically disqualified from further consideration. The purpose of this meeting is to provide a forum for all concerned parties to discuss the proposed project, answer questions on the design and construction criteria, CPM schedule, and method of compensation, instructions for submitting proposals, and other relevant issues. In the event that any discussions or questions at the pre-proposal meeting require, in the Department's opinion, official additions, deletions, or clarifications of the Request for Proposal, the Design and Construction Criteria, or any other document, the Department will issue a written summary of questions and answers or an addendum to this Request for Proposals as the Department determines is appropriate. No oral representations or discussions, which take place at the pre-proposal meeting, will be binding on the Department. FHWA will be invited on oversight projects, in order to discuss the project in detail and to clarify any concerns. The Proposers will be instructed to direct all questions after the meeting to one entity, either the Project Manager or the

Contracting Unit.

During and after the meeting, it is the responsibility of the Project Manager/Contracting Unit to ensure that each Proposer develops their technical proposal with the same information. If a Proposer receives information from the Department relating to the project prior to the information cutoff date, the Department will ensure that all Proposers receive the same information in a timely fashion. The project file will clearly document all communications with any Firm regarding the design and construction criteria by the Contracting Unit or the Project Manager.

E. Question and Answer Session

The Department shall meet with each Proposer, formally, for a Question and Answer session. FHWA shall be invited on FA Oversight Projects. The purpose of the Q & A session is for the Technical Review Committee to seek clarification and ask questions, as it relates to the Technical Proposal, of the Proposer. The Question and Answer sessions will occur a minimum of two (2) weeks after the date the Technical Proposal are due, and be part of the Overall Technical Proposal Scoring. The Proposers shall be given a minimum of one (1) week after the Question and Answer session to submit their Price Proposal. The Department will terminate the presentations promptly at the end of the allotted time. The Department may tape record or videotape all or part of the presentations. The Question and Answer session will not constitute "discussions" or negotiations. Proposers will not be permitted to ask questions of the Department except to ask the meaning of a clarification question posed by the Department. No additional time will be allowed to research answers.

The Department will provide some (not necessarily all) proposed questions to each firm as it relates to their technical proposal approximately 24 hours before the scheduled Question and Answer Session. No supplemental materials, handouts, etc. will be allowed to be presented in the Question and Answer Session.

F. Protest Rights

Any person who is adversely affected by the specifications contained in this Request for Proposal must file a notice of intent to protest in writing within seventy-two hours of the receipt of this Request for Proposals. The formal written protest shall be filed within ten days after the date of the notice of protest if filed. The person filing the Protest must send the notice of intent and the formal written protest to:

Clerk of Agency Proceedings
Department of Transportation
605 Suwannee Street, MS 58, Room 562
Tallahassee, Florida 32399-0458

The formal written protest must state with particularity the facts and law upon which the protest is based and be legible, on 8 ½ x 11-inch white paper and contain the following:

1. Name, address, telephone number, and Department identifying number on the Notice, if known, and name, address and telephone number of a representative, if any; and
2. An explanation of how substantial interest will be affected by the action described in the Request for Proposals; and
3. A statement of when and how the request for Proposals was received; and

4. A statement of all disputed issues of material fact. If there are none, this must be indicated; and
5. A concise statement of the ultimate facts alleged, as well as the rules and statutes, which entitle to relief; and
6. A demand for relief; and
7. Conform to all other requirements set out in Florida Statutes (F.S.), Chapter 120 and F.A.C., Chapter 28-106, including but not limited to Section 120.57 F.S. and Rules 28-106.301, F.A.C., as may be applicable.

A formal hearing will be held if there are disputed issues of material fact. If a formal hearing is held, this matter will be referred to the Division of Administrative Hearings, where witnesses and evidence may be presented and other witnesses may be cross-examined before an administrative law judge. If there are no disputed issues of material fact, an informal hearing will be held, in which case the person filing the protest will have the right to provide the Department with any written documentation or legal arguments which they wish the Department to consider.

Mediation pursuant to Section 120.573, F.S., may be available if agreed to by all parties, and on such terms as may be agreed upon by all parties. The right to administrative hearing is not affected when mediation does not result in a settlement.

Failure to file a protest within the time prescribed in Section 120.57(3), F.S., shall constitute a waiver of proceedings under Chapter 120, F.S.

G. Non-Responsive Proposals

Proposals found to be non-responsive shall not be considered. Proposals may be rejected if found to be in nonconformance with the requirements and instructions herein contained. A proposal may be found to be non-responsive by reasons, including, but not limited to, failure to utilize or complete prescribed forms, conditional proposals, incomplete proposals, indefinite or ambiguous proposals, failure to meet deadlines and improper and/or undated signatures.

Other conditions which may cause rejection of proposals include evidence of collusion among Proposers, obvious lack of experience or expertise to perform the required work, submission of more than one proposal for the same work from an individual, firm, joint venture, or corporation under the same or a different name (also included for Design/Build projects are those proposals wherein the same Engineer is identified in more than one proposal), failure to perform or meet financial obligations on previous contracts, employment of unauthorized aliens in violation of Section 274A (e) of the Immigration and Nationalization Act, or in the event an individual, firm, partnership, or corporation is on the United States Comptroller General's List of Ineligible Design/Build Firms for Federally Financed or Assisted Projects.

Proposals will also be rejected if not delivered or received on or before the date and time specified as the due date for submission.

H. Waiver of Irregularities

The Department may waive minor informalities or irregularities in proposals received where such is merely a matter of form and not substance, and the correction or waiver of which is not prejudicial to other Proposers. Minor irregularities are defined as those that will not have an adverse effect on the Department's interest and will not affect the price of the Proposals by giving a Proposer an advantage or benefit not enjoyed by other Proposers.

1. Any design submittals that are part of a proposal shall be deemed preliminary only.
2. Preliminary design submittals may vary from the requirements of the Design and Construction Criteria. The Department, at their discretion, may elect to consider those variations in awarding points to the proposal rather than rejecting the entire proposal.
3. In no event will any such elections by the Department be deemed to be a waiving of the Design and Construction Criteria.
4. The Proposer who is selected for the project will be required to fully comply with the Design and Construction Criteria for the price bid, regardless that the proposal may have been based on a variation from the Design and Construction Criteria.
5. Proposers shall identify separately all innovative aspects as such in the Technical Proposal. An innovative aspect does not include revisions to specifications or established Department policies. Innovation should be limited to Design/Build Firm's means and methods, roadway alignments, approach to project, use of new products, new uses for established products, etc.
6. The Proposer shall obtain any necessary permits or permit modifications not already provided.
7. Those changes to the Design Concept may be considered together with innovative construction techniques, as well as other areas, as the basis for grading the Technical Proposals in the area of innovative measures.

I. Modification or Withdrawal of Proposal

Proposers may modify or withdraw previously submitted proposals at any time prior to the proposal due date. Requests for modification or withdrawal of a submitted proposal shall be in writing and shall be signed in the same manner as the proposal. Upon receipt and acceptance of such a request, the entire proposal will be returned to the Proposer and not considered unless resubmitted by the due date and time. Proposers may also send a change in sealed envelope to be opened at the same time as the proposal provided the change is submitted prior to the proposal due date.

J. Department's Responsibilities

This Request for Proposal does not commit the Department to make studies or designs for the preparation of any proposal, nor to procure or contract for any articles or services. Proposers shall examine the Contract Documents and the site of the proposed work carefully before submitting a proposal for the work contemplated and shall investigate the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished and as to the requirements of all Contract

Documents. Written notification of differing site conditions discovered during the design or construction phase of the project will be given to the Department's Project Manager.

The Department does not guarantee the details pertaining to borings, as shown on any documents supplied by the Department, to be more than a general indication of the materials likely to be found adjacent to holes bored at the site of the work, approximately at the locations indicated. Proposers shall examine boring data, where available, and make their own interpretation of the subsoil investigations and other preliminary data, and shall base his bid on his own opinion of the conditions likely to be encountered. The submission of a proposal is prima facie evidence that the Proposer has made an examination as described in this provision.

K. Design/Build Contract

The Department will enter into a Lump Sum contract with the successful Design/Build Firm. In accordance with Section V, the Design/Build Firm will provide a schedule of values to the Department for their approval. The total of the Schedule of Values will be the lump sum contract amount.

The terms and conditions of this contract are fixed price and fixed time. The Design Build Firm's submitted bid (time and cost) is to be a lump sum bid for completing the scope of work detailed in the Request for Proposal.

IV. Disadvantaged Business Enterprise (DBE) Program.

A. DBE Availability Goal Percentage:

The Department of Transportation has an overall eight point one eight percent (8.18%) race-neutral DBE goal. This means that the State's goal is to spend at least 8.18% of the highway dollars with Certified DBE's as prime Design/Build Firms or as subcontractors. Race-neutral means that the Department believes that the 8.18% overall goal can be achieved through the normal competitive procurement process. The Department has reviewed this project and assigned a DBE availability goal shown on the bid blank/contract front page under "% DBE Availability Goal". Although not a contract requirement, the Department believes that this DBE percentage can realistically be achieved on this project based on the number of DBE's associated with the different types of work that will be required.

Under 49 Code of Federal Regulations Part 26, if the 8.18% goal is not achieved, the Department may be required to return to a race-conscious program where goals are imposed on individual contracts. The Department encourages all of our Design/Build Firms to actively pursue obtaining bids and quotes from Certified DBE's.

B. Anticipated DBE Participation Statement:

The Department is reporting to the Federal Highway Administration the planned commitments to use DBE's. This information is being collected through the Anticipated DBE Participation Statement. This statement shall be submitted to the District Contract Compliance Manager/ Resident Compliance Officer who will then submit it electronically to the Equal Opportunity Office. Although these statements WILL NOT become a mandatory part of the contract, they will assist the Department in tracking and reporting planned or estimated DBE utilization.

C. Equal Opportunity Reporting System:

The Design/Build Firm is required to report monthly, through the Department's Equal Opportunity Reporting System on the Internet at, <http://www.dot.state.fl.us/equalopportunityoffice/> actual payments, minority status, and the work type of all subcontractors and suppliers. All DBE payments must be reported whether or not the prime initially planned to utilize the company. Each month the prime must report actual payments to all DBE and MBE subcontractors and suppliers. In order for the race neutral DBE Program to be successful, cooperation is imperative.

D. DBE Supportive Services Providers:

The Department has contracted with a consultant, referred to as DBE Supportive Services Provider, to provide managerial and technical assistance to DBE's. This consultant is also required to work with prime Design/Build Firms, who have been awarded contracts, to assist in identifying DBE's that are available to participate on the project. The successful Design/Build Firm should meet with the DBE Supportive Services Provider to discuss the DBE's that are available to work on this project. The current Provider for the State of Florida is serviced by Blackmon Roberts Group and can be reached at (863) 802-1280 in Lakeland or (305) 777-0231 in Coral Gables.

E. DBE Affirmative Action Plan:

A DBE Affirmative Action Plan must be approved and on file with the Equal Opportunity Office prior to award of the contract for each prime Design/Build Firm. Update and resubmit the plan every three years. No Contract will be awarded until the Department approves the plan. The DBE Affirmative Action Plan must be on your company's letterhead, signed by a company official, dated and contain all elements of an effective DBE Affirmative Action Plan. These Plans should be mailed to:

Florida Department of Transportation
Equal Opportunity Office
605 Suwannee Street, MS 65
Tallahassee, FL 32399-0450

Questions concerning the DBE Affirmative Action Plan may be directed to the Equal Opportunity Office by calling (850) 414-4747.

F. Bidders Opportunity List:

The Federal DBE Program requires States to maintain a database of all firms that are participating, or attempting to participate, on DOT-assisted contracts. The list must include all firms that bid on prime contracts or bid or quote subcontracts on DOT-assisted projects, including both DBE's and Non-DBE's.

On the Bidders Opportunity Form if the answers to numbers 2, 3, 4, or 5 are not known, leave them blank and the Department will complete the information. This information should be returned with the bid package or proposal package or submitted to the Equal Opportunity Office within three days of submission. It can be mailed to the Equal Opportunity Office or faxed to (850) 414-4879.

V. PROJECT REQUIREMENTS AND PROVISIONS FOR WORK.

A. Governing Regulations:

The services performed by the Design/Build Firm shall be in compliance with all applicable Manuals and Guidelines including the Department, FHWA, AASHTO, and additional requirements specified in this document. Except to the extent inconsistent with the specific provisions in this document, the current edition, including updates, of the following Manuals and Guidelines shall be used in the performance of this work. Current edition is defined as the edition in place and adopted by the Department at the date of advertisement of this contract with the exception of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, Manual on Uniform Traffic Control Devices (MUTCD), Design Standards and Design Standards Modifications. The Design/Build Firm shall use the edition of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, Design Standards and Design Standard Modifications in effect at the time the bid price proposals are due in the District Office. The Design/Build Firm shall use the 2009 edition of the MUTCD. It shall be the Design/Build Firm's responsibility to acquire and utilize the necessary manuals and guidelines that apply to the work required to complete this project. The services will include preparation of all documents necessary to complete the project as described in Section I of this document.

1. Florida Department of Transportation Roadway Plans Preparation Manuals
<http://www.dot.state.fl.us/rddesign/PPMManual/PPM.shtm>
2. Florida Department of Transportation Design Standards
<http://www.dot.state.fl.us/rddesign/DesignStandards/Standards.shtm>
3. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications
<http://www.dot.state.fl.us/specificationsoffice/Default.shtm>
4. Florida Department of Transportation Surveying Procedure
<http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/550030101.pdf>
5. Florida Department of Transportation EFB User Guide (Electronic Field Book)
<http://www.dot.state.fl.us/surveyingandmapping/downloads.shtm>
6. Florida Department of Transportation Drainage Manual
<http://www.dot.state.fl.us/rddesign/dr/Manualsandhandbooks.shtm>
7. Florida Department of Transportation Soils and Foundations Handbook
<http://www.dot.state.fl.us/structures/Manuals/SFH.pdf>
8. Florida Department of Transportation Structures Manual
<http://www.dot.state.fl.us/structures/manlib.shtm>
9. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Production Criteria Handbook Roadway Standards
<http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/>
10. Florida Department of Transportation Production Criteria Handbook CADD Structures Standards
<http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/>

11. Florida Department of Transportation Structures Manual including Temporary Design Bulletins
<http://www.dot.state.fl.us/structures/StructuresManual/CurrentRelease/StructuresManual.shtm>
12. AASHTO – A Policy on Geometric Design of Highways and Streets
https://bookstore.transportation.org/item_details.aspx?ID=110
13. MUTCD - 2009
<http://mutcd.fhwa.dot.gov/>
14. Safe Mobility For Life Program
<http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/000750001.pdf>
15. Traffic Engineering and Operations Making Roads Safer for Older Drivers
<http://www.dot.state.fl.us/trafficoperations/Operations/ElderRdUser.shtm>
16. American with Disabilities Act
<http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/625020015.pdf>
17. Florida Highway Landscape Guide
<http://www.dot.state.fl.us/emo/beauty/landscap.pdf>
18. Florida Department of Transportation Florida Sampling and Testing Methods
<http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/fstm/disclaimer.shtm>
19. Florida Department of Transportation Pavement Coring and Evaluation Procedure
<http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/materialsmanual/documents/v1-section32-clean.pdf>
20. Florida Department of Transportation District Design Guidelines
<http://www.dot.state.fl.us/rddesign/updates/files/updates.shtm>
21. Florida Department of Transportation District One Design Memos
<http://www.dot.state.fl.us/ecso/downloads/publications/DistrictOnePractices/default.shtm>
22. Florida Department of Transportation Utility Accommodation Manual
<http://www.dot.state.fl.us/rddesign/utilities/UAM.shtm>
23. AASHTO – Specifications for Highway Bridges
https://bookstore.transportation.org/category_item.aspx?id=BR
24. Florida Department of Transportation Construction Project Administration Manual
<http://www.dot.state.fl.us/construction/Manuals/cpam/CPAMManual.shtm>
25. Florida Department of Transportation Flexible Pavement Design Manual
<http://www.dot.state.fl.us/pavementmanagement/PUBLICATIONS.shtm>
26. Florida Department of Transportation Rigid Pavement Design Manual
<http://www.dot.state.fl.us/pavementmanagement/PUBLICATIONS.shtm>
27. Florida Department of Transportation Pavement Type Section Manual
<http://www.dot.state.fl.us/pavementmanagement/PUBLICATIONS.shtm>
28. Florida Department of Transportation Right of Way Manual
<http://www.dot.state.fl.us/rightofway/Documents.shtm>

29. Florida Department of Transportation Intelligent Transportation System Guide Book
http://www.dot.state.fl.us/TrafficOperations/Doc_Library/Doc_Library.shtm
30. Federal Highway Administration Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications
<http://www.fhwa.dot.gov/engineering/geotech/pubs/reviewguide/checklist.cfm>
31. Florida Department of Transportation Bicycle Facilities Planning and Design Handbook
<http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/625010050.pdf>
<http://www.dot.state.fl.us/emo/pubs/pdeman/pt2ch14.pdf>
32. Federal Highway Administration Hydraulic Engineering Circular Number 18 (HEC 18).
http://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=17
33. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways
<http://www.dot.state.fl.us/rddesign/FloridaGreenbook/FGB.shtm>
34. **Florida Statutes**
<http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Tab=statutes&CFID=14677574&CFTOKEN=80981948>

B. Innovative Aspects:

All innovative aspects shall be identified separately as such in the Technical Proposal.

