



PRELIMINARY SCOPE OF SERVICES

EXHIBIT A

**DISTRICTWIDE
DRAINAGE DESIGN CONTRACT**

Financial Project No.: 241081-1-32-13 and 237099-1-32-10

March 19, 2026

EXHIBIT A
SCOPE OF SERVICES

A. OBJECTIVE:

The Florida Department of Transportation has retained the CONSULTANT to perform miscellaneous engineering services including, but not limited to:

- (1) Hydraulic Design of Highway drainage system for all types of projects.
- (2) Design water management systems per state and water management district criteria.
- (3) Obtain state and federal statewide environmental resource permits (SWERP).
- (4) Prepare Bridge Hydraulics Reports/Bridge Hydraulics Recommendation Sheets.
- (5) Prepare Hydraulics Reports for Project Development Studies.
- (6) Perform hydraulic studies on existing drainage problems and make recommendations.
- (7) Design field surveys including topography cross sections, drainage and outfalls, utilities right of way and other surveys including field investigations.
- (8) Geotechnical investigation and analysis.
- (9) Subcontract video inspection services to determine condition of existing drainage structures and pipe.
- (10) Investigate subsurface conditions to discover voids under the roadway.
- (11) Make recommendations and prepare plans for the rehabilitation and repair of existing storm drainage structures and facilities.
- (12) Perform technical reviews with written review comments of other Consultant Projects, including; Plans and Drainage Calculations, Stormwater Runoff Control Concept, Field Reviews, etc.
- (13) A qualified Coastal Engineer as specified in section 4.8.2.2 of the 2026 FDOT Drainage Manual will be required for this contract.
- (14) Design of a stormwater reuse system and / or review of either continuous simulation modeling or static design of the pump system required to distribute the reuse water.
- (15) Landscape Architect services as required.
- (16) Provide qualified staff to sit in-house.
- (17) Perform damage assessments during times of emergency response.

B. SERVICES

The CONSULTANT will provide any one or more of the following engineering services or elements contained therein, as required by the Department:

1. Provide all necessary engineering and drafting services required for the design of highway drainage systems. Drainage systems design will consist of storm sewer design for municipal projects and cross drains, side drains, ditches for rural projects. Outfalls and water management systems will be required for all projects. Designs shall be in accordance with the DOT Drainage Manual. Provide final Drainage Tabs and drainage calculations signed and sealed for all these projects.

2. Meet with Water Management Districts, U.S. Army Corps of Engineers, and other permitting agencies to determine requirements for permits. Prepare and obtain permits for projects designed from state and federal agencies.
3. Perform hydraulic studies for preparation of Hydraulic Reports for Project Development and Environment (PD&E) Studies and Drainage reports for solutions to drainage problems.
4. Perform Risk Assessment and Economic Analysis on alternate drainage designs and materials.
5. The CONSULTANT shall be responsible for early identification of and coordination with the appropriate regulatory agencies to assure that design efforts are properly directed toward permit requirements. The CONSULTANT shall prepare a complete permit package including site and system design information required by and acceptable to state and federal regulatory agencies. This may include the following: performing environmental assessments, prepare permit applications, wetland dredge and fill sketches, quantify environmental impacts and mitigation requirements.

While the responsibility for submitting the permit packages to the regulatory agencies will be determined on a project by project basis, the CONSULTANT shall be accountable for all the information necessary in order to secure permits from said agencies.

6. Design/Right-of-Way Surveys

- a. **General:**

The CONSULTANT shall perform all survey services necessary to prepare the Right-of-Way maps, legal descriptions and construction plans for the entire limits of the subject project as outlined in the following subsection. Survey services must be accomplished in accordance with the Department's Location Survey Manual. These services must also comply with the Standards of Practice for Land Surveyor's Rule Chapter 21HH-6, "Florida Administrative Code, Florida Statutes"; and any special instructions from the Department. Survey services must also comply with the Department of Natural Resources Rule Chapter 18-5, "Florida Administrative Code"; and the Department of Environmental Regulation State Jurisdiction Boundary Surveys where applicable.

