

**HIDALGO COUNTY**  
**Professional Engineering Services**  
**Contract # C-08-417-12-09**  
**Work Authorization Form**

**WORK AUTHORIZATION NO. 1**

**THIS WORK AUTHORIZATION** is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", and **L&G Consulting Engineers, Inc. d/b/a L & G Engineering**, professional engineers of Mercedes, Texas, hereinafter called "**Engineer**".

**PART 1. SCOPE OF WORK**

The purpose of this Work Authorization is for the **Engineer** to provide **Engineering Services** required for the preparation of **Schematics, Environmental Assessment, Public Involvement, ROW Mapping, Surveying, and Roadway Design** for the reconstruction of **FM 493 from US 281 (Military Highway) North 6.65 Miles to Business 83.**

The scope of services to be provided by the **Owner** is identified in **EXHIBIT "A" – Scope of Services to be Provided by the Owner** attached hereto.

The scope of services to be provided by the **Engineer** is identified in **EXHIBIT "B" – Scope of Services to be Provided by the Engineer** attached hereto.

**PART 2. ESTIMATED COST**

The estimated cost for services under this Work Authorization is **\$1,144,000.00**. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "D"**.

**PART 3. PAYMENT**

Compensation and payment to the **Engineer** for the services established under this Work Authorization shall be made in accordance with **Article/Part/Section 7** of the Agreement.

**PART 4. FUNDING**

This Work Authorization No. 1 shall be funded through funding source:

Account No. **8-1201-431-00-121-053-0-841**

Requisition Number \_\_\_\_\_ (**MUST BE INCLUDED AFTER CC APPROVAL**)

**PART 5. PERIOD OF SERVICE**

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate **upon completion of scopes of work authorization.**

**PART 6. RESPONSIBILITIES AND OBLIGATIONS**

This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

**PART 7. ACKNOWLEDGEMENT AND CONFIRMATION**

Acknowledgement and confirmation by **Hidalgo County Precinct No. 1**, Commissioner, **Sylvia S. Handy** as to content and detail of this **Work Authorization No. 1**.

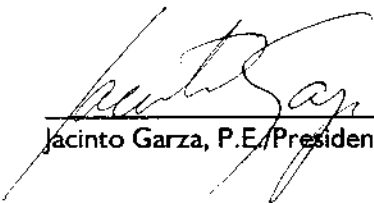
**HIDALGO COUNTY  
COMMISSIONER PRECINCT NO. 1**

  
\_\_\_\_\_  
Sylvia S. Handy, County Commissioner

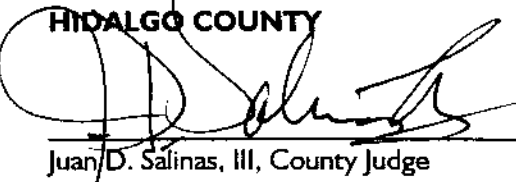
**PART 8. ACCEPTANCE AND APPROVAL**

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on **12/09/08** as indicated below and effective as of **9<sup>th</sup>** day of **December, 2008**.

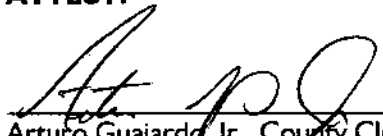
**THE ENGINEER:**

  
\_\_\_\_\_  
Jacinto Garza, P.E./President

**THE OWNER:  
HIDALGO COUNTY**

  
\_\_\_\_\_  
Juan D. Salinas, III, County Judge

**ATTEST:**

  
\_\_\_\_\_  
Arturo Guajardo, Jr., County Clerk

**LIST OF ATTACHMENTS**

- EXHIBIT "A" - Service to be Provided by the Owner
- EXHIBIT "B" - Services to be Provided by the Engineer
- EXHIBIT "C" - Work Schedule
- EXHIBIT "D" - Cost Proposal

