

DISTRICTWIDE TRAFFIC OPERATIONS PUSH-BUTTON
DESIGN CONSULTANT

SCOPE OF SERVICES

Financial Management No.

250629-9-32-01 & 448061-1-32-01

EXHIBIT A

A. OBJECTIVE

The Department desires to obtain assistance from the Consultant for performance of miscellaneous engineering services of a minor nature involving traffic operation including, but not limited to:

- A. Design and plans preparation of fast response minor projects to support the Traffic operations Office in the following categories:
 - a. Roadway, including drainage, pavement design, maintenance of traffic, and all highway improvements as required by the assignment given.
 - b. Minor structures including structure capacity for signals mast arms and for multi-post signs
 - c. Signalization
 - d. Signing and Pavement Marking
 - e. Lighting
- B. Revision and/or updating of previously completed construction plans.
- C. Preparation of construction documents for pushbutton and design bid build contracts.
- D. Miscellaneous activities to support the district traffic operations office such as coordination with municipalities and other agencies.
- E. Other activities to necessary to complete assignments including right of way and survey as described below.

B. SERVICES

The Consultant shall provide anyone or more of the following engineering services or elements contained therein, as required by the Department:

- Complete construction plans for each minor design project assigned under this agreement. Plans shall include, as appropriate, minor roadway design, intersections and highway improvements, maintenance of traffic, utility relocation, minor structures, sign support structures and details, drainage facilities, roadway lighting, signalization, signing and pavement markings and incidental items. All plans are to be in accordance with AASHTO Standard, FDOT PPM, Standards and Specifications, and the desires of the department, as made known to the Consultant. Plans shall be legible, complete in design, drawn to scale as directed by the Department, furnished in reproducible form and be suitable for bidding purposes.
- Structural analysis for signal mast arms and evaluates structural capacity according to FDOT guidelines, using resources available from FDOT and approved by the FDOT design/structures section. Evaluation of structural supports for highway signs and luminaries. The Consultant will be fully responsible for the Quality Control and accuracy of all data, items as well as positional accuracy.
- All necessary engineering required for reviewing Maintenance of Traffic Plans, Signalization Plans, and Signing and Pavement Marking Plans and ensure the plans conform to current FDOT, AASHTO Standards, standard specifications for Road and Bridge Construction, Roadway and Traffic Design standards, FDOT Drainage

Manual, MUTCD, FDOT Plans Preparation Manual and the desires of the Department as made known to the Consultant.

- Complete accurate right-of-way maps including legal descriptions and title search, satisfying the requirements of the Department, as set forth in Department policies and procedures and furnish same to the Department in reproducible form. Right-of-way maps will contain sufficient information thereon to enable, the Department to complete instruments of conveyance according to Department procedures for transfer of title for required right-of-way.
- Preliminary design plans, as required by the Department to adequately control, coordinate and approve the design and to negotiate with utility companies.
- Complete, design field survey including baseline topography, cross sections, benchmarks, drainage, and outfall, utilities, right-of-way and other surveys including field investigations. All field survey work will be signed and sealed by a Professional Surveyor & Mapper and will be in accordance with the criteria established by the Departments Highway Field Survey Specifications, D.O.T. Location Survey Manual and will be coordinated with and subject to review by the District Location Surveyor.
- Make such reviews, attend such meetings and make such contacts as are necessary for proper preparation of plans and special provisions for these minor projects.
- The consultant shall serve as an expert witness in the legal proceedings related to these minor projects if required by the Department. The fee for these services shall be established if and when they are needed.
- Coordinate with the necessary FDOT office to obtain all available roadway plans, bridge plans, right-of-way maps and other available information pertinent to the project.

C. DEPARTMENT RESPONSIBILITIES

The Florida Department of Transportation will furnish any or all or the following items, as appropriate, for performance of the required services:

1. All previously completed field surveys as required (if any).
2. Aerial photography required for preparation of construction plans if available.
3. All available traffic information.
4. Right-of-way maps and legal descriptions which are not part of the Consultants work effort, when required.
5. Utility contact and agreements (if any).

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6. When survey services are required, the Department will furnish numbered standard survey books for survey data.
7. Pavement Design when available.
8. Conceptual drawings (if any).
9. Percolation Test(s) and Double Concentric Ring Test(s), if necessary.
10. Environmental Corrosion Test(s) of soil and water samples for ph, resistivity, sulfate, and chlorides.
0. The DEPARTMENT will arrange for use of the DEPARTMENT's mainframe system, subject to normal security procedures.