- b. **Design/Right-of-Way Surveys:**

- (1) Geodetic Baseline Control - Establish a geodetic baseline control survey for the purpose of establishing the alignment of the project on the Florida Plane Coordinate System and provide a closed alignment.
 - (2) Alignment - This alignment should be determined by establishing the tangent lines of existing DEPARTMENT Right-of-Way maps if such maps exist, or in the center of dedicated Right-of-Way as per subdivision plats, or in the center of the pavement when no Right-of-Way map or dedication exists. If the traffic volume is heavy, the baseline of survey should be offset from the centerline of pavement a safe distance.

Establish Florida State Plane Coordinates on each point of intersection (PI) along the centerline or baseline of survey, also at the beginning and end of survey, by tie from the geodetic baseline control.

Stake and station the centerline or baseline of survey on the proportioned distances between these major control points so the centerline or baseline stations will coincide with the Florida Plane Coordinate System.

NOTE: All Florida State Plane Coordinates will be shown to four (4) decimal places (metric) and three (3) decimal places (English), centerline of survey stationing and all other linear measurements will be shown to (0.001) of a meter (and/or (.01) of a foot and all bearings and angles will be shown to one second (01") of angular measurement.

- (3) Reference Points - Reference all centerline or baseline of survey control points.
- (4) Aerial Targets - Place aerial targets every 300 feet and/or 100 meters, at the beginning of survey, at all P.C.'s, P.I.'s, P.T.'s and at the end of survey.
- (5) Bench Levels - Establish a benchline on N.G.V.D. 1988, or, if so instructed by the District Location Surveyor, N.G.V.D. of 1929. A Bench Mark description form will be filled out and submitted along with the Field Books for each new Bench Mark set, or old Bench Mark used. These records will be kept on file in the District Location Survey Office. Bench marks should be established at approximately 300 meter (1000 ft.) intervals, but no more than 325 meters (1100 ft.).
- (6) Topography - Make a complete topographic survey for the limits of the project. Tie all buildings by 90 degree station and offset method to the centerline or baseline of survey or if authorized by the District Location Surveyor, topography may be collected by automated means using an electronic field book (EFB) or other compatible software. The Department must be assured that the data will be collected in approved format and symbology.
- (7) Roadway Cross-Sections/Profiles - Take cross-sections for the entire limits of the project as directed by the District Location Surveyor.
- (8) Side Street Surveys - Make complete side street surveys.
- (9) Underground Utilities - Locate underground utilities both vertically and horizontally in accordance with Chapter 221 of the FDM and the Location Survey Manual, Topic Nos. 550-030-001 and 004.
- (10) Drainage Survey - Make drainage survey. The CONSULTANT may use aerial photography or perform a standard field survey. The CONSULTANT may utilize existing topographic references such as U.S.G.S. Quadrangle Maps, one foot interval contour maps, etc. All prominent features are to be verified by the CONSULTANT

during actual on site investigation or field survey. If the CONSULTANT utilizes aerial photography, spot elevations shall be shown on the aerials. Sufficient elevations shall be shown to enable the CONSULTANT'S drainage engineer to determine direction of flow to the DEPARTMENT'S right-of-way.

- (11) Bridge Data Survey - Make complete bridge survey.
- (12) Outfall, Detention and Mitigation Survey - Make necessary outfall, detention pond, and mitigation area surveys.
- (13) Jurisdictional Line Survey - Make DER jurisdictional line surveys where applicable and tie same to centerline or baseline of survey.
- (14) Stake-Out for Borings - Provide alignment stake out for subsoil investigation.
- (15) Section Ties - Tie section lines, quarter section lines, (and quarter-quarter section lines when pertinent) to the center of survey. All corners found or set in the field shall be properly identified and recorded in the field book and forms completed and filed with DNR in accordance with Section 177 F.S.
- (16) Subdivision Ties - Tie all subdivisions, including individual property line ties where apparent property line disputes may occur, condominium boundaries, at the beginning and end, block lines, and street Right-of Way lines to the centerline or baseline of survey. Ties will be made by closed traverse to assure acceptable closure. All necessary block corners shall be found or set in the field with corners properly identified and recorded in the field book. Efforts should be made to identify all vacated streets within a subdivision, along with the recording data of vacation. It should be noted that 90 degree ties from the centerline of survey or the centerline of side streets to any corner will not be accepted by the DEPARTMENT. All ties must be shown as intersecting the centerline of survey with respective subdivision lines.
- (17) Maintained Right-of-Way Survey - The necessary research and decision shall be made early in the project by the District Location Surveyor to determine the need for a maintained right-of-way survey. If necessary, tie maintained Right-of-Way to this survey line where needed and as identified by the maintaining authority. Have the field books certified as to the Maintenance Limits by the maintaining authority.
- (18) Mean High Water/Safe Upland Line Survey - Make tide studies where applicable and tie these lines to the centerline or baseline of survey to comply with Florida Administrative Code Chapter 18-5 F.S.

