

## ENGINEERING SERVICES AGREEMENT

THE STATE OF TEXAS   §  
                                          §  
COUNTY OF WALLER   §

**THIS AGREEMENT** is made and entered into by and between **WALLER COUNTY, TEXAS**, a public body corporate and politic of the State of Texas acting by and through the Waller County Commissioners Court (hereinafter referred to as "County"), and Schaumburg & Polk, Inc., hereinafter called the "Engineer" or "Company".

### WITNESSETH:

**WHEREAS**, the County proposes to hire the Engineer to perform design services to reconstruct Pitts Road from approximately Lakes of Katy Lane to Clay Road in Waller County, Texas, hereinafter called the "Project;"

**WHEREAS**, the Engineer has represented to the County that it is qualified and prepared to perform all of the services described in the Scope of Services, Appendices A, attached hereto and incorporated herein by reference as if copied herein verbatim (Scope of Services), and has submitted a proposal to provide professional engineering services for the Project;

**WHEREAS**, the County is satisfied that the Engineer is capable of performing the necessary services required for the Project and desires to contract with the Engineer to perform the services described in the Scope of Services;

**WHEREAS**, the provisions of Chapter 252, Texas Local Government Code, Competitive Bidding Law do not apply to the proposed agreement because the contract is for professional engineering services and the services were procured pursuant to Chapter 2254, Texas Government Code;

**WHEREAS**, the County has determined and found that it would be in the best interest of the County to delegate to LJA Engineering, Inc. ("LJA") supervisory and management authority over the Engineer; and

**WHEREAS**, the Engineer will control the methods and means in performing the work set out in the Scope of Services;

**NOW, THEREFORE**, in consideration of the mutual covenants and conditions set forth below, the parties agree as follows:

1.     General

- a.   In performing professional engineering services under this Agreement, the Engineer will function solely and exclusively for the benefit of the County and not for the benefit of the Engineer for the Project or any other party. All services rendered by the

Engineer under this Agreement shall be performed under the supervision of LJA. The Engineer shall render services in accordance with generally accepted professional standards of competent engineers practicing in the same or similar locality and under the same or similar circumstances and professional license and use that degree of care and skill to comply with all applicable laws and regulations.

- b. The Engineer shall be responsible for the professional quality, technical accuracy and the coordination of all deliverable documents and services furnished by the Engineer under this Agreement. The Engineer shall, without additional compensation, correct or revise all errors and omissions in its documents. Reuse of the documents and deliverables for any purpose other than that for which such deliverables were originally prepared, or alteration of such documents or deliverables without the written verification or adaptation by Engineer for the specific purpose intended, shall be at County's risk. All title blocks and engineer's seal, if applicable, shall be noted and made according to Texas Administrative Code.
- c. At the County's request, the Engineer will collaborate with LJA and County personnel to facilitate the implementation of a Project Database within the County's Electronic Document Management System. The Electronic Document Management System will provide electronic management that shall govern the distribution and file copies of all Project related correspondence, reports, plans, and technical data. The County and the Engineer will use this system to facilitate the effective electronic exchange of Project information and documents with members of the design team and other interested stakeholders.
- d. The Engineer will collaborate with LJA and County personnel to facilitate the maintenance of the Project Database. Project files shall be entered into the database by the Engineer on a timely basis and made available by LJA and the County at all times for performance of daily Project activities. Other documents, including those used for legal review, audit requests/requirements, and open records request purposes, shall be entered by the County staff assisting the Engineer team. The Engineer shall also ensure that all Project files are appropriately entered into the database:
  - 1. At all critical milestones;
  - 2. At established periodic intervals; and
  - 3. Following completion of the work as a final Project record, including applicable record drawings.
- e. County may provide information, reports, studies, site characterizations, advice, instructions, and similar information in its possession relating to the Project ("County Data"). Engineer may reasonably and in good faith rely upon the accuracy of County Data provided by County or any third party designated by County. However, Engineer will not ignore the implications of information furnished to Engineer and shall make reasonable inquiries if County Data as furnished appears to be incorrect or incomplete. Engineer makes no representations or warranties as to the quality, accuracy, usefulness, or completeness of any Services to the extent Engineer relies on County Data. Engineer, its officers, directors, and employees shall have no liability

whatsoever with respect to the use of unreliable, inaccurate, or incomplete County Data.