## EXHIBIT "B"

### Services to be provided by the Engineer

#### PROJECT LIMITS:

- **FM 493: From US 281 (Military Highway), North 6.65 Miles, to Business 83**

#### GENERAL SCOPE OF WORK:

The work to be performed by the Engineer under this Contract shall consist of providing Engineering Services required for the preparation of Schematics, Preliminary ROW Ownership, Environmental Assessment, Public Involvement, Design Surveys and ROW Determination, Outfall Identification and Hydrologic Map, Utility coordination, PS&E Development and bidding documents. In addition, this contract will include ROW acquisition provider services and construction inspection and construction material testing. The Engineer will prepare bid packages as identified in the Work Authorization for the reconstruction of FM 493 from US 281 (Military Highway) North 6.65 Miles to Business 83 in two sections. Section 1 is from Bus 83 to Champion Street and Section 2 is from Champion Street to US 281. The proposed improvements are to overlay the Section 1 and reconstruct Section 2 from an existing 28' roadway to 40 foot rural roadway providing for two lanes and shoulders along with associated drainage, structures, and grading including Traffic Control, Signing & Striping, and Traffic Signal/Flashing Beacon Installations for the subject limits.

The work to be performed by the Engineer shall also include the review of the existing drainage patterns to determine if the proposed roadway can be designed utilizing the existing outfalls. The basis for this estimate is based on the premise that the existing outfalls located at the ROW line of FM 493 will be utilized. The Engineer will examine the proposed outfall locations and associated hydrologic and hydraulic conditions and determine the feasibility and practicality of using the existing outfalls or if new outfalls are needed. **This scope does not include designing outfalls outside of the existing ROW for FM 493.** In addition, the scope includes coordinating the utilities along the project limits in preparation for construction.

The **Engineer** will furnish all equipment, materials, supplies, and incidentals as needed to perform the services required by this contract, except as otherwise specified in Exhibit A, "Services to be Provided by the County".

#### **GENERAL SCOPE OF WORK:**

The Scope of Work for this Work Authorization will be identified as follows:

- **FC110 ~ Design Schematic Development**
- **FC120 ~ Social, Economic, and Environmental Studies, and Public Involvement**
- **FC130 ~ Existing Right-of-Way Determination**
- **FC150 ~ Design Surveys**
- **FC160 ~ Roadway Design**
- **FC161 ~ Hydrologic/Hydraulic Study**
- **FC162 ~ Signing, Pav't Marking, Signals**

- FC163 ~ Irrigation Str., Estimate, Specs, Gen Notes, Misc
- FC164 ~ Contract Management
- FC 320 – Construction Inspection and Construction Material Testing
- FC 600 – ROW Acquisition Services

### FC 110 ~ DESIGN SCHEMATIC DEVELOPMENT

After the existing centerline alignment is recovered and the proposed centerline is approved by TxDOT, the Engineer will develop a design schematic for submittal to TxDOT's Design Division.

#### Design Criteria

- The Engineer will prepare a Design Summary Report (DSR) to document the design criteria for the project and submit it to TxDOT for further processing.
- A Design Concept Conference (DCC) will be held to discuss and review the design criteria. The Engineer will prepare a Meeting Summary Report which will describe in detail the decisions made at the DCC and distribute it to everyone in attendance.
- The Engineer will prepare a preliminary construction cost estimate based on the results of the DCC and submit it to TxDOT.

#### Design Schematic

- The Engineer will develop a preliminary design schematic, based on the alignment previously selected, and submit to TxDOT for review.
- The Engineer will revise the schematic to incorporate TxDOT's comments and provide to TxDOT.
- A public meeting for this project will be scheduled. The Engineer will attend and will provide TxDOT with technical support.
- The Engineer will meet with TxDOT after the meeting to discuss modifications, if any, to the design schematic. The Engineer will incorporate the changes agreed upon, into the schematic and submit the revised schematic to TxDOT for further submittal to the Design Division and/or FHWA.
- After receiving approval of the design schematic from TxDOT, the Engineer will proceed with finalizing the design and complete the PS&E.
- The Schematic details will be completed to the Districts identified checklist.