An innovative aspect does not include revisions to specifications, standards or established Department policies. Innovation should be limited to Design/Build Firm's means and methods, roadway alignments, approach to project, etc.

C. Geotechnical Services:

1. General Conditions:

The Design/Build Firm will be responsible for identifying and performing any geotechnical investigation, analysis, and design dictated by the project needs. All geotechnical work necessary shall be performed in accordance with the governing regulations.

The Design/Build Firm shall provide the Department signed and sealed design and construction reports. The reports shall be a record set of all geotechnical information, including relevant support data.

2. Pile Foundations (Not Applicable to this Project)

3. Drilled Shaft Foundations for Bridges and Major Structures (Not Applicable to this Project)

D. Environmental Permits:

1. Storm Water and Surface Water:

Plans shall be prepared in accordance with Chapter 62-25, Regulation of Storm water Discharge, Florida Administrative Code.

2. Permits:

All applicable data shall be prepared in accordance with Chapter 373 and 403, Florida Statutes, Chapters 40 and 62, Florida Administrative Code; Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and parts 114 and 115, Title 33, Code of Federal Regulations. In addition to these Federal and State permitting requirements, any dredge and fill permitting required by local agencies shall be prepared in accordance with their specific regulations. Acquisition of all applicable permits will be the responsibility of the Design/Build Firm. Preparation of complete permit packages will be the responsibility of the Design/Build Firm. The Design/Build Firm will obtain permits while acting as an authorized representative for the "Department" for permitting purposes only. If any agency rejects or denies the permit application, it is the Design/Build Firm's responsibility to make whatever changes necessary to ensure the permit is approved.

The Design/Build Firm will be required to pay all permit fees. Any fines levied by permitting agencies shall be the responsibility of the Design/Build Firm.

However, notwithstanding anything above to the contrary, upon the Design/Build Firm's preliminary request for extension of Contract Time, pursuant to 8-7.3, being made directly to the District Construction Engineer, the Department reserves unto the District Construction Engineer, in his sole and absolute discretion, according to the parameters set forth below, the authority to make a determination to grant a non-compensable time extension for any impacts beyond the reasonable control of the Design/Build Firm in securing permits. Furthermore, as to any such impact, no modification provision will be considered by the District Construction Engineer unless the Design/Build Firm clearly establishes that it has continuously from the beginning of the project aggressively, efficiently and effectively pursued the securing of the permits including the utilization of any and all reasonably available means and methods to overcome all impacts. There shall be no right of any kind on behalf of the Design/Build Firm to challenge or otherwise seek review or appeal in any forum of any determination made by the District Construction Engineer under this provision.

3. Protected Species

As part of the Design/Build Firm's responsibility to acquire all necessary permits, an evaluation of the project for impacts to protected species shall be performed by the Design/Build Firm in accordance with the Endangered Species Act, State Statutes and all rules and regulations of each regulatory agency with jurisdiction on the project. This evaluation shall be of sufficient detail and properly documented so as to satisfy permit acquisition and/or any mitigation requirements. The Design/Build Firm shall be responsible for any agency coordination required to perform the evaluation, including all activities that impact any wildlife permits and any mitigation.

The Design/Build Firm is responsible for avoidance and minimization of impacts to protected species and their habitats within and adjacent to project limits to the maximum practicable extent. The Design/Build Firm shall be responsible for an assessment of all federal and state-protected species and their habitat that could be impacted by the project. Species-specific surveys conducted for protected species shall be in

accordance with guidelines/protocol accepted by the regulatory agencies with the appropriate jurisdiction (e.g., U.S. Fish and Wildlife Service for federally-listed species and Florida Fish and Wildlife Conservation Commission for state-listed/regulated species). The Design/Build Firm is advised that Federal, State and/or local permits (including take/incidental take permits) may be required prior to impacting certain species (including, but not limited to bald eagles, gopher tortoises and tortoise commensal species), and/or prior to impacting individual animals, nests, burrows or their habitat. The Design/Build Firm shall coordinate all applicable permit applications and discussions of protected species and/or habitat impact mitigation through the Department's Environmental Management Office for concurrence prior to coordination with any regulatory agency. The Department will be allotted thirty (30) days to review and comment on any submittal or re-submittal.

The Design/Build Firm shall be responsible for all activities associated with the project (including any mitigation and/or any off site activities such as borrow pits and staging areas) and all costs associated with any wildlife related permit, coordination, commitments, conditions, requirements, understandings, or agreements throughout the life of the project.

The Design/Build Firm must develop into their project schedules the statutory time allowed and/or other reasonable time frame for agencies to review submittals, time necessary to prepare responses to agency questions/comments, additional review time by agencies, and the maximum and/or reasonable time period allowed for agency action.

4. **Archaeological and Historical Features**

The Design/Build firm is hereby advised that the project is within the U.S. 41/Tamiami Trail and Tamiami Canal corridor. These two historic linear resources have been determined eligible for listing in the National Register of Historic Places (NRHP) by the State Historic Preservation Officer (SHPO). These properties are therefore protected under Section 106 of the National Historic Preservation Act, Section 4(f) of the U.S. Department of Transportation Act, and Florida Statutes Chapter 267. The proposed RADS project will not alter the existing design (alignment, number and width of travel lanes, shoulder width, and use) of U.S. 41/Tamiami Trail nor will it alter the existing design (width, alignment, direction of flow, and use) of the Tamiami Canal. Construction equipment shall not alter these resources.

The Design/Build Firm shall be responsible for all activities associated with the project (including any mitigation and/or any off site activities such as borrow pits and staging areas) and all costs associated with any archaeological and historical features and/or coordination, commitments, conditions, requirements, understandings, or agreements throughout the life of the project.

The Design/Build Firm must develop into their project schedules the statutory time allowed and/or other reasonable time frame for agencies to review submittals, time necessary to prepare responses to agency questions/comments, additional review time by agencies, and the maximum and/or reasonable time period allowed for agency action.

E. Railroad Coordination: (Not Applicable to this Project)

F. Survey:

The Design/Build Firm shall perform all surveying and mapping services necessary to complete the project. Survey services must also comply with all pertinent Florida Statutes and applicable rules in the Florida Administrative Code. All surveying and mapping work must be accomplished in accordance with the Department's Surveying Procedure, Topic Nos. 550-030-101; Right-of-Way Mapping Procedure,

Topic No. 550-030-015; Aerial Surveying Standards for Transportation Projects Procedure, Topic No. 550-020-002. This work must comply with the Minimum Technical Standards for Professional Surveyors and Mappers, Chapter 61G17, Florida Administrative Code (F.A.C.), pursuant to Section 472.027, Florida Statutes (F.S.) and any special instructions from the Department. This survey also must comply with the Department of Environmental Protection Rule, Chapter 18-5, F.A.C. pursuant to Chapter 177, F.S., and the Department of Environmental Protection.

G. Verification of Existing Conditions:

The Design/Build Firm shall be responsible for verification of existing conditions, including research of all existing Department records and other information.

By execution of the contract, the Design/Build Firm specifically acknowledges and agrees that the Design/Build Firm is contracting and being compensated for performing adequate investigations of existing site conditions sufficient to support the design developed by the Design/Build Firm and that any information is being provided merely to assist the Design/Build Firm in completing adequate site investigations. Notwithstanding any other provision in the contract documents to the contrary, no additional compensation will be paid in the event of any inaccuracies in the preliminary information.

H. Submittals:

1. Plans:

Plans must meet the minimum contents of a particular phase submittal prior to submission for review. The particular phase of each submittal shall be clearly indicated on the cover sheet. Component submittals must be accompanied by sufficient information for adjoining components or areas of work to allow for proper evaluation of the component under review.

The Design/Build Firm shall provide copies of required review documents as listed below.

90% Component Plans

- 10 CD's 11" X 17" roadway plans
- 3 sets of documentation – roadway/drainage
- 3 copies of Technical Special Provisions
- Bridge Load Rating
- Independent Peer reviewer's comments and comment responses

Final Component Plans

- 10 CD's of 11" X 17" roadway plans
- 2 sets of final documentation
- 1 signed and sealed copy of Specifications Package
- 2 sets of electronic copies of Technical Special Provisions on CD
- Independent Peer Reviewer's signed and sealed cover letter that all comments have been addressed and resolved.

Construction Set:

1 set of 11”X 17” copies of the signed and sealed plans for the Department to stamp “Released for construction”

Final signed and sealed plans will be delivered to the Department’s Project Manager a minimum of 5 working days prior to construction of that component. The Department’s Project Manager will send a copy of a final signed and sealed plans to the appropriate office for review and stamping “Released for Construction”. Only stamped signed and sealed plans are valid and all work that the Design/Build Firm performs in advance of the Department’s release of Plans will be at the Design/Build Firm’s risk.

Record Set:

The Design/Build Firm shall furnish to the Department, upon project completion, the following:

- 1 set of 11” X 17” signed and sealed plans
- 5 sets of 11 "X 17” copies of the signed and sealed plans
- 1 signed and sealed copy of the Bridge Load Rating based on as-built conditions
- 2 sets of final documentation (if different from final component submittal)
- 2 (two) Final Project CD’s

The Design/Build Firm's Professional Engineer in responsible charge of the project’s design shall professionally endorse (signed and sealed and certified) the record prints, the special provisions and all reference and support documents. The professional endorsement shall be performed in accordance with the Department Plans Preparation Manual.

The Design Build Firm shall complete the record set as the project is being constructed. The record set becomes the as-builts at the end of the project. All changes shall be signed/sealed by the EOR. The record set shall reflect all changes initiated by the Design/Build Firm or the Department in the form of revisions. The record set shall be submitted on a Final Project CD upon project completion. The CEI shall do a review of the record set prior to final acceptance in order to complete the record set.

The CEI shall certify the final plans as per Section 4.5.7 of Chapter 4 of the Preparation and Documentation Manual (TOPIC No. 700-050-010)

2. **Milestones: (Not Applicable to this Project)**
3. **Railroad Coordination: (Not Applicable to this Project)**

I. Contract Duration:

The Design/Build Firm shall establish the contract duration for the subject project. In no event shall the contract duration exceed **325 calendar days**. The schedule supporting the proposed contract duration will be submitted with the Technical Proposal. The Proposed Contract Time (PCT) reflected in the schedule may be amended in the bid proposal. The official PCT will be the one submitted with the Bid Price Proposal.

J. Project Schedule:

The Design/Build Firm shall submit a project schedule, in accordance with Subarticle 8-3.2 (Design/Build Division I Specifications), which supports the contract duration submitted as part of the Technical Proposal. The minimum number of activities shall be those listed in the payout schedule and those listed below:

- Anticipated Award Date
- Design Submittals
- Design Survey
- Design Reviews by the Department and FHWA
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Roadway Design
- Roadway Construction
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Maintenance of Traffic Design
- Maintenance of Traffic Set-Up (per duration)
- Erosion Control
- Additional Construction Milestones as determined by the Design/Build Firm
- Final Completion Date for All Work

The DESIGN BUILD FIRM'S schedule should allow for a fifteen (15) calendar day (excluding Holidays as defined in section 1-3 of the Specifications) review time for the DEPARTMENT'S review of all submittals.

K. Key Personnel/Staffing:

The Design/Build Firm's work shall be performed and directed by key personnel identified in the technical proposal by the Design/Build Firm. Any changes in the indicated personnel shall be subject to review and approval by the Department's Project Manager. The Design/Build Firm shall have available a professional staff that meets the minimum training and experience set forth in Florida Statute Chapter 455.

L. Meetings and Progress Reporting:

The Design/Build Firm shall anticipate periodic meetings with Department personnel and other agencies as required for resolution of design and/or construction issues. These meetings may include:

- Department technical issue resolution
- Permit agency coordination
- Local government agency coordination
- Scoping Meetings

During design, the Design/Build Firm shall meet with the Department's Project Manager on a monthly basis and provide a month look ahead of the activities to be completed during the upcoming month.

During construction, the Design/Build Firm shall meet with the Department's Project Manager on a weekly basis and provide a one-week look ahead for activities to be performed during the coming week.

The Design/Build Firm shall, on a monthly basis, provide written progress reports that describe the items of concern and the work performed on each task.

M. Public Involvement:

1. General:

Public involvement is an important aspect of the project. Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the project. A Public Involvement Consultant (PIC) has been hired by the Department to carry out an exhaustive Public Involvement Campaign and a marketing effort. The Design/Build Firm will continue to be part of the Public Involvement effort but on a limited basis as described below.

2. Community Awareness:

The Design/Build Firm will review and comment on a Community Awareness Program provided by the PIC for the project.

3. Public Meetings:

The Design/Build Firm shall provide all support necessary for the PIC to hold various public meetings, which may include:

- Kick-off or introductory meeting
- Metropolitan Planning Organization (MPO) Citizens Advisory Committee Meetings
- MPO Transportation Technical Committee Meetings
- MPO Meetings
- Public Information Meetings
- Elected and appointed officials
- Special interest groups (private groups, homeowners associations, environmental groups, minority groups and individuals)

The Design/Build Firm shall include attendance at two meetings per month for the term of the contract to support the public involvement program.

For any of the above type meetings the Design/Build Firm shall provide all technical assistance, data and information necessary for the PIC to produce display boards, printed material, video graphics, computerized graphics, etc., and information necessary for the day-to-day exchange of information with the public, all agencies and elected officials in order to keep them informed as to the progress and impacts that the proposed project will create. This includes workshops, information meetings, and public hearings.

The Design/Build Firm shall, on an as-needed basis, attend the meetings with an appropriate number of his personnel to assist the Department's Project Representative/PIC. The Design/Build Firm shall forward

all requests for group meetings to the PIC. The Design/Build Firm shall inform the PIC of any meetings with individuals that occur without prior notice.