2. Scope of Services

The services to be provided herein in regard to the Project are defined in Appendices A (“Scope of Services”).

3. Compensation and Payment

- a. The Engineer shall be entitled to payment of the lump sum amount of **\$1,065,378.81** for services to perform the tasks delineated in Appendix A-1. Development of the plans for the Project will be the responsibility of the Engineer. The Engineer shall submit plans for County review at 30%, 60%, 90% and 100% completion, unless modified in writing by County. The County shall review and provide the Engineer comments to the submittals within 20 working days of receipt. The County will pay the Engineer commensurate to the plan submittal completion based upon the County’s assessment. The Engineer will not receive further payment until the County is satisfied with the Engineer’s responses to the review comments. The services necessary to perform the tasks delineated in Appendix A-2 shall be paid based on hourly rates and the County shall not be obligated to pay in excess of **\$184,602.17** for the services described in Appendix A-2. The Engineer shall not be obligated to perform further services hereunder once the Scope of Services delineated in Appendices A-1 and A-2 have been performed.

- (1) All hourly billing for the services defined in Appendix A-2 and any additional services not included in the Scope of Services under this Agreement, including changes in the contractual scope of work and revision of work satisfactorily performed, will be performed only when approved in advance and authorized by the County, and will be reimbursed at the raw salary rates in effect at that time, times a multiplier as set forth below, to the extent that such direct salary costs and subcontracts are reasonable and necessary for the performance of such services. The reimbursable hourly raw salary rates cannot exceed those set forth in Appendix B. The Engineer shall also be entitled to expense reimbursement as set forth in Appendix B, provided that miscellaneous expenses, if any, may be reimbursed hereunder only when LJA determines that incurring such expenses is not required as part of the original Scope of Services and provides written approval of such expense in advance of it being incurred. Payment will be made on the basis of certified time and expense records and in accordance with those payment procedures set forth in subparagraph b., below. Billing rates will have a 3.00 multiplier on raw salary rates.

- (2) Where Subconsultants are employed by the Engineer to perform additional services not within the original Scope of Services, the Engineer will be reimbursed for Subconsultants' salaries and hourly rates, including overtime rates, on the same basis as described for the Engineer's own personnel in subparagraph a. (1), of this Paragraph. Reimbursement to the Subconsultant for non-salary costs incurred by

Subconsultants will be on the same basis as if the costs were incurred by the Engineer. Total contract amounts shall include Subconsultant fees.

- b. It is understood and agreed that monthly payments will be made to the Engineer by the County based on the following procedures: On or about the fifteenth day of each month during the performance of services hereunder and on or about the fifteenth day of the month following completion of all services hereunder, the Engineer shall submit to the County the invoice electronically showing the amounts due for services performed during the previous month, set forth separately for work under this Agreement and for additional services (accompanied by supporting certified time and expense records of such charges in a form acceptable to the County Auditor). The fee, as determined by the methods described herein, includes out-of-pocket costs of Engineer for delivery services, parking, mileage at IRS rate and document printing. Travel expenses submitted for reimbursement must be incurred in accordance with County's travel policy. All expenses submitted by Engineer shall be subject to approval by County prior to reimbursement.

LJA shall review such invoices and approve them within ten (10) calendar days with such modifications as are consistent with this Agreement and forward same to the County Engineer, who will forward to the County Auditor. The County shall pay each such invoice as approved by the County Auditor within twenty (20) calendar days after the County Auditor's approval of same. Invoices are due and payable net 30 days from receipt.

- c. It is expressly understood and agreed that the County has available the total maximum sum of **\$1,249,980.98** as hereinafter certified available for the purpose of satisfying the County's obligations under the terms and provisions of this Agreement. The County shall not be liable under any circumstances or any interpretations hereof for any costs under the Agreement except for those certified available for this Agreement by the Waller County Auditor, as evidenced by the issuance of a purchase order by Waller County for the certified amount. Once the funds are expended for the purpose of satisfying the County's obligations under the terms and provisions of this Agreement, the County shall have no further obligations nor shall the Engineer be required to perform further services hereunder.