#### Drainage

- The Engineer will evaluate the adequacy of the existing outfalls and develop a Hydrologic Map for the project identifying if any outfalls are needed for the project. The Engineer will coordinate with the Hidalgo County Drainage District No. 1, the Irrigation Districts, and cities in the area.

#### Irrigation Structures

- The Engineer will define the horizontal layout of the irrigation system in place and draw on the schematic the basis for maintaining the irrigation system whole.

### FC 120 ~ ENVIRONMENTAL STUDIES, AND PUBLIC INVOLVEMENT

The Engineer will conduct the necessary research and field investigations to prepare an

Environmental Assessment document to obtain a Finding of No Significant Impacts (FONSI) clearance for the project.

**Task I. Document Purpose and Need for the Project:** This section will include text and graphics illustrating the description, purpose and need, objectives of the project and the existing and proposed project design. This section will also provide a description of the issues eliminated from further study.

**Task II. Alternatives:** This section will include text and graphics illustrating the different alternatives considered prior to selecting the preferred. It will also describe the reasonable alternatives and those eliminated from further study.

**Task III. Affected Environment and Environmental Consequences:** For each of the following categories the necessary background and field reconnaissance will be performed to gather data necessary for the completion of the EA. This will assist in determining which issues should be eliminated from further study or studied in detail.

*Land Use and Socio-economic Impacts:* Pertinent social and economic issues will be addressed in the EA; a separate report will not be prepared. At this time, it is unknown if relocations will occur; however, the EA will address any relocations anticipated. No other impacts to land use, land planning or socio-economic issues are anticipated. A Section 4(f)/6(f) will not be prepared.

*Ecological Resources:* A characterization of the project's ecological resources, including wetlands, vegetation, prime farmland and wildlife habitat characteristics will be performed. Ecologically sensitive resources including protected species, if any, will be identified in order to assess potential effects of project construction and operation. Any presence or absence surveys for endangered species will not be conducted. The project will be assessed for compliance with the Nationwide Permit Program; however, a permit is not anticipated. Any permitting required will be conducted by TxDOT.

*Hazardous Materials:* A field screening and an internet data search for potential hazardous materials sites will be conducted. A Phase I Environmental Site Assessment for hazardous materials will not be conducted.

*Noise and Air Quality:* A noise analysis and air quality impacts will be assessed under this scope.

*Field Investigations:* Field visits to identify potential environmental constraints involving land use, ecological resources and potential hazardous material sites will be conducted.

*Graphics:* Report graphics will be prepared for the EA as needed to show the project location, typical sections and project area photographs. In addition, the project layouts/photographs will show those resources that are necessary to convey the project's impacts to the reviewers.

*Public Involvement* – A discussion will be provided regarding any public involvement which occurs on the project.

*Report Preparation and Submittal* – The Engineer will prepare an environmental document (EA) that complies with applicable procedures of the National Environmental Policy Act (EPA) and Federal Highway Administration Technical Advisory 6640.8A. The analysis will address the

adverse and beneficial impacts of project construction and operation. Mitigation options will be emphasized where adverse impacts may potentially occur.

The Engineer will submit one draft copy of the report for review by the TxDOT Pharr District. Color photographs and exhibits will be included in both the draft and final reports. All review comment responses will be provided in writing and a meeting will not be required to discuss review comments. The draft report will be revised to incorporate District's comments. Thirteen (13) sets of the revised report will be submitted for review by ENV. After ENV reviews the report, the document will be revised and eight (8) sets of the report will be submitted. Because this project would obtain a Categorical Exclusion, no other revisions will need to be made. Upon receiving a Categorical Exclusion, a CD which includes the document and exhibits will be provided to the District for their files.

*Coordination* – L&G will coordinate with the SWCA to conduct all Cultural Resource Surveys and reports. TxDOT will coordinate with the appropriate resource agencies to obtain environment clearance for completion of project.