Items to be furnished to the DEPARTMENT are: legible copies of all city/county property appraiser's maps, subdivision and condominium plats, and copies of the certified corner records depicting the land corner references which exist throughout the project.

c. Certified Right-of-Way Control Survey Drawings:

The field Right-of-Way survey is to be presented in the format of a certified drawing on standard size reproducible film. The CONSULTANT shall certify this drawing as a Right-of-Way Control Survey which meets the Standards of Practice adopted by the Florida Department of Professional Regulation, Board of Land Surveyors, Chapter 21-HH-6 of the Florida Administrative Code and Department procedure 550-030-005.

These survey drawings shall be at a metric ratio of 1:5000 (and/or 1" = 400') for the Key Map and a metric ratio of 1:500 (and/or 1" = 40') for insert detail or to a scale that is acceptable to the DEPARTMENT.

Unless otherwise directed, the surveyor shall furnish the DEPARTMENT with four (4) signed, sealed and certified copies of the above maps along with the original reproducible film copy.

- (1) The metric ratio of 1:5000 (and/or 1" = 400') certified drawing will depict the following data:
 - a. Complete centerline alignment data, including beginning of survey station, all curve data, bearings on all tangent lines along the centerline, all intermediate control point stations, and end of survey station. All control points must be identified as to type of material set at each respective point.
 - b. All section lines, all quarter section lines, (and all quarter-quarter section lines when pertinent) must be shown with the station where their intersection with centerline or baseline of survey occurs, a distance from the nearest corner to centerline, and bearings and distances to all corners. Type of corner, either found or set, should be spelled out or identified by a legend. All ties will be shown to depict a closed traverse to assure acceptable closure.
 - c. A separate sheet depicting all of the centerline or baseline control reference points and reference points for Public Land Survey corners as per rule of the Department of Transportation Chapter 14-47 and the type of material used for each respective reference point. This sheet does not need to be plotted to scale.
 - d. Sheet 1 of key map should contain all pertinent general survey notes and the following certification.
 - e. I hereby certify this Right-of-Way Control survey was made for the purpose of surveying, referencing, describing and mapping the centerline and/or baseline for the transportation facility shown and depicted hereon and that said survey was done under my responsible charge and meets the Standards of Practice of the Board of Land Surveyors, chapter 21-HH-6, Florida Administrative Code pursuant to Section 472.027 Florida Statutes.

This drawing, consisting of sheets _____ through _____ is a true, accurate and complete depiction of a field survey performed under my direction and completed on

Date

Name of Surveyor

Address

NOT VALID UNLESS SIGNED AND EMBOSSED WITH SURVEYOR'S SEAL

- (2) The metric ratio of 1:500 (and/or 1" = 40') Certified Right-of-Way Control Survey drawing will depict the following data:
- a. The complete centerline or baseline alignment data, including beginning of survey station, all curve data, bearing on centerline, all intermediate control point stations and end of survey station. All control points must be identified as to type of material set at each respective point.
 - b. All subdivisions, including condominium boundaries, must be shown with a station where the centerline and/or baseline of survey and each subdivision line intersect. A sufficient amount of field ties must be made in order to establish the original block boundaries of each subdivision. A distance from centerline to the nearest found or set corner and bearings and distances between all corners must be shown, type of corner, either of found or set should be spelled out or identified by a legend. Show bearings and distances on all subdivision lines which were intersected with the survey line. All lot and block numbers, street names, plat book, page, and name of each subdivision. Each tie made in the field must be shown on this map. All ties will be shown to depict a closed traverse to assure acceptable closure.
 - c. The complete right-of-way survey along with the certified drawing will be submitted to the Florida Department of Transportation for review and approval 30 days prior to the beginning of the preliminary right-of-way preparation.

d. Aerial Format:

If aerial photography is utilized, it shall be processed and prepared in accordance with the governing specifications, and shall include R/W photo base maps on D.O.T. format at a metric ratio of 1:5000 (and/or 1" = 400') for the R/W key map and a metric ratio of 1:500 (and/or 1" = 40') for R/W Detail maps or a scale acceptable to and agreed upon by the Department. The Consultant will furnish the Florida Department of Transportation with the original negatives of all aerial flights.

e. Specifications:

All of the above survey work must be accomplished in accordance with the Department's Location Survey Manual, Topic Nos. 550-030-000 through 550-030-012 (760-000/760-012). This work must comply with the Standards of Practice for Land Surveyors chapter 21-HH-6, Florida Administrative Code pursuant to Florida Statute 472.027 and any special instructions from the Department. This survey also must comply with the Department of Natural Resources Rule, Florida Administrative Code Chapter 18-5, pursuant to Chapter 177, Florida Statutes, and the Department of Environmental Regulations state Jurisdiction Boundary Surveys where applicable.

f. Quality Control/Quality Assurance:

A quality checklist will be furnished by the Department and filled out by the Consultant for submittal along with the field books, maps and other data.

7. Geotechnical Investigation and Analysis

The CONSULTANT shall be responsible for a complete geotechnical investigation. All work performed by the CONSULTANT shall be in accordance with DEPARTMENT standards, the latest Soils and Foundations Manual, related directives, Federal Highway Administration Checklist and Guidelines for review of Geotechnical Reports and Preliminary Plans and Specifications, and the Pavement Coring and Evaluation Procedure (Topic No. 675-030-005-a). All work zone traffic control will be performed in accordance with the Department's Roadway and Traffic Design Standards Indices 600-651 (Topic No. 625-010-003-b). The District Geotechnical Engineer will make all determinations regarding Department geotechnical standards, policies and procedures. Prior to beginning the investigation, the Consultant shall meet with the Department's Geotechnical Project Manager to review the project scope and FDOT requirements

a. Field Investigation - Roadway:

The soils investigation for roadways shall include, but not be limited to:

- (1) One 5-foot (1.524 meter) auger boring per 100 feet or 50 meters per 2 roadway lanes.
- (2) One 20-foot (6.096 meter) auger boring per 500 feet or 150 meters of alignment.
- (3) Soil samples for laboratory soil testing will be obtained on a minimum frequency of 3 samples per stratum per mile or 1.6 kilometers.
- (4) Soil samples for pipe corrosion testing will be obtained on a minimum frequency of 1 sample per stratum per 2,000 feet or 600 meters of alignment.
- (5) Pavement cores will be obtained per the Pavement Coring and Evaluation Procedure.
- (6) Use U.S.G.S. and S.C.S. maps to identify areas of organic soils.
- (7) Determine the vertical and horizontal extent of compressible strata (i.e. muck, peat, clay, etc.).

The following boring and testing frequency will be performed for exploration of stormwater management areas:

- (1) A minimum of two 20-foot (6.096 meter) auger borings and 1 field permeability test per one acre or 4047 square meters of stormwater pond.
- (2) Auger borings and field permeability tests every 500-feet or 150 meters in exfiltration trench areas.
- (3) Double ring infiltrometer tests every 500-feet or 150 meters for swale areas.

Option: Preliminary Contamination Assessment (PCA)

At the Department's discretion, a PCA may be required on a per site basis. All work shall be performed in accordance with current DER and OSHA standards. The following work items shall be included but not be limited to:

- (1) A minimum of four borings will be required per site.
- (2) Soil gas analysis will be required by use of a flame ionization detector [i.e. OVA (Organic Vapor Analyzer), etc.].
- (3) Installation of monitoring wells may be required.
- (4) Water sampling and laboratory analysis may be required (Laboratory shall be HRS certified).
- (5) Up to four draft PCA reports will be required for review and up to six final reports (signed and sealed) will be required.

b. Laboratory Testing (Roadways and Structures):

All laboratory testing will be performed in accordance with Florida Sampling and Testing Methods or ASTM or by related directives. Laboratory testing will include the following as required by the needs of the project:

- (1) Organic Content (FM 1-T 267)
- (2) Moisture Content (FM 1-T 265)
- (3) Sieve Analysis (FM 1-T 88)
- (4) Particle Size Analysis with hydrometer (FM 1-T 88)
- (5) Specific Gravity (FM 1-T 100)
- (6) Torvane Sensitivity
- (7) Atterberg Limits (FM 1-T 89/90)
- (8) Consolidation (FM 1-T 216)*
- (9) Triaxial (FM 1-T 234)
- (10) Corrosion Series (FM 5-550, FM 5-551, FM 5-552, FM 5-553)
- (11) Limerock Bearing Ratio (FM 5-515)
- (12) Aggregate Gradation (FM 1-T 30)
- (13) Bitumen Extraction (FM 1-T 164)
- (14) Unconfined – Rock (ASTM D-2938)
- (15) Splitting Tensile (ASTM D-3967)
- (16) Direct Shear (ASTM D-3080)

* With an unload/reload cycle near the pre-consolidation pressure.

c. Roadway Report:

The roadway report shall include, but not be limited to:

- (1) Copies of SCS and USGS maps with project limits and beginning/ending stations shown.

- (2) A report of tests sheet which summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505.
- (3) Estimated seasonal high and/or low groundwater levels.
- (4) Recommend type of geo-synthetic and A.O.S. for various applications.
- (5) The design LBR value.
- (6) Permeability parameters for water retention areas/exfiltration trenches.
- (7) The existing pavement section and asphalt composition for possible reuse or grade control, if warranted.
- (8) A description of the site and subsoil conditions, design recommendations and a discussion of any special considerations (i.e. removal of unsuitable material, recompression of weak soils, estimated settlement time/amount, groundwater control etc.).
- (9) An appendix which contains stratified soil boring profiles, laboratory test data sheets, design LBR calculations/graphs, and any other pertinent information

In addition to the roadway report, the Consultant will also plot the stratified boring profiles on the original roadway cross-sections and have the Geotechnical Subconsultant review the plans for completeness before each submittal to the Department. The Geotechnical Subconsultant shall also detail limits on the cross-sections showing recommended usage and/or removal of organic, limestone, and plastic materials. Up to four draft roadway reports shall be submitted to the District Geotechnical Department for each review prior to incorporation of the CONSULTANT'S recommendations in the project design,

d. Field Investigation - Structures:

The geotechnical investigation for structural foundations includes bridges, box culverts, retaining walls, sea walls, high-mast lighting, overhead signing, mast arm signals and high embankment fills as required. The investigation shall include, but not be limited

- (1) Standard Penetration Test (SPT) borings or Cone Penetration Test (CPT) soundings at each bridge bent/pier location or at the maximum interval of 100 feet or 30 meters.
- (2) SPT borings or CPT soundings 100 feet or 30 meters behind each abutment as a minimum for exploration of high fill areas.
- (3) SPT borings or CPT soundings at a maximum interval of 200 feet or 60 meters along proposed retaining wall locations.
- (4) At least 2 SPT borings at proposed box culvert locations.
- (5) One SPT boring or CPT sounding to a minimum of 40 feet (12.195 meters) at each sign, lighting and/or signal foundation.
- (6) All SPT borings are to be sampled on 2.5 foot (0.762 meter) or 3-foot (0.914 meter) centers (unless directed otherwise).
- (7) Continuous SPT sampling to a depth of 15 feet (4.572 meters) below potential shallow foundation bearing elevation.

- (8) Undisturbed samples of cohesive soils obtained in accordance with FDOT standards.
- (9) Rock coring when hard rock is encountered. A Standard Penetration Test (SPT) shall be performed at the bottom of each core run. Core runs shall not be longer than 5 feet (1.524 meters).
- (10) If the drilling program expects to encounter artesian conditions, the Geotechnical Engineer shall submit a methodology(s) for plugging the borehole to FDOT for approval prior to commencing with the boring program.
- (11) Additional specialized field testing as required by needs of project.

Field sampling and testing is also to include the testing of soils, and/or water for the determination of environmental class for the substructure and superstructure, and measurement of d50 and evaluation of angle of repose for channel bed soils.