#### 4. Time of Performance

It is understood and agreed that time is of the essence for performance of the Engineer's services under this Agreement and services shall be performed as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect.

#### 5. The County's Option to Terminate

- a. The County has the right to terminate this Agreement at its sole option at any time, with or without cause, by providing written notice of such intention to terminate and by

stating in said notice the "Termination Date." Upon such termination, the County shall compensate the Engineer in accordance with Paragraph 3., above, for those services that were provided under this Agreement prior to its termination and that have not been previously invoiced to the County. The Engineer's final invoice for said services will be presented to and paid by the County in the same manner set forth in Paragraph 3. b., above.

- b. Termination of this Agreement and payment in settlement as described in subparagraph a. of this Paragraph shall extinguish all rights, duties, obligations, and liabilities of the County and the Engineer under this Agreement and this Agreement shall be of no further force and effect; provided, however, such termination shall not act to release the Engineer from liability for any previous default either under this Agreement or under any standard of conduct set by law. No termination of this Agreement shall have the effect of terminating the Engineer's obligations under Sections 7 (Delays and Damages), 8 (Inspection of the Engineer's Books and Records), 12 (Appearance as Witness), or 15 (Indemnification).
- c. If the County shall terminate this Agreement as provided in this Paragraph, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to the Engineer.
- d. The County's rights and options to terminate this Agreement, as provided in any provision of this Agreement shall be in addition to, and not in lieu of, any and all rights, actions and privileges otherwise available under law or equity to the County by virtue of this Agreement or otherwise. Failure of the County to exercise any of its rights, actions, options or privileges to terminate this Agreement as provided in any provision of this Agreement shall not be deemed a waiver of any rights, actions or privileges otherwise available under the law or equity with respect to any continuing or subsequent breaches of this Agreement or of any other standard of conduct set by law.
- e. Copies of all completed and partially completed documents prepared under this Agreement shall be delivered to the County upon the Engineer's receipt of termination payment when and if this Agreement is terminated.

6. Source of Fee Payments

The County intends to pay for design and construction with the proceeds from the sale and issuance of bonds. It is expressly acknowledged that all payments owing for Engineering services performed under this Agreement shall be made solely from this source of funds for financing design and construction of the Project. The County shall be under no liability under this Agreement to make payment to the Engineer from any other source. In addition, the County reserves the right, at its sole discretion, at any time prior to issuance by the County of the written notice to proceed, to terminate this Agreement and in the event of such termination, the Engineer shall not be entitled to any payment, nor have any claim for compensation or damages resulting from such cancellation. In no event shall the liability of the County under this Agreement exceed the amount hereunder certified as available by the County Auditor.

7. Delays and Damages

Except as otherwise provided herein, the Engineer agrees that no other charges or claims for damage shall be made by it against the County for any delays or hindrances occurring during the progress of the Engineer in providing to the County the services specified in this Agreement.

8. Inspection of the Engineer's Books and Records

County shall have the right, during normal business hours, to inspect, copy and audit at any time, and from time to time, all of Engineer's files, books, records, costs, and expenses pertaining to the Program. The County will conduct an audit on an annual basis, or more frequently at its sole discretion. If County elects to audit Engineer's files, books, records, costs, and expenses pertaining to the Program, and the audit discloses a discrepancy of one percent (1%) or more from the payment applications or invoices, then, in addition to repaying County all sums owing, Engineer shall pay the cost of the audit. Any such audit or examination may be undertaken by County or its contracted representative at reasonable times during normal business hours and in conformance with generally accepted auditing standards upon five (5) business days' notice to Engineer.