*Assumptions used to derive to proposed fee estimate and scope of services:*

- The Engineer will conduct field investigations in two field trips.
- The Engineer will attend the DCC and one meeting.
- All investigations will be conducted based on existing literature, field reconnaissance and aerial photographic interpretation.
- The draft EA will be submitted to TxDOT in 30 days after the public meeting and/or receipt of data needed.

### **FC 120 ~ ENVIRONMENTAL STUDIES, AND PUBLIC INVOLVEMENT**

SWCA will conduct and prepare all Cultural Resource surveys and reports as required by TxDOT.

### **FC 130 ~ PRELIMINARY ROW DETERMINATION**

#### **FM 493 From Champion Street to US 281**

##### **General**

1. The **Surveyor** will recover and or re-establish the existing Right-of-Way for the subject project.
2. The **Surveyor** shall monument the recovered ROW at all at all PCs, PTs, angle points, intersecting right-of-way lines of side streets, and 1000-foot stations after coordinating with the L&G Engineer. The **Surveyor** shall also monument all ROW corners.
3. **The Surveyor will submit a separate existing R.O.W. layout drawing (at scale of 1 inch = 100 feet), delineating the existing points recovered and all R.O.W. monuments that will be set before setting any points on the ground.** This map shall be utilized by L&G to attach it to the requests for the utility companies to adjust their lines prior to construction.

- a. This map shall also contain the proposed centerline as set on the ground – **again do not set a centerline for construction until L&G Engineers have approved.**
- b. Existing right-of-way lines will be delineated with appropriate bearings, distances, and curve data. The proposed centerline alignment will be delineated with appropriate bearings, distances, curve data and stationing. The existing ROW layout sheets stationing will be based on the proposed alignment. A north arrow will be shown on each sheet and, if possible, in the upper right hand corner.
- c. Monumentation set or found will be shown and described as to material and size.
- d. A station and offset based on the proposed alignment will be shown for all points set and/or recovered.
- e. Intersecting streets will be shown and identified by name and right-of-way width.
- f. Railroads will be shown and identified by name and right-of-way width.
- g. A note will be included on each sheet stating the basis of bearings, coordinates, and datum used.
- h. All existing right-of-way layout sheets shall be 11" x 17". The borders around these map sheets should ½" from the right side of the map, the top and the bottom. The border on the left side is 2". Scale of 1"=100'.

**FC 150 ~ DESIGN SURVEYING**

**FM 493 From Champion Street to US 281**

A. Design Survey

1. **The Limit of the Design survey shall be 1000-ft before and after the limits of the project. Set horizontal and vertical control for FM 493 from Bus 83 to US 281. The Basis for the H & V Control shall be the control previously established on US 281. Set benchmarks at max 1000-ft intervals. The BM's shall be #5 I.R. 2-ft in depth set in concrete. An H&V Book will be provided to the Engineer with 3-pt reference ties.**
2. Field Topographic Survey - Verify accuracy of existing topographic information by checking coordinates of Horizontal control points and elevations of benchmarks previously established by TxDOT.
3. Update existing planimetric data with current information of any improvements and apparent changes in the topography since the original planimetric data was obtained as well as field tie all existing drainage structures, driveways, and pavement edges as well as all existing roadway centerline and roadside drainage ditch profiles.
4. Fill all existing planimetric mapping void areas along FM 493, data processing and CADD mapping (2d and 3d) update, (4.7 Miles including additional limits).
5. Field locate cross culverts, driveway culverts, invert, irrigation lines, within the project limits, data processing and CADD mapping (2d and 3d) update.
6. Right of Entry, Right of Way Research, and Appraisal District Records is the responsibility of the surveyor.
- 6a. The surveyor shall recover and reestablish the existing centerline then coordinate with the Engineer to establish the existing centerline stationing based on the old stationing of the previous plans south of Mile 10.