4. Public Workshops, Information Meetings:

The Design/Build Firm shall provide all the support services listed in No. 3 above. All legal/display ads announcing workshops, information meetings, and public meetings will be prepared and paid for by the PIC.

The Department will be responsible for the legal/display advertisements for design concept acceptance. The PIC will be responsible for preparing and mailing (includes postage) for all letters announcing workshops and information meetings.

5. Public Involvement Data:

The Design/Build Firm is responsible for the following:

- Coordinating with the Public Involvement Consultant.
- Identifying possible permit and review agencies and providing names and contact information for these agencies to the PIC.
- Providing required expertise (staff members) to assist the PIC on an as-needed basis.
- Preparing color graphic renderings and/or computer generated graphics to depict the proposed improvements for coordination with the Department, local governments, the Urban Design Guidelines Committee, and other agencies.

The collection of public input occurs throughout the life of the project and requires maintaining files, newspaper clippings, letters, and especially direct contacts before, during and after any of the public meetings. Articles such as those mentioned shall be provided to the PIC for their use and records.

In addition to collecting public input data, the Design/Build Firm may be asked by the PIC to prepare responses to any public inquiries as a result of the public involvement process. The Department shall review all responses prior to mailing.

N. Quality Management Plan (QMP):

1. Design:

The Design/Build Firm shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications, geotechnical and other services furnished by the Design/Build Firm under this contract.

The Design/Build Firm shall provide a Design Quality Management Plan, which describes the Quality Control (QC) procedures to be utilized to verify, independently check, and review all design drawings, specifications, and other documentation prepared as a part of the contract. In addition the QMP shall establish a Quality Assurance (QA) program to confirm that the Quality Control procedures are followed. The Design/Build Firm shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The QMP may be one utilized by the Design/Build Firm, as part of their normal operation or it may be one specifically designed for this project. The

Design/Build Firm shall submit a QMP within 15 working days of the written Notice to Proceed for review and concurrence by the Department. A marked up set of prints from the Quality Control review will be sent in with each review submittal. The responsible Professional Engineers or Professional Surveyor that performed the Quality Control review, as well as the QA manager will sign a statement certifying that the review was conducted.

The Design/Build Firm shall, without additional compensation, correct all errors or deficiencies in the surveys, designs, drawings, specifications and/or other services.

No fabrication, casting, or construction will occur until all related design review and shop drawing review comments are resolved.

2. **Construction:**

The Design/Build Firm shall be responsible for developing and maintaining a Construction Quality Control Plan in accordance with Section 105 of Standard Specifications which describes their Quality Control procedures to verify, check, and maintain control of key construction processes and materials.

The sampling, testing and reporting of all materials used shall be in compliance with the Sampling, Testing and Reporting Guide (STRG) provided by the Department. The Design/Build Firm will use the Department's database(s) to allow audits of materials used to assure compliance with the STRG. The Department has listed the most commonly used materials and details in the Department's database. When materials being used are not in the Department's database list, the Design/Build Firm shall use appropriate material details from the STRG to report sampling and testing. Refer to the "Access Instruction for LIMS" for more information on how to gain access to the Department's databases: <http://www.dot.state.fl.us/statematerialsoffice/quality/programs/qualitycontrol/contractor.shtm>

Prepare and submit to the Engineer a Job Guide Schedule (JGS) using the Laboratory Information Management System (LIMS), 21 calendar days prior to commencement of construction. Update the Job Guide Schedule and submit it to the Engineer prior to each monthly progress estimate. The Department may not authorize payment of any progress estimate not accompanied by an up-to-date Job Guide Schedule. Maintain the Job Guide Schedule throughout the project including the quantity placed since the previous submittal, and total to date quantity and any additional materials placed. Do not commence work activities that require testing until the Job Guide Schedule has been reviewed and accepted by the Engineer. At final acceptance, submit a final Job Guide Schedule that includes all materials used on the project in the same format as the monthly reports.

The Department shall maintain its rights to inspect construction activities and request any documentation from the Design/Build Firm to ensure quality products and services are being provided in accordance with the Department's Materials Acceptance Program.

O. Liaison Office:

The Department and the Design/Build Firm will designate a Liaison Office and a Project Manager who shall be the representative of their respective organizations for the project.

P. Schedule of Values:

The Design/Build Firm will be responsible for invoicing the Department based on current invoicing policy and procedure. Invoicing will be based on the completion or percentage of completion of major,

well-defined tasks as defined in the schedule of values. Final payment will be made upon final acceptance by the Department of the Design/Build project. Tracking DBE participation will be required under normal procedures according to the CPAM. The Design/Build Firm must submit the schedule of values to the Department for approval. No invoices shall be submitted prior to Department approval of the schedule of values.

Upon receipt of the invoice, the Department's Project Manager will make judgment on whether or not work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

Q. Computer Automation:

The project shall be developed utilizing computer automation systems in order to facilitate the development of the contract plans. Various software and operating systems were developed to aid in assuring quality and conformance with Department of Transportation policies and procedures. Seed Files, Cell Libraries, User Commands, MDL Applications and related programs developed for roadway design and drafting are available for the MicroStation V8 format in the FDOT CADD Software Suite. However, it is the responsibility of the Design/Build Firm to obtain and utilize current Department releases of all CADD applications.

The Design/Build Firm's role and responsibilities are defined in the Department's CADD Manual. The Design/Build Firm will be required to submit final documents and files which shall include complete CADD design and coordinate geometry files in Intergraph / Micro station format, as described in the above referenced document.

The archived submittal shall also include either a TIMS database file, CADD Index file (generated from RDMENU) or documentation that shall contain the project history, file descriptions of all (and only) project files, reference file cross references, and plotting criteria a (e.g. batch, level symbology, view attributes, and display requirements). A printed directory of the archived submittal shall be included.

R. Construction Engineering and Inspection:

The Department is responsible for providing Construction Engineering and Inspection (CEI) and Quality Assurance Engineering.

The Design/Build Firm is subject to the Department's Independent Assurance (IA) Procedures.

S. Testing:

The Department or its representative will perform verification and resolution testing services in accordance with the latest Specifications. On all Federal Aid Projects, the Department or its representative shall perform verification sampling and testing on site as well as off site locations such as pre-stress plants, batch plants, structural steel and weld, fabrication plants, etc.

T. Value Added:

The Design/Build Firm shall provide a Value Added Project Features, in accordance with Article 5-14 of the Specifications for the following features:

- Roadside Animal Detection System (RADS)

- And any other products or features the Design/Build Firm desires.

The minimum Value Added timeframe shall be for twelve (12) months after the final acceptance of the project.

The Design/Build Firm shall develop the Value Added criteria, measurable standards, and remedial work plans in the Design/Build Firm's technical proposal for features proposed by the D/B Firm. The Design/build Firm shall have a maximum of three days (72 hours) to repair the system after notification of a failure.

U. Adjoining Construction Projects:

The Design/Build Firm shall be responsible for coordinating construction activities with other construction projects that are impacted by or impact this project. This includes projects under the jurisdiction of local governments, the Department, or other regional and state agencies.

V. Design Issue Escalation:

The Department has established the issue escalation process for design questions and conflict resolution that the Design/Build Firm shall follow unless revised by the Partnering agreement. All issues are to be directed to the Department Project Manager. If the issue cannot be resolved at this level the Department Project Manager shall forward the issue to the next level in the process. The escalation process begins with the District Design Engineer, followed by the Director of Transportation Operations, and finally to the District Secretary. Each level shall have a maximum of three working days to answer, resolve or address the issue. This three day window is a response time and does not infer resolution. Questions may be expressed verbally and followed up in writing. The Department Project Manager will respond in a timely manner but not to exceed three working days. The Design/Build Firm shall provide any available supporting documentation.

The Design/Build Firm shall provide a similar issue escalation process for his organization with personnel of similar levels of responsibility.

The District Secretary will have the final authority on design decisions.

W. Construction Clarification, Conflict Resolution, and Issue Escalation:

In the event that construction problems occur, the resolution of those problems will be processed in one of the following two ways unless revised by a Partnering agreement:

- If the resolution does not change the original intent of the technical proposal/RFP, then the Design/Build Firm Engineer of Record (EOR) will be responsible for developing the design solution to the construction problem and the District Resident Engineer will be responsible for review and response within 10 working days. The District Resident Engineer will either concur with the proposed solution or, if the District Resident Engineer has concerns, the issue will be escalated as described in the process below.
- If the resolution does alter the original intent of the technical proposal/RFP then the EOR will develop the proposed solution, copy in the District Resident Engineer, and send it to the District Construction Office for review and response

through the Department Project Manager. The District Construction Office will respond to the proposed solution within ten working days. The District Construction Office will either concur with the proposed solution or, if the District Resident Engineer has concerns, the issue will be escalated as described in the process below. Changes to the original intent of the technical proposal/RFP will require a contract change order and FHWA approval.

- The Department has established the issue escalation process for construction questions and conflict resolution that the Design/Build Firm shall follow unless revised by the Partnering agreement. All issues are to be directed to the Department Project Manager. If the issue cannot be resolved at this level the Department Project Manager shall forward the issue to the next level in the process. The escalation process begins with the District Construction Engineer, followed by the Director of Transportation Operations, and finally to the District Secretary. Each level shall have a maximum of three working days to answer, resolve or address the issue. This three day window is a response time and does not infer resolution. Questions may be expressed verbally and followed up in writing. The Department Project Manager will respond in a timely manner but not to exceed three working days. The Design/Build Firm shall provide any available supporting documentation.

The Design/Build Firm shall provide a similar chain of command for his organization with personnel of similar levels of responsibility.

Should an impasse develop, the Regional Dispute Review Board shall assist in the resolution of disputes and claims arising out of the work on the Contract.

VI. Design and Construction Criteria.

A. General:

The Design/Build Firm shall be responsible for: detailed plan checking as outlined in the Plans Preparation Manual (PPM); as described in the RFP; and the Design and Construction criteria package. This includes a checklist of the items listed in the PPM for each completed phase submittal. Bridge submittals may be broken into foundation, substructure, superstructure, approach spans and main channel spans. Roadway submittals may be broken down into grading, drainage, walls, ITS, signing & pavement marking, signalization, landscaping and final geometry components. The component design must be in conformity with the Design and Construction Criteria requirements, approved preliminary layout and concept as provided in the Technical Proposal.

Before construction activities can begin for a specific component, signed and sealed design plans and calculations supporting the design for that component must be reviewed by the Department. Component submittals shall be complete submittals along with all the supporting information necessary for review. The work must represent logical work activities and must show impacts on subsequent work on this project. Any modification to the component construction due to subsequent design changes as the result of design development is solely the Design/Build Firm's risk. Upon review by the Department, the plans will be stamped "Released for Construction" and initialed and dated by the reviewer. Any construction initiated by the Design/Build Firm prior to receiving signed and sealed plans stamped "Released for Construction" shall be at the sole risk of the Design/Build Firm.

All design and construction documents shall be prepared using the English system.

B. Geotechnical Services (Not Applicable to this Project)

C. Utility Coordination

The Design Build Firm shall insure FDOT standards, policies, procedures, and design criteria are followed concerning utility coordination. The FDOT standards, policies, procedures, and design criteria are contained in the current adopted Design Standards, Standard Specifications for Road and Bridge Construction, Rule 14-46.001 (Utility Accommodation Manual), and any Supplemental Specification, Provision, or Agreement attached to this RFP.

The Design/Build Firm may employ more than one individual or utility engineering consultant to provide utility coordination and engineering design expertise. However, the Design/Build Firm shall employ and identify a single dedicated person responsible for managing all utility coordination and design activities. This person shall be contractually referred to as the Utility Coordination Manager and shall be identified in the Design/Build Firm's proposal. The Utility Coordination Manager shall be required to satisfactorily demonstrate to the Department's Project Manager having the following knowledge, skills, and abilities:

1. A minimum of 4 years of experience performing utility coordination in accordance with Department standards, policies, and procedures.
2. Knowledge of the Department plans production process and District utility coordination practices,
3. Knowledge of Department agreements, standards, policies, and procedures.

The Design/Build Firm's Utility Coordination Manager shall be responsible for, but not limited to, the following:

1. Ensuring that Utility Coordination and design is conducted in accordance with the Department's standards, policies, procedures, and design criteria.
2. Assisting the engineer of record in identifying all existing utilities and coordinating any new installations. . Reviewing proposed utility permit application packages and recommend approval/disapproval of each permit application based on the compatibility of the permit as related to the Design/Build firm's plans.
3. Scheduling utility meetings, keeping and distribution of minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues.
4. Distributing all plans, conflict matrixes and changes to affected utility owners and making sure this information is properly coordinated.
5. Identifying and coordinating the completion of any Department or utility owner agreement that is required for reimbursement, or accommodation of the utility facilities associated with the Design/Build project. Reviewing, approving, signing and coordination of all Utility Work Schedules.
6. Assisting the Engineer of Record and the contractor with resolving utility conflicts.
7. Review of all Utility Work Schedules.
8. Handling reimbursable issues inclusive of betterment and salvage determination.
9. Obtaining and maintaining Sunshine State One Call Design to Dig Tickets.
10. QA Review of construction plans prior to construction activities for completeness

11. Acquisition/procurement of any required easements when stated in RFP and as required by design
12. Periodic project updates to the district utility office as needed

D. Roadway Plans:

General:

The Design/Build Firm shall prepare the Roadway Plans Package. This work effort includes the roadway design and drainage analysis needed to prepare a complete set of Roadway Plans, Traffic Control Plans, Environmental Permits and other necessary documents.

Design Analysis:

The Design/Build Firm shall develop and submit a signed and sealed Typical Section Package for review and concurrence by the Department and FHWA on Federal Aid Oversight Projects. These packages shall include the following:

1. **Typical Section Package:**
 - Transmittal letter
 - Location Map
 - Roadway Typical Section(s)
 1. Minimum lane, shoulder, median widths
 2. RAD Device locations
 - Data Sheet
 - Design Speed
2. **Pavement Design Package: (Not Applicable to this Project)**
3. **Drainage Analysis: (Not Applicable to this Project)**

E. Geometric:

The Design/Build Firm shall design the geometric for the project using the design standards that are most appropriate with proper consideration given to the design traffic volumes, adjacent land use, design consistency, aesthetics, ADA requirements, and this document.

The design elements shall include, but not be limited to, the horizontal and vertical alignments, lane widths, shoulder widths, median widths, cross slopes, borders, sight distance, side slopes, front slopes and ditches. The geometric design developed by the Design/Build Firm shall be an engineering solution that is not merely an adherence to the minimum AASHTO and/or Department standards.

F. Design Documentation, Computations and Quantities:

The Design/Build Firm shall submit to the Department design notes and computations to document the design conclusions reached during the development of the construction plans.

The design notes and computation sheets shall be fully titled, numbered, dated, indexed, and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to a standard size 8½" x 11". The data shall be in a hard-back folder for submittal to the Department. At the project completion, a final set of design notes and computations, signed by the Design/Build Firm, shall be submitted with the record set of plans and tracings.

The design notes and calculations shall include, but not be limited to the following data:

1. Design standards used for the project
2. Geometric design calculations for horizontal alignments
3. Vertical geometry calculations
4. Documentation of decisions reached resulting from meetings, telephone conversations or site visits
5. Final quantities list

G. Structure Plans: (Not Applicable to this Project)

H. Specifications:

The Department Specifications Design Build Division One, Attachment A, may not be modified or revised. The Design/Build Firm shall also include all Technical Special Provisions, which will apply to the work in the proposal. Technical Special Provisions shall be written only for items not addressed by Department Specifications, and shall not be used as a means of changing Department Specifications. This is a Federally Funded project and all applicable specifications shall apply. Any Technical Special Provisions shall be submitted with the Technical Proposal for review and approval by the Department. Failure to submit them at this time may result in adjustments to the Contract Price.