9. Personnel, Equipment, and Material

- a. The Engineer represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for performance of the services required under this Agreement and that the Engineer shall furnish and maintain, at its own expense, adequate and sufficient personnel and equipment, in the opinion of LJA, to perform the services when and as required and without delays. It is understood that LJA will approve assignment and release of all key engineering personnel and that the Engineer shall submit written notification of all key engineering personnel changes monthly for LJA's approval prior to the implementation of such changes. Services described in this Agreement shall be performed under the direction of an engineer licensed to practice professional engineering in the State of Texas.
- b. All employees of the Engineer or Subconsultants hired by the Engineer shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of the Engineer or Subconsultant of the Engineer who, in the opinion of LJA, is incompetent or by his conduct becomes detrimental to the Project shall, upon request of LJA, immediately be removed from association with the Project.
- c. Except as otherwise specified, the Engineer shall furnish all equipment, transportation, supplies, and materials required for its operations under this Agreement.

10. Subletting

The Engineer shall not sublet, assign, or transfer all or any part of the services in this Agreement without the prior written approval of the County. Even in the case of a permitted sublet, Engineer shall remain responsible under this Agreement for the work.

11. Conferences

At the request of LJA, the Engineer shall provide appropriate personnel for conferences at its offices, or attend conferences at the various offices of LJA, or at the site of the Project. LJA and the County are permitted to inspect the Engineer site Project offices.

12. Appearance as Witness

If requested by the County, or on its behalf, the Engineer shall prepare such engineering exhibits and plats as may be requested for all hearings and trials related to the Project and, further, it shall prepare for and appear at conferences and shall furnish competent expert engineering witnesses to provide such oral testimony and to introduce such demonstrative evidence as may be needed throughout all trials and hearings with reference to any litigation relating to the Project. Compensation for trial preparation and appearance by the Engineer in courts regarding litigation matters will be made in accordance with the provisions of Paragraph 3. a. (1), above.

13. Compliance with Laws

The Engineer shall comply with all applicable federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required, the Engineer shall furnish the County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees specified above.

The Engineer shall strictly comply with Section 2251.022 Texas Government Code, and shall require that its Subconsultants fully comply with Section 2251.023 Texas Government Code.

14. Insurance

The Engineer shall obtain, keep and maintain any and all insurance that may be required by law or that may be required by any agreement the County has with any other party concerning the Project as contained in Attachment C.

15. Indemnification

**TO THE EXTENT ALLOWED BY LAW, THE ENGINEER AGREES TO INDEMNIFY AND HOLD HARMLESS THE COUNTY, ITS COMMISSIONERS, OFFICERS, EMPLOYEES, AND AGENTS FROM LIABILITY, LOSSES, EXPENSES, DEMANDS, REASONABLE ATTORNEYS' FEES, AND CLAIMS FOR BODILY INJURY (INCLUDING DEATH) AND PROPERTY DAMAGE TO THE EXTENT CAUSED BY THE NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT OF THE ENGINEER (INCLUDING THE ENGINEER'S AGENTS, EMPLOYEES, VOLUNTEERS, AND SUBCONSULTANTS/CONSULTANTS UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE ENGINEER EXERCISES CONTROL) IN THE**

**PERFORMANCE OF THE SERVICES DEFINED IN THIS AGREEMENT. THE ENGINEER SHALL ALSO SAVE THE COUNTY HARMLESS FROM AND AGAINST ANY AND ALL EXPENSES, INCLUDING REASONABLE ATTORNEYS' FEES, IN PROPORTION TO THE ENGINEER'S LIABILITY, THAT MIGHT BE INCURRED BY THE COUNTY, IN LITIGATION OR OTHERWISE RESISTING SUCH CLAIMS OR LIABILITIES.**

16. Delivery of Notices, Etc.

- a. All routine written notices, invoices, change orders, etc. are to be delivered to the County Engineer J. Ross McCall, P.E., 775 Business US 290 East, Hempstead, TX 77445, or at such other place or places as the County may designate by written notice delivered to the Engineer.

All formal notices and demands under this Agreement shall be delivered to the Waller County Judge, Attention: Carbett "Trey" J. Duhon III, 425 FM 1488, Hempstead, TX 77445.