7. Stake proposed centerline/baseline at 1000-foot stations, PC's and PT's as directed by Engineer. (No. 5 I.R. 2-ft long).—FOR CONSTRUCTION but not until the Engineer directs the surveyor to do so.
8. The Surveyor shall also paint the proposed centerline on the proposed pavement. (500-ft stations and a tick mark at 100-ft stations ---12 inches long with approved paint by Engineer) before construction for the purpose of utility adjustments and project location.
9. Extend topographic survey 500 feet to each side of the existing Right-of-Way on all the intersecting streets for the limit of the project except at the existing drain ditches, the survey shall be extended 500-ft east and west from the existing FM 493 ROW and the x-sections shall be 50-ft Lt and Rt from the ditch centerline plus tying in all topo.

**B. Utilities**

1. Coordinate with engineer to have all existing underground utilities marked by utility companies along FM 493 and intersecting streets. Field tie the marked locations and process the information to include in the planimetric CADD mapping files. Utility lines shall be properly labeled and placed in separate levels in accordance with TxDOT requirements.
2. Collect vertical information of all exposed (by utility companies) utilities that have been identified as possible conflicts by the Engineer and process as above.

**C. Miscellaneous**

1. Provide the engineer with a copy of all field books developed during this project. The field books shall supplement the graphical information submitted by the surveyor. Accurate sketches of the existing conditions of all irrigation and drainage structures that were tied down by the surveyor shall be included in the field books.
2. A horizontal and vertical control book shall be submitted to the engineer. This control book shall include the reference sketches to the BM's and Horizontal Control. Points as well as describe the basis of the datum's used.

**FC 160 – DESIGN**

PS&E for the above work shall be prepared in accordance with the applicable requirements of TxDOT Specifications, Standards, and manuals (updated for revisions). Whenever possible, the Department's standard drawings, standard specifications, or previously approved special provisions and/or special specifications will be used. If a special provision and/or special specification must be developed for this project, it shall be in the Departmental format and, to the extent possible, incorporate references to approved Department test procedures.

The Engineer shall furnish three (3) final cross-section plots showing both the original terrain (modified) and the design cross-sections, showing the roadway template. The design cross-sections shall indicate the slope rate on the side slopes.

**FC 161 – DRAINAGE**

The Engineer will perform a Geopak Drainage generated drainage analysis for all drain systems which will also include contributing runoff from the Adjacent Properties. This drainage analysis will be prepared prior to detailed design of drainage structures and will contain drainage area map(s), hydraulic calculations and Thysys and/or HEC-RAS analysis for TxDOT to approve.

**FC 161 - STORM WATER POLLUTION PREVENTION PLAN (SW3P)**

The **ENGINEER** shall complete the plans adequately addressing a storm water pollution prevention plan for the entire project during all phases of construction. SW3P layouts shall be developed on the TCP plan sheets. SW3P plans shall **generally** include the following drawings:

- **Summary Sheet on TCP's**
- **Details & Standards**

The Engineer shall develop a project specific Storm Water Pollution Prevention Plan (SW3P) to comply with the Federal Regulations (40 CFR part 122) published in the Federal Register on Sept. 9, 1992.

**FC 162 - SIGNAL DESIGN**

**Project Understanding**

The Engineer will produce a complete set of Plans, Specifications and Estimates (PS&E) that cover the installation of permanent signals along FM 493 after and if warrants are met.

**TASK 1 – General Notes for Traffic Signal installation**

The Engineer will setup the General Notes sheet(s) and prepare the general notes for the traffic signal design, as well as the signing, pavement marking and wheelchair ramp design at the above intersections.

**TASK 2 – Estimate and Quantities**

THE ENGINEER will prepare Basis of Estimate sheets with adequate number of columns to reflect the number of the above intersections and one column for the total quantities.

THE ENGINEER will calculate quantities and prepare cost estimates at 60%, 90% and 100% levels of completion.

**TASK 3 – Condition Diagram**

THE ENGINEER will setup the condition diagram sheets that would show the existing configuration of each intersection and other elements as required by TxDOT.