Before construction activities can begin, the Design/Build Firm shall prepare and submit a signed and sealed Construction Specifications Package for the project, containing all applicable Division II and III Special Provisions and Supplement Specifications from the Specifications Workbook in effect at the time the Bid Price Proposals were due in the District Office. Specification Workbooks are posted on the Department's website at the following URL address:

<https://www2.dot.state.fl.us/SpecificationsPackage/Utilities/Membership/login.aspx?ReturnUrl=%2fspecificationspackage%2fDefault.aspx>.

The signed and sealed Specifications Package shall also include individually signed and sealed Technical Special Provisions for any and all work not addressed by Department Specifications. Any Technical Special Provisions included in the signed and sealed Construction Specifications Package which had not been included in the proposal phase, may require a contract cost modification as a condition of approval.

The Design/Build Firm must account for a 10 working day (excluding Holidays as defined in section 1-3 of the Specifications) review time in its schedule. Upon review by the Department, the Construction Specifications Package will be stamped "Released for Construction" and initialed and dated by the reviewer.

Any subsequent modifications to the Construction Specifications Package shall be prepared, signed and sealed as a Supplemental Specifications Package, subject to the same process for submittal, review, and, release for construction, as described above, for the original Construction Specifications Package.

Construction work affected by Supplemental Specifications Packages shall not begin until stamped "Released for Construction" Supplemental Specification Package is obtained.

I. Shop Drawings:

The Design/Build Firm shall be responsible for the preparation and approval of all Shop Drawings. Shop Drawings shall be submitted to the Department and shall bear the stamp and signature of the Design/Build Firm's Contractor Engineer of Record (EOR), and Specialty Engineer and signed and sealed by the Contractor's EOR or the Specialty Engineer as appropriate. The Department shall review the Shop Drawing(s) to evaluate compliance with project requirements and provide any findings to the Design/Build Firm. The Departments procedural review of shop drawings is to assure that the Design/Build Firm and the EOR have both accepted and signed the drawing, the drawing has been independently reviewed and is in general conformance with the plans. The Departments review is not meant to be a complete and detailed review. Upon review of the shop drawing, the Department will stamp "Released for Construction" or "Released for Construction as noted" and initialed and dated by the reviewer.

Shop Drawing submittals must be accompanied by sufficient information for adjoining components or areas of work to allow for proper evaluation of the Shop Drawing(s) submitted for review.

J. Sequence of Construction:

The Design/Build Firm shall construct the work in a logical manner and with the following objectives as guides:

1. Maintain or improve, to the maximum extent possible, the quality of existing traffic operations, both in terms of flow rate and safety, throughout the duration of the project.
2. Minimize the number of different Traffic Control Plan (TCP) phases, i.e., number of different diversions and detours for a given traffic movement.
3. Take advantage of newly constructed portions of the permanent facility as soon as possible when it is in the best interest of traffic operations and construction activity.
4. Maintain reasonable direct access to adjacent properties at all times, with the exception in areas of limited access right-of-way where direct access is not permitted.
5. Proper coordination with adjacent construction projects and maintaining agencies.

K. Stormwater Pollution Prevention Plans (SWPPP)

The Design/Build Firm shall prepare an erosion control plan that complies with the Storm Water Pollution Prevention Plan (SWPPP) as required by the National Pollution Discharge Elimination System (NPDES). The Design/Build Firm shall refer to the Plans Preparation Manual for information in regard to the SWPPP and Florida Department of Environmental Protection (FDEP) Rule 62-25 for requirements on the erosion control plan. Detailed limits of the erosion control items will be necessary but may be shown on the roadway plans sheets. This plan shall be submitted along with the Design/Build Firm's Certification at least 15 working days prior to beginning construction activities.

L. Temporary Traffic Control Plan:

1. Traffic Control Analysis:

The Design/Build Firm shall design a safe and effective Temporary Traffic Control Plan to move vehicular traffic during all phases of construction. The areas shall include, but are not limited to, construction phasing, utility relocation, drainage structures, signalization, ditches, front slopes, back slopes, drop offs within clear zone, and traffic monitoring sites. Special consideration shall be given to the drainage system when developing the construction phases. Positive drainage must be maintained at all times.

The Temporary Traffic Control Plan shall address how to assist with maintenance of traffic throughout the duration of the contract.

The Temporary Traffic Control Plan shall be prepared by a certified designer who has completed the Department's training course, and in accordance with the Department's Design Standards and the Roadway Plans Preparation Manual.

Transportation Management Plans (TMPs) are required for significant projects which are defined as:

1. A project that, alone or in combination with other concurrent projects nearby, is anticipated to cause sustained work zone impacts.
2. All Interstate system projects within the boundaries of a designated Transportation Management Area (TMA) that occupy a location for more than three days with either intermittent or continuous lane closures shall be considered as significant projects.

For significant projects a TMP will consist of three components:

- (1) Temporary Traffic Control (TTC) plan component;
- (2) Transportation Operations (TO) component; and
- (3) Public Information (PI) component

Additional information can be found in chapter 10 of the PPM.

2. Temporary Traffic Control Plans:

The Design/Build Firm shall utilize Index Series 600 of the Department's Design Standards where applicable. Should these standards be inadequate, a detailed Temporary Traffic Control Plan shall be developed. The Design/Build Firm shall prepare plan sheets, notes, and details to include the following: typical section sheet(s), general notes and construction sequence sheet(s), typical detail sheet(s), traffic control plan sheet(s).

The Design/Build Firm shall prepare additional plan sheets such as cross sections, profiles, drainage structures, retaining wall details, and sheet piling as necessary for proper construction and implementation of the Temporary Traffic Control Plan.

3. Traffic Control Restrictions:

There will be NO LANE CLOSURES restrictions for the project. A lane may only be closed during active work periods. All lane closures, including ramp closures, must be reported to the local emergency

agencies, the media and the District One information officer. Also, the Design/Build Firm shall develop the project to be able to provide for all lanes of traffic to be open in the event of an emergency or if the lane closure causes a driver delay greater than 20 minutes.

M. Environmental Services/Permits/Mitigation:

The Design/Build Firm will be responsible for preparing designs and proposing construction methods that are permitable. The Design/Build Firm will be responsible for any required permit fees. All permits required for a particular construction activity will be acquired prior to commencing the particular construction activity. Delays due to incomplete permit packages, agency rejection, agency denials, agency processing time, or any permit violations, except as provided in Section V.D.2, will be the responsibility of the Design/Build Firm, and will not be considered sufficient reason for time extension.

The installation of any “Optional Facility” identified within this RFP is not a requirement of this RFP, nor is the Design/Build Firm responsible for any permitting or commenting agency coordination or other impacts to the permit processes that would be associated with such an “Optional Facility”, unless the Design/Build Firm chooses to include the “Optional Facility” in its Proposal.

N. Signing and Pavement Marking Plans:

The Design/Build Firm shall prepare signing and pavement marking plans in accordance with Department criteria. The warning signs may be placed behind existing guardrail or new guardrail. The intent is to maximize the distance between the edge of the travel lane and the new guardrail.

O. Lighting Plans:(Not Applicable to this Project)

VII. Technical Proposal Requirements.

A. General:

Each Design/Build Firm being considered for this project is required to submit a Technical Proposal. The proposal shall include sufficient information to enable the Department to evaluate the capability of the Design/Build Firm to provide the desired services. The data shall be significant to the project and shall be innovative, when appropriate, and practical. Discussions of past performances on other projects shall be minimized except as they relate to the proposed work.

B. Submittal Requirements:

The Technical Proposal shall be submitted in ACCO Binders with identifying labels and with tabs labeled Section 1 through Section 9 with the information, paper size and page limitation requirements as listed below.

A copy of the “Written Technical Proposal” **in its entirety** must also be submitted in electronic format on a Compact Disc (CD). The format shall be saved in .pdf format. Minimum font size of ten (10).

Submit Three (3) CDs of the Technical Proposal in its entirety and six (6) hard copies (one original and 5 copies) of the Technical Proposal to:

Mr. Ed McKinney, PSU Administrator
ATTN: Felipe Alvarez
801 North Broadway Ave.
Bartow, FL. 33830

Section 1: Written Technical Proposal

- Paper size: 8½" x 11", additional larger charts and graphs may be provided if folded neatly to 8½" x 11"
- Maximum allowed pages: 50

The minimum information to be included:

- **Approach and Understanding of the Project:**

The Design/Build Firm shall present a comprehensive plan for completing the specified work. The plan should address all significant design and construction issues and constraints and should demonstrate efficient use of manpower, materials, equipment, construction schemes, and techniques for completing the project.

- **Staffing Plan:**

The Design/Build Firm shall submit a staffing plan, which clearly illustrates the key elements of the organizational structure, proposed to accomplish the management, technical, construction and administrative services required. Project management and key personnel within each area of required services shall be identified and past experience of each, as it relates to this project, shall be discussed. The Department must approve any changes to the Project Management and Key Personnel. Other items to be included in the discussion of the staffing plan are:

1. Man-loading requirements (both quality and quantity) for all technical services.
2. Man-loading capabilities of all team firms.
3. Man-loading availability for the project.

- **Responsible Office:**

Design/Build Firms being considered for this project may have more than one office location. The office assigned responsibility for the work shall be identified in the Technical Proposal. If different elements of the work will be done at different locations, those locations shall be listed.

- **Other Appropriate Data:**

Other data demonstrating the ability of the Design/Build Firm to provide the desired services may be included in the Technical Proposal.

- **Coordination:**

During the performance of the services, coordination must be maintained with the Department and/or other agencies. A suggested method for assuring proper coordination shall be addressed in the Technical Proposal.

- A summary of innovative aspects: Details can be explained in Section Four (4) below.
- A summary of Design/Build Firm's Value Added Features: The Design/Build Firm will summarize the Design/Build Firm's Value Added Features that is being proposed. Details of criteria will be provided in Section six (6) below.
- A summary of Quality Management: The actual plan will be provided in Section five (5) below.
- A summary of the project schedule: The full schedule will be provided in Section three (3) below.

Section 2: Resumes of Key Project Personnel

- Paper size: 8½" x 11"
- Maximum allowed pages: Each Résumé is limited to one (1) page per person.
- The minimum information to be included: experience directly relevant to this project.

Section 3: Proposed Schedule

- Paper size: 8½" x 11" or larger if folded neatly to 8½" x 11"
- Maximum allowed pages: 3
- The minimum information to be included in the summary CPM schedule of anticipated major milestones and their associated phasing as follows:

Anticipated Award Date
Design Schedule
Design Reviews by the DEPARTMENT
Geotechnical Investigations
Permitting
Start of Construction
Construction Milestones
Construction Phasing and major MOT shifts
Utility Relocations
Structure Completion Date
Final Completion Date for all Work

Section 4: Innovative Aspects

- Paper size: 8½" x 11"
- Maximum allowed pages: 3
- Any supportive information associated with the innovative aspects being proposed.

Section 5: Quality Management Plan

- Paper size: 8½" x 11"
- Maximum allowed pages: Unlimited
- The minimum information to be included shall be in accordance with Section V. N.

Section 6: Design/Build Firm Value Added

- Paper size: 8½" x 11"
- Maximum allowed pages: 5
- The minimum information to be included shall be in accordance with Section V.T

Section 7: Design Support Documents

- Paper size: 8½" x 11"
- Maximum allowed pages: Unlimited
- The minimum information to be included is as follows:

The minimum information to be included shall be in accordance with Section VI. F.

Section 8: Preliminary Plans

- Paper size: 11" x 17"
- Maximum allowed pages: Unlimited

The minimum information to be included in the preliminary design requirements is as follows:

Roadway

- Project Limits
- Horizontal alignment
- Major topographic features
- Proposed vertical profile
- Survey controls and bench marks
- Stationing along Horizontal alignment
- Connections to existing roadway
- Utility provisions
- Maintenance of traffic provisions
- Roadway Typical Section

Section 9: Specifications

- Paper size: 8½" x 11"
- Marked up Workbook of Division II and III
- Technical Special Provisions
- The minimum information to be included shall be in accordance with section VI. H.

C. Evaluation Criteria:

The Technical Review Committee shall evaluate the written Technical Proposal by each Design/Build team. The Design/Build Firm should not discuss or reveal elements of the price proposal in the written proposals. A technical score for each firm will be based on the following criteria:

<u>Item</u>	<u>Value</u>
1. Environmental Protection/Commitments	10
2. Maintainability	15
3. Value Added	10
4. Schedule	5
5. Coordination	10
6. Quality Management Plan	5
7. Maintenance of Traffic	10
8. Innovation	10
9. Design Services	25
Maximum Score	100

The following is a description of each of the above referenced items:

1. **Environmental Protection/Commitments (10 points)**

Credit will be given for minimizing impacts to the environment during all phases of design/construction and insure that all environmental commitments are honored.

2. **Maintainability (15 points)**

Credit will be given for a design that minimizes periodic and routine maintenance. The following elements should be considered: access to provide adequate inspections and maintenance, adequacy of vandalism protection and quality of construction materials. Credit will be assigned for exceeding minimum material requirements to enhance durability of structural components.

3. **Value Added (10 points)**

Credit will be given for the extent of the Value Added coverage

4. **Schedule (5 points)**

Credit will be given for a comprehensive and logical schedule that minimizes contract duration. Proper attention should be provided to the project's critical path elements.

5. Coordination (10 points)

Credit will be given for a coordination plan/effort that includes, as a minimum, coordination with the following groups:

- Department management team
- Community and boat users
- Permitting/Environmental agencies
- Utility owners
- Local governments

6. Quality Management Plan (5 points)

Credit will be given for a timely, complete and comprehensive quality management plan, which incorporates effective peer reviews and includes all phases of the project.

7. Maintenance of Traffic (10 points)

Credit will be given for a MOT scheme that minimizes disruption of roadway traffic. This shall include, but not be limited to, minimization of lane closures, lane widths, visual obstructions, and drastic reductions in speed limits.

8. Innovation (10 points)

Credit will be given for innovative techniques of the proposed system and how it performs in the project limits.

9. Design Services (25 points)

Credit will be given for the quality of the following elements:

- Quality and design of RADS features
- Design coordination and plans preparation schedule
- Construction coordination plan minimizing design changes

D. Final Selection Formula:

The Selection Committee shall publicly open the sealed bid proposals and calculate an adjusted score using the following formula:

$$\text{BPP/TS} = \text{Adjusted Score}$$

$$\text{BPP} = \text{Bid Price Proposal}$$

$$\text{TS} = \text{Technical Score}$$

The firm selected will be that firm whose adjusted score is lowest.

The Department reserves the right to consider any proposal as non-responsive if any part of the Technical Proposal does not meet established codes and criteria. Also, if PCT is greater than Maximum Allowable Contract Time (MCT) (325) the proposal will be considered non-responsive.