- b. All written notices, demands, and other papers or documents to be delivered to the Engineer under this Agreement shall be delivered to Mark Dessens, Schaumburg & Polk, Inc., 11767 Katy Freeway, Suite 900, Houston, TX 77079, or at such other place or places as the Engineer may designate by written notice delivered to the County.

17. Reports of Accidents, Etc.

Within 24 hours after the occurrence of any accident or other event which results in, or might result in, injury to the person or property of any third person (other than an employee of the Engineer), whether or not it results from or involves any action or failure to act by the Engineer or any employee or agent of the Engineer and which arises in any manner from the performance of this Agreement, the Engineer shall send a written report of such accident or other event to the County, setting forth a full and concise statement of the facts pertaining thereto. The Engineer shall also immediately send the County a copy of any summons, subpoena, notice, or other documents served upon the Engineer, its agents, employees, or representatives, or received by it or them, in connection with any matter before any court arising in any manner from the Engineer's performance of work under this Agreement.

18. The County's Acts

Anything to be done under this Agreement by the County may be done by such persons, corporations, or firms as the County may designate.

19. Limitations

Notwithstanding anything herein to the contrary, all covenants and obligations of the County under this Agreement shall be deemed to be valid covenants and obligations only to the extent authorized by the Act creating the County and permitted by the laws and the Constitution of the State of Texas.



20. Captions Not a Part Hereof

The captions or subtitles of the several sections and divisions of this Agreement constitute no part of the content hereof but are only labels to assist in locating and reading the provisions hereof.

21. Controlling Law, Venue

This Agreement shall be governed and construed in accordance with the laws of the State of Texas. This Agreement shall be performed entirely in Waller County, Texas and the parties hereto acknowledge that venue is proper in Waller County, Texas, for all disputes arising hereunder and waive the right to sue or be sued elsewhere.

22. Successors and Assigns

The County and the Engineer bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of the other party, in respect to all covenants of this Agreement.

23. Independent Engineer

Notwithstanding any provision of this Agreement, the Engineer shall at all times act as an independent Engineer, and not as an employee of the County, and the Engineer shall be responsible for the means and methods employed in performing services hereunder.

24. Certificate of Interested Parties (Form 1295)

Texas law requires all parties who enter into any contract with the County that must be approved by Commissioners Court to disclose all Interested Parties. Texas Ethics Commission Form 1295 must be completed in its entirety. If changes to this Form are necessary during this Agreement, the Engineer will notify and send the County an updated and complete version.

25. Additional Statutory Requirements. Certain State Law Requirements for Contracts. For purposes of section 2252.152, 2271.002, and 2274.002, Texas Government Code, as amended, Engineer hereby verifies that Engineer and any parent company, wholly owned subsidiary, majority-owned subsidiary, and affiliate:

- a. Unless affirmatively declared by the United States government to be excluded from its federal sanctions regime relating to Sudan or Iran or any federal sanctions regime relating to a foreign terrorist organization, is not identified on a list prepared and maintained by the Texas Comptroller of Public Accounts under Section 806.051, 807.051, or 2252.153 of the Texas Government Code.
- b. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not boycott Israel and is authorized to agree in such

contracts not to boycott Israel during the term of such contracts. "Boycott Israel" has the meaning provided in section 808.001 of the Texas Government Code.

- c. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not boycott energy companies and is authorized to agree in such contracts not to boycott energy companies during the term of such contracts. "Boycott energy company" has the meaning provided in section 809.001 of the Texas Government Code.
- d. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and is authorized to agree in such contracts not to discriminate against a firearm entity or firearm trade association during the term of such contracts. "Discriminate against a firearm entity or firearm trade association" has the meaning provided in section 2274.001(3) of the Texas Government Code. "Firearm entity" and "firearm trade association" have the meanings provided in section 2274.001(6) and (7) of the Texas Government Code.

BY ACCEPTANCE OF AGREEMENT, ENGINEER ACKNOWLEDGES THAT THE COUNTY IS OPPOSED TO HUMAN TRAFFICKING AND THAT NO COUNTY FUNDS WILL BE USED IN SUPPORT OF SERVICES OR ACTIVITIES THAT VIOLATE HUMAN TRAFFICKING LAWS.