**TASK 4 – Proposed Signal Plan Layout**

THE ENGINEER will setup proposed signal layout sheets that would show the proposed geometry of the above intersections along with the basic elements of the signal design, such as location of signal poles, pedestrian poles, wheel chair ramps, cross walks and service pole locations.

THE ENGINEER will contact the local power company for electrical service requirements at each of the above interceptions.

THE ENGINEER will produce submittals for TxDOT's review at the 60%, 90% and 100% completion levels.

**TASK 5 – Signal Phasing and Timing**

Based on traffic counts furnished by TxDOT, the Engineer will develop optimal phasing and timing charts for each of the AM peak, PM peak and Off-peak time periods, using appropriate software. The charts will be presented to TxDOT for review and approval before their incorporation into the plan sheets.

**TASK 6 – Standard Sheets List**

The Engineer will prepare a list of standard sheets for the 60%, 90% and 100% submittals. The Engineer will also prepare the drill shaft tables on the TSFD standard sheet as well as the shipping parts list on the SP/SMA standard sheet.

**TASK 7 – Specifications List and Cost Estimate**

The Engineer will prepare a list with all pertinent specifications and special provisions as they relate to the above tasks. The Engineer will also prepare cost estimates at the 60%, 90% and 100% submittals.

**TASK 8 – Electrical Schedules**

The Engineer will prepare tables, depicting the electrical schedule for each signalized intersection. The electrical schedules will be shown on the same sheets with the loop detector schedules and phasing/timing tables.

**TASK 9 – Field Investigation and Meetings**

The Engineer will conduct field investigations at the above intersection locations and record pertinent signal design information as well as identify potential design issues.

The Engineer will participate in one project progress meeting with L&G/TxDOT.

**TASK 10 – Other services**

The Engineer will provide tables with electrical service data for each of the services poles required at the above intersections.

Other services not covered in the above scope will be negotiated separately.

**FC 162 – PAVEMENT MARKING AND MARKER LAYOUTS**

**TASK 1 – Plan Layouts (1"=100')**

L&G will produce a complete set of Plans, Specifications and Estimates (PS&E) that cover the pavement marking and markers along FM 493 and all cross street approaches for the length

shown in the plan and profile layouts. Work will include design of ADA compliant wheelchair ramps that line up with the proposed crosswalks and any signal pole locations.

**TASK 2 – Estimate and Quantities**

The Engineer will prepare a summary of pavement marking and marker quantities (Basis of Estimate sheet) with adequate number of columns to reflect the types of markings to be installed by each payout sheet and one column for the total quantities.

The Engineer will calculate quantities at 60%, 90% and 100% levels of completion.

**TASK 3 – Standard Sheets List**

The Engineer will calculate quantities at 60%, 90% and 100% levels of completion.

**TASK 4 – Specifications List and Cost Estimate**

The Engineer will prepare a list with all pertinent specifications and special provisions as they relate to the above tasks. The Engineer will also prepare cost estimates at the 60%, 90% and 100% submittals.

**FC 162 – SIGNING AND DELINEATION LAYOUTS**

**TASK 1 – Plan Layouts (1"=100')**

L&G will produce a complete set of Plans, Specifications and Estimates (PS&E) that cover the signing and delineation along FM 493 and all cross street approaches for the length shown in the plan and profile layouts. The work will include design of flashing beacons near the School. The plans will show the following:

- Existing signs to remain in place
- Existing signs to be removed
- Proposed new signs
- Proposed new delineators and object markers.

L&G will prepare signing and delineation plans for all major cross streets.

**TASK 2 – Summary of Small Signs**

L&G will prepare a summary of small signs sheets along with a descriptive codes sheet. (Basis of Estimate sheet).

L&G will calculate quantities at 60%, 90% and 100% levels of completion.

**TASK 3 – Standard Sheets List**

L&G will calculate quantities at 60%, 90% and 100% levels of completion.