E. Final Selection Process:

After the sealed bids are received, the Department will have a public meeting for the announcement of the Technical Scores and opening of sealed bids. This meeting will be recorded. At this meeting, the Department will announce the score for each member of the Technical Review Committee for each Proposer and each Proposer's average Technical Score. Following announcement of the technical scores, the sealed bid proposals will be opened and the adjusted scores calculated. The Selection Committee should meet a minimum of five working days after the public opening of the Technical Scores and Price Proposals. The Department's Selection Committee will review the evaluation of the Technical Review Committee and the Price Proposal of each Proposer as to the apparent lowest adjusted score and make a final determination of the lowest adjusted score. The Selection Committee has the right to correct any errors in the evaluation and selection process that may have been made. The Department is not obligated to award the contract and the Selection Committee may decide to reject all proposals. If the Selection Committee decides not to reject all proposals, the contract will be awarded to the Proposer determined by the Selection Committee to have the lowest adjusted score.

F. Stipend Awards:

The FDOT has elected to pay responsive shortlisted proposers who are not awarded the contract a stipend to offset some of the costs of preparing their proposals. That stipend will only be payable under the terms and conditions of the stipend agreement, a copy of which is included with this Request for Proposal. This Request for Proposal does not commit the FDOT or any other public agency to pay any costs incurred by an individual firm, partnership, or corporation in the submission of proposals except as set forth in the stipend agreement. The amount of the stipend compensation will be **\$5,000.00** and in no way is intended to compensate Firms for the total cost of preparing the Technical and Price proposal. The Department reserves the right to use any of the concepts or ideas within the technical proposals, as the Department deems appropriate.

In order for a short-listed firm to be eligible for a stipend, the short-listed firm must enter into a Stipend Agreement. The Contracting Office shall prepare the Agreement and forward the document to the Short-listed firms for signature. The Design/Build Firm shall reproduce the necessary copies. Terms of said agreement are non-negotiable. A fully executed copy of the agreement will be returned to the shortlisted firm.

Failure of a short-listed firm to execute and timely return the agreement shall constitute a release to the Department by the short-listed firm for proposal compensation and the Department shall have no further obligation to compensate the short-listed firm for its efforts in preparing its proposal.

The shortlisted firms are to submit an invoice for payment of services on a lump sum basis after the selection/award process is complete. The invoice should include a statement similar to the following: "All work necessary to prepare technical and price proposals in response to the Department's RFP for the subject project". Compensation is intended to be on a pass/fail basis (i.e., responsive or non-responsive). If a proposal is deemed to be non-responsive by the Technical Review Committee, then no stipend will be paid.

VIII. BID PROPOSAL REQUIREMENTS.

A. Bid Price Proposal:

Bid Price Proposals shall be submitted on the Bid Blank form attached hereto and shall include one lump sum price for the Project and the number of calendar days within which the Proposer will complete the project. The lump sum price shall include all costs for all design, geotechnical surveys, architectural services, engineering services, Design/Build Firms quality plan, construction of that portion of the Project, and all other work necessary to fully and timely complete that portion of the Project in accordance with the Contract Documents, as well as all job site and home office overhead, and profit, it being understood that payment of that amount for that portion of the Project will be full, complete, and final compensation for the work required to complete that portion of the Project. If the Department is compensating the short-listed lead designers for the proposals by means of a separate Design/Build Stipend Agreement (Form No. 700-011-14), the Total Lump Sum Price shown on the Bid Blank form (Design-Build Bid Proposal) should reflect a deduction of the proposal compensation amount as a separate line item. The Price Proposal shall be hand delivered in a separate sealed package to the following:

Mr. Ed McKinney, PSU Administrator
ATTN: Felipe Alvarez
801 North Broadway Ave.
Bartow, FL. 33830

The package shall indicate clearly that it is the Price Proposal and shall identify clearly the Proposer's name, and project description. The Bid Price Proposal shall be secured and unopened until the date specified for opening of Price Proposals.

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
BID PROPOSAL REQUIREMENTS**

CONTRACT NO.: E1141 FPID: 195338-2-52-01 FAP No. 3011 021 P

PROJECT LOCATION/DESCRIPTION: Roadside Animal Detection System along US 41

PROPOSED CONTRACT TIME: _____

<u>Item Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>
Design/Build	LS	1	\$ _____
TOTAL LUMP SUM PRICE			\$ _____

TOTAL LUMP SUM PRICE – DESIGN BUILD AMOUNT (WRITTEN OUT):

\$ _____

Design/Build Firm NAME: _____

Design/Build Firm ADDRESS: _____

Design/Build Firm SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____

Florida Department of Transportation ENVIRONMENTAL DETERMINATION

1. GENERAL INFORMATION

County : Collier
Project Name: U.S. 41 Roadside Animal Detection System
Project Limits: U.S. Highway 41 from 840 feet west of the entrance to the Skunk Ape Research Headquarters and Trail Lakes Campground to 440 feet east of the intersection of Turner River Road
Project Numbers: 195338-2-52-01 TBD
Financial Management Federal Aid

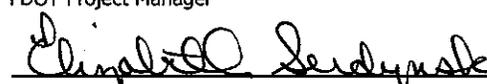
2. PROJECT DESCRIPTION

- a. Existing: **See Attachment 2-a**
b. Proposed Improvements: **See Attachment 2-b**

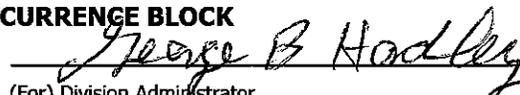
3. CLASS OF ACTION

- a. Class of Action
- | | |
|--|--|
| <input type="checkbox"/> Environmental Assessment | B. Other Actions |
| <input type="checkbox"/> Environmental Impact Statement | <input type="checkbox"/> Section 4(f) Statements |
| <input checked="" type="checkbox"/> Type 2 Categorical Exclusion | <input type="checkbox"/> Section 106 Consultation |
| | <input type="checkbox"/> Endangered Species Assessment |
- c. Public Involvement
- A public hearing is not required, therefore approval of this Type 2 Categorical Exclusion constitutes acceptance of the location and design concepts for this project.
 - A public hearing was held on _____ and a transcript is included with the environmental determination. Approval of this Type 2 Categorical Exclusion determination constitutes acceptance of the location and design concepts for this project.
 - An opportunity for a public hearing was afforded and a certification of opportunity is included with the environmental determination. Approval of this Type 2 Categorical Exclusion determination constitutes acceptance of the location and design concepts for this project.
 - A public hearing will be held and the public hearing transcript will be provided at a later date. Approval of this Type 2 Categorical Exclusion DOES NOT constitute acceptance of the project location and design concepts.
 - An opportunity for a public hearing will be afforded and a certification of opportunity will be provided at a later date. Approval of this Type 2 Categorical Exclusion DOES NOT constitute acceptance of the project location and design concepts.
- d. Cooperating Agency: COE USCG USFWS USEPA NMFS None

4. REVIEWER'S SIGNATURE BLOCK

 FDOT Project Manager	<u>5/12/10</u> Date
 FDOT Environmental Specialist	<u>5/12/10</u> Date
_____ FHWA Transportation Engineer	_____ Date

5. FHWA CONCURRENCE BLOCK

 (For) Division Administrator	<u>5/18/10</u> Date
---	------------------------

6. IMPACT EVALUATION

Topical Categories

SIGN	MIN	NONE	NO INV
------	-----	------	--------

A. SOCIAL IMPACTS

1. Land Use Changes
2. Community Cohesion
3. Relocation Potential
4. Community Services
5. Title VI Considerations
6. Controversy Potential
7. Utilities and Railroads

			X
			x
			x
		x	
		x	
		x	
			x

REMARKS

See Attachment A-4

See Attachment A-5

See Attachment A-6

B. CULTURAL IMPACTS

1. Section 4(f) Lands
2. Historic Sites/Districts
3. Archaeological Sites
4. Recreation Areas

		x	
	x		
		x	
		x	

See Attachment B-1

See Attachment B-2

See Attachment B-3

See Attachment B-4

C. NATURAL ENVIRONMENT

1. Wetlands
2. Aquatic Preserves
3. Water Quality
4. Outstanding Florida Waters
5. Wild and Scenic Rivers
6. Floodplains
7. Coastal Zone Consistency
8. Coastal Barrier Islands
9. Wildlife and Habitat
10. Farmlands

		x	
			x
			X
		x	
			x
	x		
			x

See Attachment C-1

See Attachment C-4

See Attachment C-9

D. PHYSICAL IMPACTS

1. Noise
2. Air
3. Construction
4. Contamination
5. Navigation

			x
			x
		x	
		x	
			x

See Attachment D-3

See Attachment D-4

E. PERMITS REQUIRED

Anticipated permits include, but are not limited to the following: United States Army Corps of Engineers, South Florida Water Management District ERP (Environmental Resource Permit) and US Environmental Protection Agency NPDES (National Pollution Discharge Elimination System).

7. WETLANDS FINDING (Applies to Type 2 Categorical Exclusions Only)

(See attachment C-1)

8. COMMITMENTS AND RECOMMENDATIONS (Applies to Type 2 Categorical Exclusions Only)

A. Commitments

The Florida Department of Transportation is committed to the following measures for this project:

1. If wetland mitigation is required, it will be mitigated pursuant to S. 373.4137, F.S. to satisfy all mitigation requirements of Part IV, Chapter 373, F.S. and 33 U.S.C.S. 1344.
2. Two linear resources are located within the project corridor: U.S. 41/Tamiami Trail (CR927) and Tamiami Canal (CR928). The segment of U.S. 41, within the RADS project area, is designated at the national level as the Tamiami Trail National Scenic Byway. The RADS project Request for Proposal (RFP) will identify these two linear resources and require that they not be altered/adversely affected by this project.
3. The process for inadvertent and/or unanticipated discovery of cultural remains will apply to this project. In the event that human remains are encountered during the course of development, the procedures outline in Chapter 872, Florida Statutes will need to be followed. In the event such discoveries are made during the development process, all activities in the immediate vicinity of the discovery will be suspended, and a professional archaeologist will be contacted to evaluate the importance of the discovery.

ATTACHMENT 2

a. Existing

The existing U.S. 41 consists of two 12 foot lanes of an undivided Rural Principal Arterial with a posted speed of 60mph during the day and 45mph at night. The existing R/W from the centerline of the road it varies from 33-93ft on the east side and 95-150ft on the west.

b. Proposed Improvements

The RADS project involves the installation of RADS along both sides of U.S. 41 from 840 feet west of the entrance to Skunk Ape Research Headquarters and Trail Lakes Campground to 440 feet east of the intersection of Turner River Road, Collier County a distance of approximately 1.3 miles. The system employs electronic motion and/or thermal infra-red sensors along this stretch of roadway to detect large animals (*e.g.*, panther, deer, black bear) as they approach the road. The triggering of a sensor activates warning message signs alerting drivers to the presence of animals on or near the roadway. Early warning can result in increased driver's awareness and reductions in speed that increase the probability of avoiding collisions with wildlife. Manufacturers of the commonly employed detection technologies have stated that the active signals used to detect large mammals operate at a very low power level and are safe to humans, animals, and the environment. Research has shown RADS to be effective in reducing vehicle speeds and vehicle collisions with wildlife such as large ungulates (*i.e.*, hooved mammals). It is anticipated this project will be completed as a Design/Build.

ATTACHMENT A- SOCIAL IMPACTS

A-4. Community Services

The Ochopee Fire Control District, Station 60 is located on the south side of U.S. 41 on the western end of the project. The project will not affect the access or function of the fire station.

A-5. Title VI Considerations

This project has been developed in accordance with the Civil Rights Act of 1964, and as amended. No Title VI issues were raised.

A-6. Controversy Potential

A Public Information Workshop for the US 41 Engineering and Environment Study was held on Thursday, July 30, 2009 at the Everglades City Community Center. This open house workshop revealed many concerns for the proposed fencing and construction of two proposed wildlife crossings. As a result of the public comments received, the Department in conjunction with the U.S. Fish and Wildlife Service and the Defenders of Wildlife further reviewed the alternatives presented at the workshop and determined to move forward with a Roadside Animal Detection System (RADS).

Prior to the mailing of project information letter on the RADS project the following people were contacted:

- Bill Hamilton, representative for the Aboriginal People of Florida
- Frank Denninger, representative of the Gladesmen
- David Shealy, Land Owner along the corridor
- Steve Terry, Land Resources Manager for the Miccosukee Tribe of Indians of Florida
- Dione Carroll, Attorney representing the Aboriginal People of Florida
- Pedro Ramos, Big Cypress National Preserve
- Commissioner Jim Coletta, County Commissioner
- Nancy Payton, National Wildlife Federation
- Brad Cornell, Audubon Society
- Ron Clark, Big Cypress National Preserve
- Krista Sherwood, Former Transportation Scholar for Big Cypress National Park

Opportunities were offered to meet individually to discuss RADS along this corridor. No individual meetings were requested at that time.

The Department mailed and/or e-mailed a letter dated March 19, 2010 to the 304 addresses contained in the project mailing list. FDOT requested any comments on the proposed RADS project by March 31, 2010. The Department received one request from Bill Hamilton on March 30, 2010 to meet with Bobby C. Billie (Aboriginal People of Florida) the week of April 19, 2010.

On April 23rd at 1:00 pm, a meeting was held at the FDOT office as requested by Bill Hamilton. Bobby Billie started the meeting by discussing the ways of their people, then stated an appreciation for the new direction of the project but had concerns about additional impacts to native vegetation as a result of construction of the RADS system. It was discussed that RADS will be placed inside the maintained FDOT right-of-way area. Bobby Billie found the project to be acceptable with keeping RADS inside the maintained right-of-way but expressed concern over any additional clearing and grubbing to place sensors.

In addition, the Department received one additional comment via e-mail on April 7, 2010 from John Galson. Mr. Galson expressed concern on the extermination of the panther due to the elimination of its food supply. Public involvement material is included as Appendix A.

ATTACHMENT B – CULTURAL IMPACTS

B-1. Section 4(f) Lands

Big Cypress National Preserve (BCNP) is located immediately adjacent to US 41 both north and south of the existing right-of-way throughout the majority of the project area. Staff from BCNP have been continuously involved and provided input on the development of the proposed RADS project. It is anticipated that this project, funded with a Transportation Enhancement Grant, will enhance the value and function of BCNP in protecting the Florida panther and other wildlife. There is no direct taking proposed, access to BCNP will not be altered and all improvements will occur within the existing U.S. 41 right-of-way. This project will not result in any Section 4(f) use of BCNP.

Two linear resources are located within the project corridor: U.S. 41/Tamiami Trail (CR927) and Tamiami Canal (CR928). These were actually recorded approximately 25 miles west of this project as part of the U.S. 41 from C.R. 951 to C.R. 92 Project Development and Environment (PD&E) Study. The SHPO determined that portions of both linear resources were eligible for listing in the NRHP. The NRHP-eligible portions were from beginning at the northern boundary of the Collier-Seminole State Park and heading east to C.R. 92 and possibly eastward beyond C.R. 92 but that was outside of the PD&E Study project area being evaluated. The segment of U.S. 41, within the RADS project area is designated at the national level as the Tamiami Trail National Scenic Byway. The designated segment is approximately 50 miles long between S.R. 951 at the west and the Collier/Dade County line at the east. A review of the project area utilizing Google Street view shows that U.S. 41/Tamiami Trail within the RADS project area is a two lane undivided rural roadway with the Tamiami Canal along the north side. Although the segments of U.S. 41 and the Tamiami Canal, located within the RADS project area, have not been previously surveyed or recorded, it appears that these segments of the two linear resources would also be NRHP-eligible.

Based on the review and due to the nature of the project, the proposed RADS project is not likely to have an effect on significant archaeological sites or an adverse affect on the two NRHP-eligible linear resources. The proposed project will not have visual, aesthetic, or access effects to the two linear resources nor will it affect the NRHP-eligible characteristics of the resources. Based on SHPO evaluation of effects for other canals, it is determined that this project should not affect the NRHP-eligible Tamiami Canal since the proposed project will not change the original construction plan/design of the canal (such as widening, realignment, change of direction of flow of water in the canal) nor will it change the recent function of canal (such as changing navigation to water control structure or vice versa).