SPT borings or CPT soundings including an analysis of foundation alternates shall be performed if justified by the inclusion of signing, lighting and/or signal foundations. This effort shall include field work as referenced above, lab testing, data reduction, analysis and recommendations.

e. Structures Report:

The structures report shall contain the following discussions as appropriate for the assigned project:

- (1) Summary of structure background data, SCS and USGS data.
- (2) Analysis of structure foundation alternatives including but not limited to the following:
 - Spread footings
 - Pre-stressed concrete piling - various sizes (SPT94.EXE)
 - Steel H piles - various sizes (SPILE)
 - Steel pipe piles - various sizes (SPT94.EXE)
 - Drilled shafts - various sizes (FHWA Drilled Shaft Manual-Reese/O'Neill or UF Research Report D647F as appropriate)
 - Other feasible foundation types
- (3) Recommendations for most practical foundations types will be given along with the basis for selection.
- (4) Analysis of allowable and/or ultimate foundation capacity and settlement potential for all feasible alternatives. Foundation capacity analyses shall be performed using the methods listed above or an FDOT approved alternate. For pile foundations, provide graphs of design soil resistance versus estimated minimum/maximum pile tip elevations (Adjusted for scour if necessary).
- (5) Analysis of lateral load capacities when required (COM624G/LPILE).
- (6) Evaluation of external stability for conventional retaining walls and retained/reinforced earth wall systems (FHWA-RD-89-043, 11/90).
- (7) Evaluation of embankment slope stability (PCSTABL) and settlement.

- (8) Sheet Piling Analysis (CWALSHT/FHWA DP-68-1 & RD-82-047/USS SSPDM).
- (9) Draft of detailed boring/sounding standard sheet, including environmental classification and specialized construction requirements, for inclusion in final construction plans.
- (10) Summary of soil test results including the following:
 - Unit Weight
 - Consolidation parameters
 - Cohesion
 - Friction angle for cohesion-less soils
 - Strain at 50% stress level from UU Triaxial compression
 - Modulus of subgrade reaction
 - Other pertinent test results
- (11) Evaluation of lateral earth pressures on underground structures (i.e. box culverts, retaining walls, etc.).
- (12) Shallow foundation bearing capacity (i.e. allowable bearing pressure, minimum footing width, and minimum embedment depth).
- (13) Construction information addressing the following items:
 - Estimated maximum driving resistance anticipated for pile foundations.
 - Recommendations for footing or shaft installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
 - Recommend quantity, location and length of test piles with or without instrumentation and a recommendation on the use of load tests.
- (14) An Appendix which includes SCS and USGS maps, SPT and CPT boring/sounding profiles, data from any specialized field tests, laboratory test data sheets, engineering analysis notes, calculations and any other pertinent information.

Up to six draft structures reports shall be submitted to the District Geotechnical Department for each review prior to incorporation of the CONSULTANT'S recommendations in the project design. All structural plans submittals shall be reviewed by the Geotechnical Subconsultant before each submittal to the Department.

f. Preliminary Roadway Report:

Up to four copies of the Preliminary Roadway Report shall be submitted before the 30% plans submittal. This report should include a field reconnaissance report, Preliminary estimated seasonal high water table elevations and review of existing data. Existing data to be reviewed and summarized should include but not be limited to:

- (1) Topographical Maps (include copies in report)
- (2) Aerial Photographs
- (3) Geological Maps and Reports
- (4) Soil Conservation Service Surveys (include copies in report)
- (5) Adjacent Projects.

The Preliminary Roadway Report will be provided to the Roadway Designer to assist in setting road grades and locating potential problems.

g. Final Analyses and Reports:

Separate final engineering reports will be submitted for roadway and structures. These final reports will incorporate comments of the FDOT District Geotechnical Department and contain any additional field or laboratory test results, recommended foundation alternatives along with design parameters and special provisions for the construction plans. These reports will be submitted to the District Geotechnical Engineer for review prior to project completion. After review by the District Geotechnical Department, the reports will be submitted in final form and will include the following:

- (1) Signed and sealed Structures reports (up to six original reports).
- (2) Two sets of unsigned xerographic bonds (half size and full size).
- (3) Two sets of signed and sealed xerographic bonds (half size and full size).
- (4) Four sets of all applicable technical special provisions.
- (5) Signed and sealed Roadway reports (up to eight original reports).
- (6) All reference and support documentation used in preparation of contract plans package.

The final roadway and structure reports, as well as plan sheets, will be signed and sealed by a registered Professional Engineer in the State of Florida.

h. Provisions for Work:

The proposal will show the base unit costs and shall state the upset limit fee estimated to complete this activity. Negotiated unit estimates may vary to meet the project requirements. Prices will adhere to the fee schedule and remain under the upset limit. Actual payment for the geotechnical investigation will be based on the work actually performed at the unit prices stipulated in the price proposal.