**TASK 4 – Specifications List and Cost Estimate**

L&G will prepare a list with all pertinent specifications and special provisions as they relate to the above tasks. L&G will also prepare cost estimates at the 60%, 90% and 100% submittals.

**FC 163 - IRRIGATION SIPHONS AND CANALS**

The ENGINEER shall coordinate with the Irrigation District(s) and prepare all necessary drawings needed for maintaining the functionality of irrigation districts irrigation lines.

**FC 163: TRAFFIC CONTROL**

The Engineer shall determine the project construction sequence and design a traffic control plan based upon the Texas MUTCD and the latest district traffic control design requirements. This shall include field investigations into such items as any Drainage Structures, utilities, R.O.W. restrictions, adjacent properties and cross street access, and other items which may ultimately affect the safe handling of traffic during the construction sequence.

The engineer shall meet with the Pharr District personnel early in the project design as soon as a construction sequence is developed. The construction sequence shall be updated periodically as the design progresses.

The engineer shall prepare drawings for each phase, based upon the agreed sequence of construction. The drawings shall indicate traffic lanes versus work zones per phase, including all required detours. Consideration shall be given to the use of temporary traffic control signals and, if needed, how to utilize and coordinate with the various phases. The drawings will be used by the District to obtain final concept approval of the TCP from the District Traffic Control Review Committee. Based on the results of the safety review team meeting, the detailed Traffic Control PS&E will be completed.

**FC 163: UTILITIES**

The Engineer shall coordinate the utilities as follows: (L&G will conduct two utility meetings with the owners at the County or at L&G's office in coordination with TxDOT)

- A. Determine the ownership of the existing utilities on the subject project.
- B. Contact the utility owners and locate (horizontally and vertically) existing utilities on the ground.
- C. Evaluate utility conflicts with proposed construction. Prepare and submit drawings to the County, Utility Companies and copies to TxDOT, for required utility adjustment. The following information will be submitted for each required utility adjustment.
  1. A reproducible drawing 8-1/2" x 11", 11" x 17", or 22" x 34" (as appropriate) for each utility adjustment
  2. Drawing will include the following:
    - a) Existing and/or proposed R.O.W lines.
    - b) Existing and/or proposed roadways.
    - c) Proposed drainage structure

- d) Existing underground utility in plan and profile.
  - e) Owner of utility.
  - f) Benchmark
3. Provide copies to TxDOT of correspondence with utility companies and cities. If initial contact was made by phone, provide name of company and representative's name and telephone number.
  4. Prepare a detailed list to TxDOT of all conflicts with existing utilities during the drainage structure design phase. List must include the following:
    - a) Highway station number.
    - b) Name of utility company and type of facility.
    - c) Proposed highway facility - the conflict with: storm sewer, roadway, drainage ditch, drill shaft, etc.
  4. The Engineer shall be responsible for notifying all utility owners, early in the design phase, regarding any utility adjustments.
  5. Utility agreements to be developed by consultant, sent by consultant to companies and coordinate with them.

**FC 163: BIDDING DOCUMENTS**

- 1) The Engineer will furnish to the Owner the necessary copies of approved plans, specifications, notices to bidders, and proposals as prepared under PS&E.
- 2) The Engineer will assist Owner the tabulation of bids, recommendations to the Owner as to the proper action on all bid proposals received, and the preparation of formal contract documents for the award of each construction contract.

**FC 164 – CONTRACT MANAGEMENT**

The Engineer will be required to meet with designated TxDOT representatives on a regularly scheduled basis to report on progress. A typewritten progress report will be required, together with evidence of the work accomplished during the period since the previous report. A bar chart indicating the percentage of completion of each task shown on Attachment "C" will also be required. Formal progress reports with bar charts will be required on a monthly basis.

The Engineer will establish a separate cost accounting system for each control-section-job (C-S-J) number to properly allocate all labor and expenses incurred. The Engineer shall invoice monthly according to Function Code breakdowns.