B-2. Historic Sites/Districts

Based on the Florida State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) Agency Operating Agreement dated August 15, 2003, the project was evaluated for potential effects to significant cultural resources.

A desktop review was conducted by a qualified archaeologist and architectural historian to determine if the proposed project would have an effect on significant cultural resources. This project is located in the SE quarter of Section 36 of Township 52 South, Range 30 East and in the NE quarter of Section 1 of Township 53 South, Range 30 East (Ochopee Florida USGS Quadrangle Map 1972, Photoinspected 1990). The project's Area of Potential Effect (APE) was defined as the existing ROW due to the nature of the project.

Two linear resources are located within the project corridor: U.S. 41/Tamiami Trail (CR927) and Tamiami Canal (CR928). These were actually recorded approximately 25 miles west of this project as part of the U.S. 41 from C.R. 951 to C.R. 92 Project Development and Environment (PD&E) Study. The SHPO determined that portions of both linear resources were eligible for listing in the NRHP. The NRHP-eligible portions were from beginning at the northern boundary of the Collier-Seminole State Park and heading east to C.R. 92 and possibly eastward beyond C.R. 92 but that was outside of the PD&E Study project area being evaluated. The segment of U.S. 41, within the RADS project area, is designated at the national level as the Tamiami Trail National Scenic Byway. The designated segment is approximately 50 miles long between S.R. 951 at the west and the Collier/Dade County line at the east. A review of the project area utilizing Google Street view shows that U.S. 41/Tamiami Trail within the RADS project area is a two lane undivided rural roadway with the Tamiami Canal along the north side. Although the segments of U.S. 41 and the Tamiami Canal, located within the RADS project area, have not been previously surveyed or recorded, it appears that these segments of the two linear resources would also be NRHP-eligible.

Based on the review and due to the nature of the project, the proposed RADS project is not likely to have an effect on significant archaeological sites or an adverse affect on the two NRHP-eligible linear resources. The proposed project will not have visual, aesthetic, or access effects to the two linear resources nor will it affect the NRHP-eligible characteristics of the resources. Based on SHPO evaluation of effects for other canals, it is determined that this project should not affect the NRHP-eligible Tamiami Canal since the proposed project will not change the original construction plan/design of the canal (such as widening, realignment, change of direction of flow of water in the canal) nor will it change the recent function of canal (such as changing navigation to water control structure or vice versa).

B-3. Archaeological Sites

Based on the Florida State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) Agency Operating Agreement dated August 15, 2003, the project was evaluated for potential effects to significant cultural resources.

A desktop review was conducted by a qualified archaeologist and architectural historian to determine if the proposed project would have an effect on significant cultural resources. This project is located in the SE quarter of Section 36 of Township 52 South, Range 30 East and in the NE quarter of Section 1 of Township 53 South, Range 30 East (Ochopee Florida USGS Quadrangle Map 1972, Photoinspected 1990). The project's Area of Potential Effect (APE) was defined as the existing ROW due to the nature of the project.

A review of the historic and archaeological information provided in the Efficient Transportation Decision Making (ETDM) Electronic Screening Tool (EST) identified four cultural resource surveys that have been conducted in this area; three of them include archaeological surveys for the National Park Service (NPS) Big Cypress National Preserve.

Several archaeological sites (CR8, CR273, CR274, CR 340, CR341, and CR342) have been recorded with Florida Master Site File (FMSF) forms along Turner River, both north and south of U.S. 41 but not near the road. Most are recorded as prehistoric middens that have been identified as potentially eligible for listing in the National Register of Historic Places (NRHP) by the recorder but have not been evaluated by the SHPO. One archaeological site, CR8 (Turner River Site), is identified as prehistoric mounds and was listed in the NRHP in 1978, but is not immediately adjacent to U.S. 41.

Based on the review and due to the nature of the project, the proposed RADS project is not likely to have an effect on significant archaeological sites.

B-4. Recreation Areas

Big Cypress National Preserve (BCNP) is located immediately adjacent to US 41 both north and south of the existing right of way throughout the majority of the project area. Staff from BCNP have been continuously involved and provided input on the development of the proposed RADS project. It is anticipated that this project, funded with a Transportation Enhancement grant, will enhance the value and function BCNP in protecting the Florida Panther and other wildlife. This project will not diminish the recreational value of BCNP. No direct taking of BCNP is proposed, access to BCNP will not be altered and all improvements will occur within the existing U.S. 41 right-of-way.

ATTACHMENT C – NATURAL ENVIRONMENT

C-1. Wetlands

In compliance with Presidential Executive Order 11990, and Part 2, Chapter 18 of the FDOT's PD&E Manual, revised April 14, 1999, consideration was given to protect wetland resources. Wetland field surveys were conducted within the project area. The area adjacent to the project is primarily wetland forested mixed (FLUCFCS 630), and cypress (FLUCFCS 624). Turner River flows through the project corridor from north to south. The area within the maintained FDOT right-of-way is predominantly uplands. The proposed project will be contained within the maintained FDOT right-of-way and minimal to no wetlands impacts are anticipated.

Final determination of jurisdictional wetland areas and mitigation requirements will occur between the FDOT and the regulatory agencies during the final design and permitting phase of this project. If wetland mitigation is required, it will be mitigated pursuant to S. 373.4137, F.S. to satisfy all mitigation requirements of Part IV, Chapter 373, F.S. and 33 U.S.C.S. 1344.

C-4. Outstanding Florida Waters

All wetlands within the Big Cypress National Preserve (BCNP) are designated by the Florida Department of Environmental Protection as Outstanding Florida Waters (OFW). No work will be conducted outside of FDOT owned right-of-way and no wetlands within BCNP are anticipated to be impacted.

C-9. Wildlife and Habitat

This project has been evaluated for potential impacts to threatened and endangered species in accordance with Section 7(c) of the Endangered Species Act of 1973 as amended and Part 2, Chapter 27 of the FDOT PD&E Manual, revised April 14, 1999.

Twenty-one animal and 27 plant species protected by the US Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FFWCC), or the Florida Department of Agriculture and Community Services (FDACS) have the potential to occur within the project region. Of these species, one state-listed plant, Cardinal airplant (*Tillandsia fasciculata*), was observed within the study corridor. This is a state-listed species and is afforded protection from harvest for commercial exploitation, but there is no restriction on the take of this species by the property owner. The Cardinal airplant attach to trunks and high branches in cypress swamps and sloughs. The project will be contained within maintained FDOT right-of-way therefore no impact to the species is anticipated.

Multiple protected animal species occur within close proximity to the project corridor; confirmed either through direct observation during field survey or via wildlife agency species occurrence data. These species include the American alligator, wood stork, white ibis, tri-colored heron, limpkin, Florida panther, and Florida black bear. The installation of the RADS will be located within existing maintained right-of-way, does not increase capacity of U.S. 41 and should be beneficial in preventing animal vehicle collisions. Therefore, no adverse effects are anticipated for threatened and endangered species. (USFWS letter dated April 20, 2010)

ATTACHMENT D – PHYSICAL IMPACTS

D-2. Construction

Construction activities for the project will result in minimal temporary, yet unavoidable, air, noise, and visual impacts for individuals residing or traveling in the immediate vicinity of the project. Minor noise generated by the project construction is anticipated. Construction noise will be minimized on this project by the Contractors adherence to noise control measures discussed in the FDOT *Standard Specifications for Road and Bridge Construction*, latest edition, Sections 6-6.1, 100-2.1 through 10-2.4, 120-6.6, and any of the technical special provisions in the construction project.

Construction activities will also cause minor short-term increases in air quality impacts in the form of dust from earthwork. These impacts will be minimized or controlled by adherence to all State and local regulations and to the FDOT *Standard Specifications for Roadway and Bridge Construction*, latest edition, and any of the technical special provisions in the construction contract.

Maintenance of traffic and sequence of construction will be planned and scheduled so as to minimize traffic delays throughout the project. Access to adjacent properties will be maintained to the extent practical through controlled construction scheduling. If necessary, during final design, a Traffic Control Plan will be developed and approved for use, in accordance with FDOT *Roadway and Traffic Standards* (latest edition).

D-3. Contaminated Sites

In accordance with the FDOT policy and the Federal Highway Administration (FHWA) requirements, a Contamination Screening Evaluation has been performed to evaluate potential impacts, to the project corridor, from nearby or adjacent contaminated sites. A CSER has been prepared pursuant to the FHWA's Technical Advisory T 6640.8A and the FDOT's PD&E Manual, Part 2, Chapter 22.

Risk rankings were assigned after reviewing data obtained from on-site visual reviews of the current FDOT right-of-way inclusive of: a review of historical land usage via historical aerial photographs; hazardous material / petroleum site database; and, other contamination-related data. All sites along or in close proximity to the corridor were evaluated through review of historical resources such as aerial photographs, regulatory sources at the Federal and local levels, and on-site physical site reviews.

This assessment identified potential sources of contamination on or within an adjacent property, none were identified within FDOT right-of-way. The environmental screening evaluation resulted in no sites receiving a "High" ranking, one site receiving a "Medium" ranking, three sites receiving a "Low" ranking and no sites receiving a "None" ranking.

None of these sites will have a direct influence of the Roadside Animal Detection System (RADS) due to the proposed improvements being within the maintained FDOT right-of-way.

5/2010

841

BASS ROAD

839

TURNER RIVER ROAD

BIG CYPRESS NATIONAL PRESERVE

BEGIN PROJECT

41

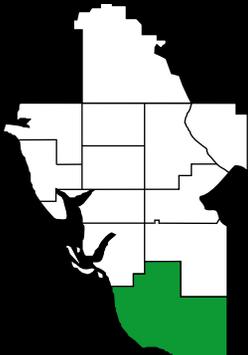
TAMIAMI TRAIL

TURNER RIVER

END PROJECT

BIG CYPRESS NATIONAL PRESERVE

SKUNK APE RESEARCH HEADQUARTERS AND TRAIL LAKES CAMPGROUND



FLORIDA DEPARTMENT OF TRANSPORTATION

DISTRICT 1

US 41 at Turner River Road Roadside Animal Detection System

From 1.3 miles west of Turner River Road to east of Turner River Road in Collier County
PROJECT LOCATION MAP

Financial Project ID: 195338-2-52-01
Federal Project ID: Pending

Appendix A

Public Involvement



United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960



January 29, 2010

Mark Schulz
Florida Department of Transportation
801 North Broadway Avenue
Bartow, Florida 33831-1249

Service Federal Activity Code: 41420-2010-FA-0157
Service Consultation Code: 41420-2010-TA-0086
Project: Roadside Animal Detection System
Project at U.S. Highway 41 - Turner
River
County: Collier County

Dear Mr. Schulz:

This letter serves as a follow-up to our January 19, 2010, meeting and conference call with the Florida Department of Transportation (FDOT), Defenders of Wildlife, Big Cypress National Preserve (BCNP), Florida Fish and Wildlife Conservation Commission, Montana State University's Western Transportation Institute, and the University of Central Florida regarding the installation of a Roadside Animal Detection System (RADS) on U.S. Highway 41 at Turner River. The project will be funded by the \$650,000 made available through FDOT's Transportation Enhancement Project funding (Financial Project Number: 195338-2). We offer the following information in order to help the FDOT prepare a Request for Proposals (RFP) in order to solicit competitive bids and proposals from contractors for the installation of a RADS along both sides of U.S. Highway 41 in the vicinity of the Turner River, Collier County, Florida.

DESCRIPTION OF WORK

The project involves the installation of a RADS along both sides of U.S. Highway 41 from 840 feet west of the entrance to the Skunk Ape Research Headquarters and Trail Lakes Campground to 440 feet east of the intersection of Turner River Road, Collier County, Florida (a distance of approximately 1.3 miles). The purpose of the project is to: 1) reduce wildlife-vehicle collisions and vehicle-related mortality of the endangered Florida panther (*Puma concolor coryi*), white-tailed deer (*Odocoileus virginianus*), Florida black bear (*Ursus americanus floridanus*), and other large wildlife species; 2) improve habitat connectivity for large wildlife species; and 3) provide a safer roadway for the public.

TAKE PRIDE[®]
IN AMERICA 

Background

Motor vehicles colliding with large animals attempting to cross highways can increase risk of human injury and are detrimental to wildlife and wildlife populations. A RADS employs electronic motion and/or thermal infra-red sensors installed along both sides of a stretch of roadway to detect large animals (*e.g.*, panther, deer, black bear) as they approach the road. The triggering of a sensor activates warning message signs alerting drivers to the presence of animals on or near the roadway. Early warning can result in increased driver's awareness and reductions in speed that increase the probability of avoiding collisions with wildlife. Manufacturers of the commonly employed detection technologies have stated that the active signals used to detect large mammals operate at a very low power level and are safe to humans, animals, and the environment. Research has shown RADS to be effective in reducing vehicle speeds and vehicle collisions with wildlife such as large ungulates (*i.e.*, hoofed mammals).

Most RADS are comprised of electronic sensors installed on poles above the ground along both sides of a section of roadway. The "above ground" detection systems consist of either "area-cover" or "break-the-beam" sensors. Area-cover sensors are designed to detect animals based on body heat and motion within a certain area and range from a sensor. The detection area is typically cone-shaped and narrow close to the sensor, and wider as the distance from the sensor increases. Break-the-beam sensors consist of a transmitter that sends a signal to a receiver. The sensor is triggered when an animal's body blocks the signal. Break-the-beam systems use infrared, laser or microwave radio signals. Depending on the detection technology and manufacturer, the maximum range of a sensor can vary from 90 feet to over 1,000 feet. Longer distances can be covered by installing several sensors in series along the roadway. Above ground sensors require a clear line-of-sight between the transmitter and the receiver. Therefore, regular maintenance of roadside vegetation is necessary.

Another RADS technology employing an "underground" electronic sensor is available and currently being tested in Colorado. This system uses an underground buried cable that emits an electromagnetic field calibrated to detect large animals. A large animal passing over the field triggers the warning signs to alert motorists.

Project Specifics

1. The project location is a 1.3-mile segment of U.S. Highway 41 from approximately 840 feet west of the entrance to the Skunk Ape Research Headquarters and Trail Lakes Campground (latitude 25.895535,° longitude -81.280639°) to the intersection of Turner River Road in Collier County, Florida (latitude 25.887213,° longitude -81.261338°) (Figure 1).
2. A RADS will be installed within the existing FDOT right-of-way along the north and south sides of the roadway. An above-ground or underground system, or a combination of both, may be used. An adequate number of sensors must be installed to cover the

entire segment of roadway, without gaps, from 400 feet west of the entrance to the Skunk Ape Research Headquarters and Trail Lakes Campground to the intersection of Turner River Road. The electronic sensors will be located as close to the property boundary of BCNP as possible to maximize the warning time to drivers.