D. CONSULTANT RESPONSIBILITIES

1. The CONSULTANT shall provide a Project Manager (CPM) who is acceptable to the Department and who will be the primary point of contact for the CONSULTANT for scope, schedule, manpower coordination, negotiation of staff-hours, and completion of all Work Orders. The Project Manager (CPM) shall meet with the DEPARTMENT Project Manager on a regular basis and shall provide monthly progress reports by Task Work Order. These progress reports shall be the basis for evaluation and processing of invoices for payment.
2. The CONSULTANT shall provide sufficient staff, either the specific staff person requested or acceptable staff at defined levels of expertise as agreed to by the DEPARTMENT's Project Manager, in a timely manner to complete all assigned work within the Task Work Order schedule. If, at any time, the DEPARTMENT's Project Manager determines that the number or expertise of particular staff assigned to a specific task is inadequate, the Project Manager shall coordinate with the CONSULTANT Project Manager to remedy the situation so as to ensure the timely completion of the work.
3. While it is expected that the CONSULTANT shall seek and receive advice from various state, regional, and local agencies, the final direction on all matters of this project remain with the DEPARTMENT Project Manager.
4. Copies of all written correspondence between the CONSULTANT and any party pertaining specifically to this contract shall be provided to the DEPARTMENT for their records within one (1) week of the receipt or mailing of said correspondence.
5. The CONSULTANT shall have a Registered Professional Engineer in the State of Florida sign and seal all reports, documents, and plans as required by DEPARTMENT standards.

E. PUBLIC INVOLVEMENT

Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the project. The

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

F. QUALITY ASSURANCE/QUALITY CONTROL

It is the intention of the DEPARTMENT that CONSULTANTS are held responsible for their work. The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications and other services furnished by the CONSULTANT under this contract.

The CONSULTANT shall provide a Quality Assurance/Control Plan that describes the procedures to be utilized to verify, independently check, and review all maps, design drawings, specifications, and other documentation and services prepared as a part of the contract. The CONSULTANT shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. *The names of the CONSULTANT's staff that will perform the quality control reviews shall be included in the Quality Control Plan. The Quality Control reviewer shall be a Florida Registered Professional Engineer.* The Quality Assurance/Control Plan may be one utilized by the CONSULTANT as part of their normal operation or it may be one specifically designed for this project. The CONSULTANT shall submit a Quality Assurance/Control Plan for approval within *10 (ten)* calendar days of the written Notice to Proceed. Unless specifically waived, no payment shall be made until the CONSULTANT's Quality Assurance/Control Plan is approved by the Department. Significant changes to the work requirement may require the CONSULTANT to revise the Quality Assurance/Control Plan. It shall be the responsibility of the CONSULTANT to keep the plan current with the work-requirements. The CONSULTANT shall, without additional compensation, correct all errors or deficiencies in the designs, maps, drawings, specifications and/or other services.

The CONSULTANT shall maintain adequate records of the quality control actions performed by the CONSULTANT team, (including sub-contractors and vendors), in providing services and products under this Contract. All records shall indicate the nature and number of observations made, the number and type of deficiencies found, and the actions taken. These records shall be available to the Department, upon request, during the contract term. All records are subject to audit review.

G. DESIGN VARIATIONS AND EXCEPTIONS

If available, the DEPARTMENT shall furnish the Variation/Exception Report. The CONSULTANT shall prepare the documentation necessary to gain DEPARTMENT approval of all appropriate Design Variations and/or Design Exceptions.

F. COMPUTER AUTOMATION

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. The DEPARTMENT makes available software to help assure quality and conformance with policy and procedures regarding CADD. It is the responsibility of the CONSULTANT to meet the requirements in the DEPARTMENT's CADD Manual. The CONSULTANT will submit final documents and files as described therein.

G. METHOD OF COMPENSATION

Payment for the work accomplished will be in accordance with Exhibit B of this contract. The CONSULTANT shall meet with the DEPARTMENT as required and shall provide a written progress and schedule status reports that describe the work performed on each task. Progress and schedule status reports shall be delivered to the DEPARTMENT concurrently with the monthly invoice. The Project Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

Payments will not be made that exceed the percentage of work for any event until those events have actually occurred and the results are acceptable to the DEPARTMENT.