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IN WITNESS WHEREOF, County and Engineer have caused their respective duly authorized representatives to execute, seal and deliver this Agreement, all as of the day and year first above written.

COUNTY:

ENGINEER:

WALLER COUNTY

Schaumburg & Polk, Inc.

\_\_\_\_\_  
Carbett "Trey" J. Duhon III, County Judge

\_\_\_\_\_  
Mark Dessens

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

ATTEST:

\_\_\_\_\_  
Debbie Hollan, County Clerk

Approved:

\_\_\_\_\_  
J. Ross McCall, P.E., County Engineer

#### AUDITOR'S CERTIFICATE

I hereby certify that funds are available in an amount not to exceed \$1,249,980.98 to accomplish and pay the obligation of Waller County in the foregoing matter.

\_\_\_\_\_  
Alan R. Younts, County Auditor

**APPENDIX A-1**  
**Scope of Services (Lump Sum)**

## Scope of Services Pitts Road



The proposed improvements include the widening of Pitts Road for 0.72 miles from Lakes of Katy Lane to the Pitts Road/Clay Road intersection. The project also includes the northern transition from the intersection to existing Pitts Road as well as a traffic signal at the intersection, if warranted. The project entails the widening of the existing two-lane asphalt road with roadside ditches to a four-lane curb and gutter road with sidewalk on one side.

The City of Katy designed and constructed Pitts Road from Morton Road to Skiers Crossing Drive. Currently, the City of Katy is designing Pitts Road from Skiers Crossing Drive to Lakes of Katy Lane. The project is in preliminary design phase. At Lakes of Katy Lane, Schaumburg & Polk, Inc. is to either tie-in to the existing Pitts Road or to the proposed Pitts Road designed by City of Katy. This will be determined as the project moves forward.

Work not specifically listed below will be provided by others.

### 1. General

- The Engineer will collect all available land plans, existing as-built plans, drainage studies, survey data, and all other data pertaining to the design of the project.
- Attend periodic progress meetings with the County, their consultants, and other stakeholders as required to present a status report on design development. Schaumburg & Polk, Inc. will meet with LJA at least monthly to discuss the progress of the project and schedule milestones.
- The Engineer shall coordinate with Harris County and City of Katy and prepare permit applications for approval.
- The Engineer shall coordinate with the governing drainage district (Brookshire Katy Drainage District and Harris County Flood Control District).
- The Engineer to review and provide necessary comments for permit applications made to the County in the project's vicinity within 48 hours.
- The Engineer shall coordinate with local permitting agencies.
- The Engineer shall coordinate with existing and future development.
- Coordination with utilities, pipelines, LIDS, HOAs, POAs, and MUDs, to analyze impacts and obtain Letters of No Objections (LONOs) or have utilities relocate to be completed by the Program Manager. Schaumburg & Polk, Inc. to provide assistance with exhibits and other documents as needed. Schaumburg & Polk, Inc. to communicate with these entities/landowners to determine viable options when necessary.
- The Engineer shall perform QA/QC at all levels. For each deliverable, the Engineer shall have some evidence of their internal review and mark-up of that deliverable. A milestone submittal is not considered complete unless the associated internal red-line mark-ups are submitted.

## Scope of Services Pitts Road

- The Engineer shall coordinate all subconsultant activity to include quality of and consistency of plans and administration of the invoices and monthly progress reports.
- The Engineer shall develop a detailed project schedule and prepare invoicing and progress reports for each month.
- County projects will follow the Waller County Engineering Design Manual, and Fort Bend County standard details. The proposed traffic signal design will be performed per Harris County standards and design criteria since the proposed traffic signal will be maintained by Harris County.
- KMZ to be included with milestone submittals.