3. The RADS system employed must be able to operate reliably under normal south Florida environmental conditions including adverse weather (*e.g.*, wind, rain, fog, *etc.*). If possible, the system should be designed to identify periods of extreme rain or fog, and shut down during unfavorable conditions for accurate detection, and avoid false detections which may negatively affect driver response to the system.
4. If an above ground RADS system is employed, the electronic sensors will be mounted at a height of approximately 18 inches above the ground. This height requirement was based on the height of the sensor(s) needed to detect an adult Florida panther. Any vegetation or other obstruction that blocks the sensors must be removed and maintained to ensure that the system functions properly. However, removal of native vegetation should be minimized to the greatest extent practicable, and limited only to that necessary to maintain an unobstructed path between sensors.
5. The RADS system employed must be able to log the date, time, and location (or zone) of each detection made.
6. A informational sign should be installed within the FDOT right-of-way in the following locations: 1) approximately ½ mile east of the first electronic warning sign and ½ mile west of the last warning sign adjacent to the westbound lane of the U.S. Highway 41 segment; and 2) approximately ½ mile west of the first electronic warning and ½ mile east of the last warning sign adjacent to the eastbound lane of the U.S. Highway 41 segment. The signs should be designed to comply with the FDOT's current standards and policies. The two informational signs situated before the first electronic warning signs should display the message "Entering Wildlife Sensor Detection Area." The two informational signs situated after the last electronic warning signs should display the message "Leaving Wildlife Sensor Detection Area."
7. Electronic warning signs should be installed along the north and south sides of the roadway within the FDOT right-of-way of the 1.3-mile U.S. Highway 41 road segment. The number of signs should be the number necessary to ensure that drivers are adequately warned of the presence of wildlife on or near the road across the entire expanse of the 1.3 miles. All signs will be designed to comply with the FDOT's current standards and policies, and positioned so that the lighted flashing message is visible to motorists when the sign is activated. For the eastbound lane of U.S. Highway 41, the first warning sign will be installed approximately 840 feet west of the intersection of the Skunk Ape Research Headquarters and Trail Lakes Campground. For the westbound lane of U.S.

Highway 41, the first warning sign will be installed approximately 440 feet east of the intersection of Turner River Road.

8. Each electronic warning sign will display the flashing message when activated:

Warning-Wildlife on Roadway
Reduce Speed

9. The warning signs must deactivate 5 minutes following the last detection. When warning signs are not activated they should display a completely blank screen and not display any other symbol or message.
10. An adequate electrical power system powered by the local electrical grid will be used to provide power to the RADS within the corridor. The RADS should be powered and operational 24 hours per day. A backup battery system will also be installed and available in the event of a power outage.
11. All equipment should be designed and installed to minimize the potential for vandalism to the greatest extent practicable.
12. Data showing the independent evaluation of the reliability of the RADS system chosen must be provided by the manufacturer. Measures of reliability include the number of false positives and false negatives over a standard time period in service, and the amount of downtime due to equipment malfunction. Important environmental factors must include performance under high heat and humidity and periodic high winds.
13. It is important that warning signs not be activated until after system reliability is established, as high numbers of false positives may erode motorist confidence. Systems need to be calibrated so that warning signs are only triggered when the likelihood of a large animal crossing the road is high, otherwise drivers may become apathetic, ignoring the warning signs and less willing to slow down. Following installation on-site and prior to making the warning sign operational to the public, all sensors and warning signs must be tested to ensure that they are operating correctly. The Service requests the opportunity to provide comments on the proposed verification technique. The system should be able to detect all passages (100 percent) across the detection line correctly. Warning signs should be masked from motorists during calibration and reliability testing and unveiled only when the system is ready to be operational.

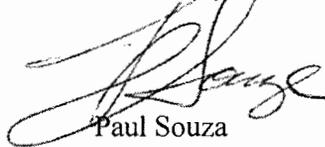
14. The selected system should be adaptive and have the ability to adjust sensor sensitivity in order to detect the targeted animals (*i.e.*, Florida panther, white-tail deer, Florida black bear), while minimizing false positives caused by blowing vegetation or debris. The American alligator (*Alligator mississippiensis*) occurs in the project area. We understand that RADS may have difficulty detecting these animals. If practicable, the RADS system employed should be able to detect alligators.
15. We are aware that intersections occur within the U.S. Highway 41 roadway segment at the entrance to the BCNP canoe launch access and the entrance to the Skunk Ape Research Headquarters and Trail Lakes Campground. If possible, the RADS employed should be designed to detect animals in these areas accurately without a significant number of false detections due to vehicles triggering the sensors.
16. The contractor will be responsible for verifying project site conditions to ensure that the proposed RADS will operate correctly. Specifically, we are aware of site conditions (*e.g.*, guard rail, canal, vegetation) that may present difficulties for the installation of a RADS.
17. Any RADS system chosen should meet the following minimum performance standards described in Huisjer (2009): 1) Animal detection systems should detect at least 91 percent of all large animals that approach the road; and 2) Animal detection systems should have fewer than 10 percent of all false detections.

As we have discussed, it would be beneficial to identify funding to provide a pre- and post-construction assessment of the RADS employed to: 1) compare its effectiveness to other locations; and 2) manage adaptively and improve the application of the technology in this location and others in the future. Due to timing of project installation, the pre-construction assessment period employed may be limited, on the order of months. The post-construction assessment period should be a minimum of one year. Pre-construction assessment may include general wildlife road-kill and/or track studies to identify abundance and diversity of large animal species potentially detected by the RADS system.

The post-construction assessment would document system functionality related to reductions in collisions and effectiveness in facilitating safe crossings by wildlife as well as driver acceptance and behavioral evaluations. We look forward to working with the FDOT and our other partners to develop an assessment protocol to test the effectiveness of the RADS system employed.

We thank you sincerely for your consideration of our request and your cooperation and effort in protecting the Florida panther. Please advise the Service if the information provided is adequate for the FDOT to prepare an RFP for the U.S. Highway 41 at Turner River RADS project, or if you need additional clarification. If you have any questions, please contact John Wrublik at 772-562-3909, extension 282.

Sincerely yours,



Paul Souza

Field Supervisor

South Florida Ecological Services Office

cc: electronic only

FWC, Tallahassee, Florida (Mary Ann Poole, Kipp Frohlich)

FWC, Naples, Florida (Darrell Land)

Defenders of Wildlife, Naples, Florida (Elizabeth Fleming, Laurie Macdonald)

University of Central Florida, Orlando, Florida (Dr. Daniel Smith)

Montana State University, Bozeman, Montana (Dr. Marcel Huijser)

Big Cypress National Preserve, Ochopee, Florida (Deborah Jansen, Ron Clark)

Service, Vero Beach, Florida (Chris Belden)

LITERATURE CITED

Huijser, M.P., T. D. Holland, M. Blank, M.C. Greenwood, P. T. McGowen, B. Hubbard, and S. Wang. The Comparison of Animal Detection Systems in a Test-Bed: A Quantitative Comparison of System Reliability and Experiences with Operation and Maintenance. Final report submitted to the Federal Highway Administration and Montana Department of Transportation. Western Transportation Institute, College of Engineering, and Department of Mathematical Sciences, Montana State University.

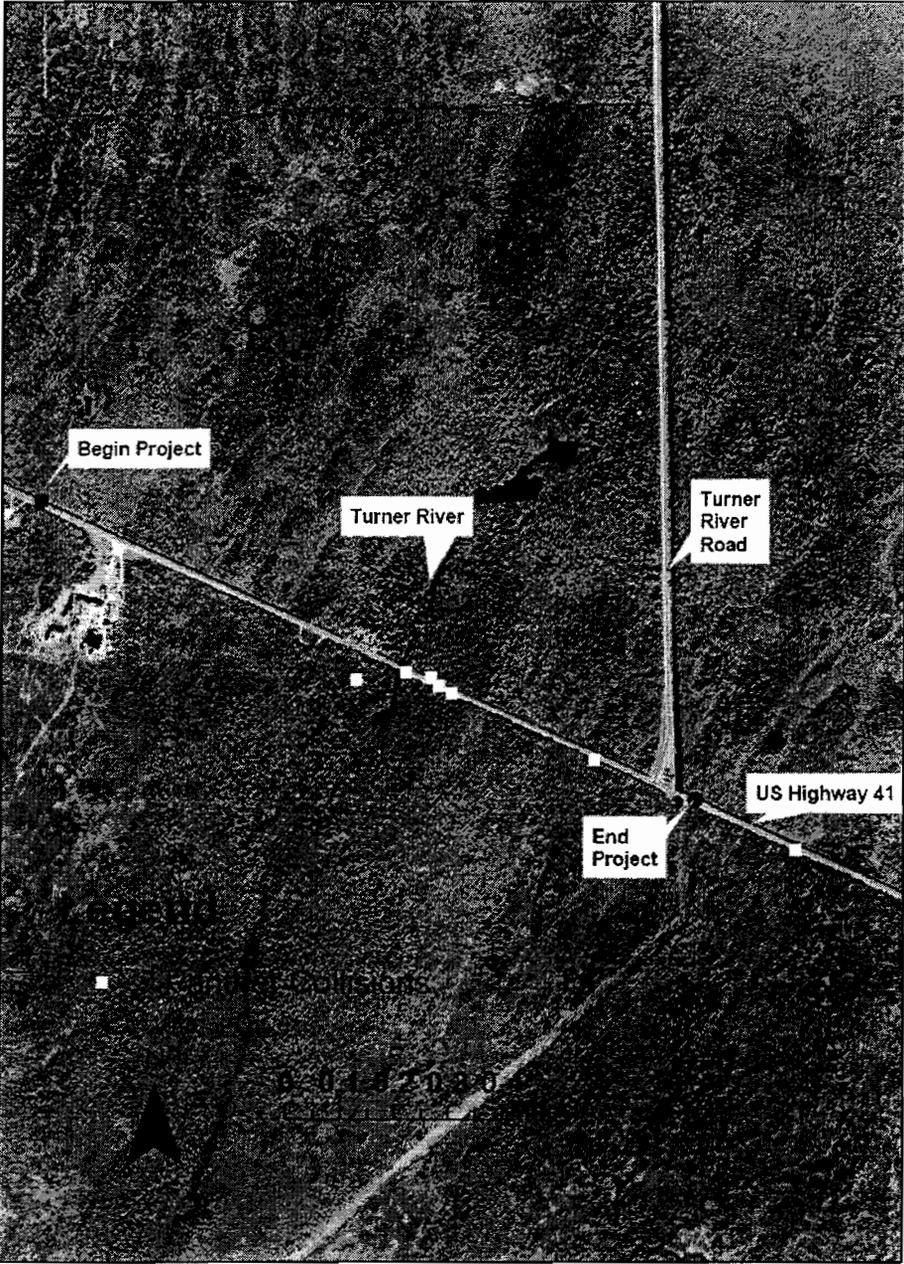


Figure 1. Location map for installation of RADS along U.S. Highway 41 from west of Skunk Ape Research Headquarters and Trail Lakes Campground to Turner River Road in Collier County, Florida.



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

STEPHANIE C. KOPELOUSOS
SECRETARY

March 19, 2010

The Honorable Fred Coyle
Board of County Commissioners
3301 E. Tamiami Trail
Naples, Florida 34112

RE: Proposed U.S. 41 wildlife crossing (Bass Lake Road to Turner River Road)
Financial Project Number: 195338-2

Dear Commissioner Coyle:

The Florida Department of Transportation, on behalf of the U.S. Fish and Wildlife Service and Defenders of Wildlife, thanks you again for your interest and participation in the public information workshop held July 30, 2009, at the Everglades City Community Center. The workshop gave people an opportunity to review evaluation materials and discuss the feasibility of wildlife crossings on U.S. 41 from Bass Lake Road to Turner River Road in Collier County.

The department has further reviewed alternatives presented at the workshop and has determined two other approaches provide important wildlife protection near this area of U.S. 41. One project (to install panther advisory signs with flashers) has been completed. A second project (to design and install a Roadside Animal Detection System/RADS) will be put out to bid this summer. Rumble strips, which are approved to draw drivers' attention to upcoming traffic signals and stop signs in lengthy road segments without frequent signals and stop signs, are not included in either project.

Crews installed panther advisory signs with flashers along the panther zone on U.S. 41 and also will install speed feedback signs (one each direction) within this segment of U.S. 41 (Bass Lake Road to Turner River Road). Flashers help alert drivers to the panther zone, and speed feedback signs advise motorists to slow down if they are traveling above the posted speed limit.

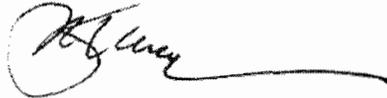
RADS is a remote sensing system that helps drivers avoid crashes with animals on the roadway. The system is designed to detect larger animals, like Florida panthers, black bears, and white-tailed deer, if they enter the roadway and flashes amber warning lights to alert drivers. Although this system has not been used in Florida, RADS has been effective in several western states and costs less than construction of wildlife crossings. In addition, there is no fencing associated with RADS. This system will be installed along both sides of U.S. 41 from just west of the entrance to the Trail Lakes Campground to just east of the U.S. 41/Turner River Road intersection (about 1.3 miles).

The Honorable Fred Coyle
March 19, 2010
Page 2

If you have thoughts or comments about the upcoming RADS project, we'd like to hear from you by March 31st. You may reach project manager Nicole Broome at the Florida Department of Transportation, District One, P.O. Box 1249, Bartow, Florida 33831. You also may email her (nicole.broome@dot.state.fl.us) or telephone her (863- 519-2373).

The department has worked in partnership with the U.S. Fish and Wildlife Service and Defenders of Wildlife to develop these two approaches to reduce wildlife/vehicle collisions and panther deaths, improve connectivity among habitats for larger wildlife, and enhance safety for motorists on U.S. 41. If you have questions about the projects, please do not hesitate to contact Ms. Broome or me.

Sincerely,

A handwritten signature in black ink, appearing to read "Stanley M. Cann", with a long horizontal flourish extending to the right.

Stanley M. Cann, P.E.
District Secretary

SC/nb

Broome, Nicole

From: Broome, Nicole
Sent: Wednesday, March 10, 2010 10:51 AM
To: soho@bellsouth.net
Subject: FW: US 41 Wildlife Crossing
Attachments: RADS at turner river.pdf

Mr. Hamilton,

Per our phone conversation this morning, I have attached the letter of general specifications for the Roadside Animal Detection System (RADS) for which the U.S. Fish and Wildlife Service and Defenders of Wildlife have requested further action from the FDOT. If you change your mind and would like to meet in person to discuss this issue or need additional information, please contact me at your convenience.

You will receive a general notification letter of the change in direction from the wildlife crossing with fencing to the RADS technology in the next few weeks.

I am pleased that the FDOT was able to address your concerns and move forward with an alternative that you support.

Sincerely,

Nicole Broome, E.I.

Project Manager
Florida Department of Transportation, District 1
District Environmental Management Office
Tel: (863) 519-2373
Fax: (863) 519-1922
nicole.broome@dot.state.fl.us

Broome, Nicole

From: Broome, Nicole
Sent: Thursday, March 11, 2010 12:22 PM
To: frank denninger
Subject: FW: US 41 Wildlife Crossing
Attachments: RADS at turner river.pdf

Frank,

Per our phone conversation this morning, I have attached the letter of general specifications for the Roadside Animal Detection System (RADS) for which the U.S. Fish and Wildlife Service and Defenders of Wildlife have requested further action from the FDOT. If you change your mind and would like to meet in person to discuss this issue or need additional information, please contact me at your convenience.

You will receive a general notification letter of the change in direction from the wildlife crossing with fencing to the RADS technology in the next few weeks.

I am pleased that the FDOT was able to address your concerns and move forward with an alternative that you support.

Sincerely,

Nicole Broome, E.I.