NOTE: HORIZONTAL SPACING SHALL BE DEPENDENT UPON BASE LINE SURVEY.

8. Make such reviews, attend such meetings and make such contacts as are necessary for proper preparation of plans and special provisions for these projects.
9. The CONSULTANT shall serve as an expert witness in any legal proceedings related to these if required by the DEPARTMENT. The fee for these services shall be established if and when, they are needed.
10. The CONSULTANT shall prepare a draft of special provisions required for the construction of the roadway, structures and traffic operations portions of each project.

C. DEPARTMENT RESPONSIBILITIES:

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

1. All previously completed field surveys as required.
2. All available roadway plans, bridge plans, right-of-way maps, studies and other available information pertinent to the project.
3. Aerial photography required for preparation of construction plans and right-of-way maps, if available.
4. All available traffic information.
5. Right-of-way maps and legal descriptions which are not part of the consultants work effort, when required.
6. When survey services are required, the Department will furnish numbered standard survey books for survey data.
7. Pavement designs.
8. Available thru lane A.D.T. information.
9. A DEPARTMENT engineer as a project manager who shall be the technical representative of the DEPARTMENT for the project. 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 a technical nature will remain with the Project Manager. However, all matters pertaining to contract administration lie with the District Professional Services Administrator.
10. The DEPARTMENT will be responsible for obtaining instruments of conveyance, and for all phases of right-of-way acquisition.
11. All correspondence on file which is determined by the DEPARTMENT to be relevant to the design process.
12. Available accident data.
13. Notice to Proceed Meeting:

The CONSULTANT shall meet with certain DEPARTMENT personnel immediately following receipt of the Notice to Proceed. As a minimum, the CONSULTANT's Project Manager and senior project staff shall attend these proceedings. The DEPARTMENT'S participants in this meeting may include:

- District Secretary, District 5
- District Director of Production
- District Design Engineer
- District Project Manager
- District Traffic Operations Engineer
- District Utilities Engineer
- District Drainage Engineer
- District Location Surveyor
- District Geotechnical Engineer
- District Professional Services Administrator

D. GENERAL:

1. The computations and plans shall be accurate, legible, complete in design, and acceptable to the DEPARTMENT. It shall be the CONSULTANT's responsibility to acquire and utilize the necessary DEPARTMENT manuals that apply to the design work required to complete this project.
2. The CONSULTANT shall finish preliminary prints and sepias as required by the DEPARTMENT to adequately control, coordinate and approve the design.
3. The CONSULTANT shall furnish to the DEPARTMENT copies of all written correspondence between the CONSULTANT and any party pertaining specifically to this project within one (1) week of the receipt or mailing of said correspondence. The CONSULTANT shall also prepare and distribute minutes of all meetings the CONSULTANT attends relative to the project, including the contract kick off meeting.
4. The CONSULTANT shall prepare and submit a schedule for consultant activities on projects as they are assigned along with the periodic progress reports as directed by the DEPARTMENT.
5. The CONSULTANT shall submit his man-hour and fee estimate proposal for each project within 10-working days of his receipt of our request for same.
6. The CONSULTANT's work shall be performed and/or directed by the key personnel identified in the technical/fee proposal presentations by the consultants. Any changes in the indicated personnel or the CONSULTANT's office-in-charge-of-the-work as identified in the CONSULTANTS's proposal shall be subject to review and approval by the DEPARTMENT.
7. The CONSULTANT shall furnish to the DEPARTMENT, upon final plans acceptance, the original contract plans package, two sets of record prints, one set of special provisions and all reference and support document utilized in the preparation of the contract plans package. One set of the record prints, the special provisions and all reference and support documents shall be professionally endorsed (signed, sealed and certified) by the CONSULTANT's Professional Engineer in responsible charge of the project design. The professional endorsement shall be performed in accordance with Chapter 471, Rules 21H-19 and 21H-23 of the Florida Statutes and Chapter 130 of the DEPARTMENT'S FDM .
8. Upon completion of each project, the CONSULTANT shall deliver to the DEPARTMENT, in an organized manner, all project files, maps, sketches, worksheets, plans aerial photography, COMPUTER AIDED DRAFTING AND DESIGN FILES, and other materials used or generated during the design process.