Project Manager
Florida Department of Transportation, District 1
District Environmental Management Office
Tel: (863) 519-2373
Fax: (863) 519-1922
nicole.broome@dot.state.fl.us

Broome, Nicole

From: Broome, Nicole
Sent: Wednesday, March 10, 2010 9:07 AM
To: David Shealy
Subject: US 41 Wildlife Crossing
Attachments: RADS at turner river.pdf

Mr. Shealy,

Per our phone conversation this morning, I have attached the letter of general specifications for the Roadside Animal Detection System (RADS) for which the U.S. Fish and Wildlife Service and Defenders of Wildlife have requested further action from the FDOT. If you change your mind and would like to meet in person to discuss this issue or need additional information, please contact me at your convenience.

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I am pleased that the FDOT was able to address your concerns and move forward with an alternative that you support.

Sincerely,

Nicole Broome, E.I.

Project Manager
Florida Department of Transportation, District 1
District Environmental Management Office
Tel: (863) 519-2373
Fax: (863) 519-1922
nicole.broome@dot.state.fl.us

Broome, Nicole

From: Broome, Nicole
Sent: Monday, February 22, 2010 9:41 AM
To: stevet@miccosukeetribe.com
Cc: McGonagill, Clay
Subject: US 41 Wildlife Crossing
Attachments: RADS at turner river.pdf

Steve,

Per our phone conversation Thursday, I have attached the letter of general specifications for the Roadside Animal Detection System (RADS) for which the U.S. Fish and Wildlife Service and Defenders of Wildlife have requested further action from the FDOT. If you change your mind and would like to meet in person to discuss this issue or need additional information, please contact me at your convenience.

You will receive a general notification letter of the change in direction from the wildlife crossing with fencing to the RADS technology in the next few weeks.

I am pleased that the FDOT was able to address your concerns and move forward with an alternative that you support.

Sincerely,

Nicole Broome, E.I.

Project Manager
Florida Department of Transportation, District 1
District Environmental Management Office
Tel: (863) 519-2373
Fax: (863) 519-1922
nicole.broome@dot.state.fl.us

Broome, Nicole

From: Broome, Nicole
Sent: Monday, February 22, 2010 9:57 AM
To: dione@carroll-law-offices.com
Cc: McGonagill, Clay
Subject: US 41 Wildlife Crossing
Attachments: RADS at turner river.pdf

Dione,

Per our phone conversation this morning, I have attached the letter of general specifications for the Roadside Animal Detection System (RADS) for which the U.S. Fish and Wildlife Service and Defenders of Wildlife have requested further action from the FDOT. If you change your mind and would like to meet in person to discuss this issue or need additional information, please contact me at your convenience.

You will receive a general notification letter of the change in direction from the wildlife crossing with fencing to the RADS technology in the next few weeks.

I am pleased that the FDOT was able to address your concerns and move forward with an alternative that you support.

Sincerely,

Nicole Broome, E.I.

Project Manager
Florida Department of Transportation, District 1
District Environmental Management Office
Tel: (863) 519-2373
Fax: (863) 519-1922
nicole.broome@dot.state.fl.us

Broome, Nicole

From: Piazza, Chris
Sent: Wednesday, April 07, 2010 2:49 PM
To: Broome, Nicole
Cc: Schulz, Mark; Serdyski, Elizabeth
Subject: FW: Email Address to Respond

Nicole,

Here is Mr. Galson's email. Please include it with the other comments received to date for the Turner River project. Thanks.

Chris Piazza, P.E.
Project Development Engineer
Florida Department of Transportation, District 1
District Environmental Management Office
Tel: (863) 519-2293
Fax: (863) 519-1922
chris.piazza@dot.state.fl.us

From: JOHN GALSON [mailto:105thud@wildblue.net]
Sent: Wednesday, April 07, 2010 2:44 PM
To: Piazza, Chris
Subject: Re: Email Address to Respond

Cougar Extermination! There is a policy here of an open hunt on pigs 24/7. This is taking away the food supply for the cougar thus starving the breed to extermination. This is stupid!! I am still looking for that autopsy report. John G. Mailing address John Galson PO Box 374 Everglades City Fl # 34139-0374; email 105thud@wildblue.net

On Wed, Apr 7, 2010 at 2:15 PM, Piazza, Chris <Chris.Piazza@dot.state.fl.us> wrote:

John,

Here is my email, thanks. chris.piazza@dot.state.fl.us

Chris Piazza, P.E.

Project Development Engineer

Florida Department of Transportation, District 1

District Environmental Management Office

Tel: (863) 519-2293

Fax: (863) 519-1922

chris.piazza@dot.state.fl.us

Broome, Nicole

From: B. Hamilton [soho@bellsouth.net]
Sent: Wednesday, March 31, 2010 6:51 AM
To: Broome, Nicole
Subject: Re: FW: US 41 Wildlife Crossing

Nicole,

Thank you for agreeing to arrange a meeting.

Just to clarify, I didn't say there were no specific issues, only that Bobby C. Billie asked that I contact you and ask for a meeting. He did not specify any particular issues when he asked for the meeting. I am sure he will make clear any concerns when he sees you.

Thank you and best regards.

Bill Hamilton
904.471.0440

On 3/30/2010 5:27 PM, Broome, Nicole wrote:

Bill,
Per our conversation today and to follow up to the email below, Bobby C Billie has requested a meeting in mid April to discuss RADS at Turner River. You indicated that there were not any specific issues and he just wanted to meet in regards to the project. In addition you requested to have USFWS, Defenders and FDOT coordinate through you for a date the week of April 19th.

I will be in touch after speaking with USFWS and Defenders on their availability. Should you have any further questions please feel free to contact me.

Nicole Broome, E.I.

Project Manager
Florida Department of Transportation, District 1
District Environmental Management Office
Tel: (863) 519-2373
Fax: (863) 519-1922
nicole.broome@dot.state.fl.us

From: Broome, Nicole
Sent: Wednesday, March 10, 2010 10:51 AM
To: soho@bellsouth.net
Subject: FW: US 41 Wildlife Crossing

Mr. Hamilton,

Per our phone conversation this morning, I have attached the letter of general specifications for the Roadside Animal Detection System (RADS) for which the U.S. Fish and Wildlife Service and Defenders of Wildlife have requested further action from the FDOT. If you change your mind and would like to meet in person to discuss this issue or need additional information, please contact me at your convenience.

You will receive a general notification letter of the change in direction from the wildlife crossing with fencing to the RADS technology in the next few weeks.

I am pleased that the FDOT was able to address your concerns and move forward with an alternative that you support.

Sincerely,

Nicole Broome, E.I.

Project Manager

Florida Department of Transportation, District 1

District Environmental Management Office

Tel: (863) 519-2373

Fax: (863) 519-1922

nicole.broome@dot.state.fl.us

USFWS letter



United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960



April 20, 2010

Elizabeth Serdyski
Florida Department of Transportation
801 North Broadway Avenue
Bartow, Florida 33831-1249

Service Federal Activity Code: 41420-2010-CPA-0157
Service Consultation Code: 41420-2010-I-0086
Date Received: April 14, 2010
Project: Roadside Animal Detection System
Project at U.S. Highway 41 -
Turner River
County: Collier

Dear Ms. Serdyski:

The U.S. Fish and Wildlife Service (Service) has reviewed your email dated April 14, 2010, and other information submitted by the Florida Department of Transportation (FDOT), on behalf of the Federal Highway Administration, for the project referenced above. This letter is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 *et seq.*).

PROJECT DESCRIPTION

The FDOT, in coordination with the Service and the Defenders of Wildlife, is proposing to install a Roadside Animal Detection System (RADS) along a section of the U.S. Highway 41 right-of-way at Turner River. A RADS employs electronic motion and/or thermal infra-red sensors installed along both sides of a stretch of roadway to detect large animals (*e.g.*, panther, deer, black bear) as they approach the road. The triggering of a sensor activates warning message signs alerting drivers to the presence of animals on or near the roadway. Early warning can result in increased driver awareness and reductions in speed that increase the probability of avoiding collisions with wildlife. Research has shown RADS to be effective in reducing vehicle speeds and vehicle collisions with wildlife such as large ungulates (*i.e.*, hooved mammals). The purpose of the project is to: 1) reduce wildlife-vehicle collisions and vehicle-related mortality of the endangered Florida panther (*Puma concolor coryi*), white-tailed deer (*Odocoileus virginianus*), Florida black bear (*Ursus americanus floridanus*), and other large wildlife species; 2) improve habitat connectivity for large wildlife species; and 3) provide a safer roadway for the public. The project location is a 1.2-mile segment of U.S. Highway 41, from approximately 840 feet west of the entrance to the Skunk Ape Research Headquarters and Trail Lakes Campground (latitude 25.894981°, longitude -81.279547°) to the



intersection of Turner River Road (latitude 25.887849°, longitude -81.262599°), in Collier County, Florida.

THREATENED AND ENDANGERED SPECIES

Florida panther

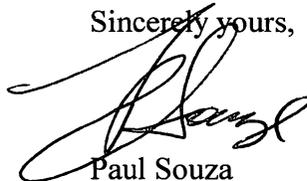
The project occurs within the geographic range of the endangered Florida panther (*Puma concolor coryi*), and within the Primary Zone of the Service's "Focus Area" for the Florida panther. The Focus Area is based on the latest scientific information on panther habitat usage provided in Kautz et al. 2006, and Thatcher et al. 2006, and denotes areas in Florida where development projects could potentially affect the panther.

The FDOT has determined the project "may affect, but is not likely to adversely affect" the Florida panther. The Service notes that the project will be located within an existing highway right-of-way and will not result in the loss of habitat for the Florida panther. Furthermore, the purpose of the project is to reduce vehicle-related mortality of panthers and other large wildlife species. The Service anticipates that the project is likely to benefit the panther and other wildlife species in the project area. Consequently, the Service strongly supports the project and concurs with FDOT's determination.

This letter fulfills the requirements of section 7 of the Act and further action is not required. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

Thank you for allowing us to provide these comments and for your cooperation and effort in protecting federally listed species. If you have any questions regarding this project, please contact John Wrublik at 772-562-3909, extension 282.

Sincerely yours,



Paul Souza
Field Supervisor
South Florida Ecological Services Office

cc: electronic copy only

Big Cypress National Preserve, Ochopee, Florida (Deborah Jansen, Ron Clark)

Defenders of Wildlife, St. Petersburg, Florida (Elizabeth Fleming, Laurie Macdonald)

FWC, Naples, Florida (Darrell Land)

FWC, Tallahassee, Florida (Mary Ann Poole, Kipp Frohlich)

Service, Vero Beach, Florida (Chris Belden)

University of Central Florida, Orlando, Florida (Daniel Smith)

LITERATURE CITED

Kautz, R., R. Kawula, T. Hctor, J. Comiskey, D. Jansen, D. Jennings, J. Kasbohm, F. Mazzotti, R. McBride, L. Richardson, and K. Root. 2006. How much is enough? Landscape-scale conservation for the Florida panther. *Biological Conservation* 130:118-133.

Thatcher, C. A., F. T. van Manen, and J. D. Clark. 2006. An assessment of habitat north of the Caloosahatchee River for Florida panthers. Leetown Science Center, Southern Appalachian Research Branch, U.S. Geological survey, Knoxville, Tennessee, USA.



Federal Aid Management Office

James Jobe - Manager

[Logon](#)

STIP Amendments

[Manually Approved STIP Amendments](#)

Fiscal Year:

STIP Report Sorted by Amendment Number

Item Segment: -

	Amendment #	Date	Assigned MPO Name	Project Name
Close	10-16	4/9/2010	Collier MPO	195338-2 US 41 WILDLIFE XING FROM 1.3MI W OF TURNER RV RD TO E OF TURNER

The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code.

The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

Transportation Improvement Program Amendment
FY2009/10 - 2013 /14

STIP Amendment Number: 10-16

** This STIP is in an MPO Area **

TIP Page Number: I-A10

On Friday, April 09, 2010, the Collier MPO Metropolitan Planning Organization amended the Transportation Improvement Program that was developed and adopted in compliance with Title 23 and Title 49 in a continuing, cooperative and comprehensive transportation planning process as a condition to the receipt of federal assistance.

The amendment does not adversely impact the air quality conformity or financial constraints of the STIP.

The STIP Amendment is consistent with the Adopted Long Range Transportation Plan. (Page Number: 4-9)

This document was electronically signed
4/20/2010
Lorraine Lantz
Collier MPO

Metropolitan Planning Organization Chairman or Designee

This document was electronically signed
4/20/2010
Trinty Caudill-Scott
FI DOT

FDOT District Representative or Designee District 01

This document was electronically signed
4/21/2010
Richard Lutén
FDOT Federal Aid

Federal Aid Management Manager or Designee

This document was electronically signed
4/28/2010
Leeann Jacobs
FHWA

Federal Highway Authorization

STIP amendment criteria:

D - The change results in major scope changes

An air conformity determination must be made by the MPO on amended projects within the non-attainment or maintenance areas

E - The MPO is not in an air quality non-attainment or maintenance area.

Project Name 195338-2 US 41 WILDLIFE XING FROM 1.3MI W OF TURNER RV RD TO E OF TURNER

Status	ITEM	Ver	Description	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Original STIP	195338 2	AD	US 41 WILDLIFE CROSSING FROM BASS ROAD TO TURNER RIVER					
		DIH	PE	25,000.00	0.00	0.00	0.00	0.00
		SE	PE	650,000.00	0.00	0.00	0.00	0.00
Proposed Project	195338 2	AM	US 41 WILDLIFE XING FROM 1.3MI W OF TURNER RV RD TO E OF TURNER RV RD					
		DIH	DSB	5,000.00	0.00	0.00	0.00	0.00
		DIH	PE	25,000.00	0.00	0.00	0.00	0.00
		EB	DSB	632,807.00	0.00	0.00	0.00	0.00
		EB	PE	15,000.00	0.00	0.00	0.00	0.00
Funding Source After Change	406360 1	AD	088716 STATE TRUST INTRASTATE HIGHWAY CONSTR CONTINGENCY BOX					
		EB	CST	103,066.00	4,000,917.00	0.00	4,000,000.00	4,000,000.00
		406372 1	AD	IN-HOUSE STATE PE RW CEI ON STATE HIGHWAY SYSTEM				
		DIH	PE	125,191.00	1,051,998.00	1,071,620.00	2,954,169.00	224,954.00
Funding Source Balance Before Change				231,064.00	5,052,915.00	1,071,620.00	6,954,169.00	4,224,954.00
Funding Source Balance After Change				228,257.00	5,052,915.00	1,071,620.00	6,954,169.00	4,224,954.00
Net Change to Funding Source				-2,807.00				
Proposed Project Before Change				675,000.00				
Proposed Project After Change				677,807.00				
Net Change to Project				2,807.00				
Net Change to Funding Source				-2,807.00				
Net Change to Proposed Project				2,807.00				
Net Change to STIP								

This site is maintained by the Federal Aid Management Office, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 32399. For additional information please e-mail questions or comments to: (Richard Luten: Richard.Luten@dot.state.fl.us or call 850-414-4463)

Office Home: [Return to The Office of Work Program Home](#)
[INFONET](#)

**TIP Amendments Approved by the Collier MPO on April 9, 2010
for TIP FY2009/10 through FY2013/14**

<u>Action</u>	<u>FPN</u>	<u>Project Name</u>	<u>Description</u>	<u>Source for Project Request</u>	<u>Fund</u>	<u>Phase</u>	<u>Amount FY 2009/2010</u>
Reduce length of project and modify sources of funding	195338-2	US 41 Wildlife Crossing	Roadside animal detection system project from US 41 from W of the entrance of the Skunk Ape Research HQ and Trail Lakes Campground to E of intersection of Turner River Road (reducing project length from 2.195 miles to 1.3 miles)	FDOT	DIH	PE	\$25,000
					EB	PE	\$15,000
					EB	DSB	\$632,807