### 2. Preliminary Engineering

- Perform detailed field survey for the detailed design phase, including SUE QL C. Survey will be performed by TNP, Inc. See Exhibit No. 1 for detailed scope of work.
- Perform detailed SUE QL A, B and D for the detailed design phase. SUE services will be performed by Pape-Dawson Engineers. See Exhibit No. 2 for detailed scope of work.
- Perform geotechnical evaluation for pavement or structural design in the final design phase. Geotechnical services will be performed by B2Z Engineering. See Exhibit No. 3 for detailed scope of work.
- Perform an environmental constraints evaluation and identify any required approvals to proceed to the final design phase. Environmental services will be performed by Consor. The environmental scope of work will include the following:
  - The environmental constraints evaluation will be for a study corridor of approximately 500 feet on each side of the existing ROW.
  - Obtain and review the most recent available data for natural resources, cultural resources, land use, locations of public resources, gas pipeline and well information, water wells, and ASTM third-party hazardous materials database search.
  - A limited “windshield” field reconnaissance will be conducted to verify data and identify other environmental concerns.
  - An environmental constraints map will be prepared at a reasonable scale, and a brief letter report (or as part of the PER) summarizing the environmental review. The report will include a regulatory and analysis framework, methods, results, conclusions, and recommendations.
  - A supplemental scope of work may be required for environmental field surveys and to determine any required approvals to proceed to the final design phase.
  - A supplemental scope of work may be required to conduct thorough background archeological literature and records research and coordination with the Texas Historical Commission for concurrence of findings.
  - Additional assumptions (quantity of meetings, etc.) are included in Consor’s fee schedule.

## **Scope of Services**

### **Pitts Road**

- Present a schematic roll plot for each alternative with horizontal and vertical alignments. Schaumburg & Polk, Inc. will present the schematic roll plot(s) at the PER meeting.
- Evaluate intersections for sight triangles and analyze need for Unobstructed Visibility Easements (UVE). Sight triangles and UVEs will be performed by TEDSI. See Exhibit No. 4 for detailed scope of work.
- Evaluate ROW requirements for roadway based on preliminary cross sections. Cross sections will be cut every 100 ft and other intermediate locations as required to show significant changes.
- Perform a review of the utilities along the corridor and provide a utility conflict list which includes all correspondence with utility companies to the Program Manager. Pape-Dawson Engineers will prepare the utility conflict list. See Exhibit No. 2 for detailed scope of work.
- Provide Signal Warrant analysis. TEDSI will prepare the Signal Warrant analysis. See Exhibit No. 4 for detailed scope of work.
- Perform a Drainage Analysis in the preliminary design stage to include the following:
  - Identify the ultimate project outfalls and evaluate ROW requirements
  - Define drainage boundaries for the project
  - Size crossing using HEC-RAS and/or HY-8
  - Provide existing vs proposed flows, analyze detention volume requirements
  - Identify options for storage method and location of detention volume
- Provide Drainage Report.
- Provide updated construction cost estimates based on the preliminary design.
- Provide Preliminary Engineering Report (PER, draft and final). The PER will include the following appendices:
  - PER review meeting minutes
  - Project Location Map
  - Alignment Exhibit showing ultimate configuration
  - Flood Insurance Rate Map
  - Preliminary Drainage Area Map
  - Sight Triangle Exhibit
  - Right-of-Way Exhibit
  - Cost Estimate
  - Utility Conflict Table and utility correspondences
  - 30 percent plans (typical sections, plan and profile sheets, traffic control plan)
  - Reports (Drainage Study, Geotechnical Report, Environmental Report, Traffic Signal Warrant Study)
- Attend PER meeting at Waller County facility.

**Scope of Services  
Pitts Road**

- Provide M&Bs for ROW taking after design is finalized at PER meeting. ROW documents will be prepared by TNP Inc. See Exhibit No. 1 for detailed scope of work.

3. Final Design

- Construction drawings will be prepared on 11"x17" sheets.
- LONOs from utilities will be obtained by the Program Manager as well as to ensure that utilities are relocated prior to bidding. Schaumburg & Polk, Inc. to provide assistance with exhibits and other documents as needed.
- Obtain final permitting approvals from Harris County and City of Katy prior to bidding.
- It is expected that individual environmental permits will not be needed for this project. If it is determined that individual permits are required during preliminary engineering phase, the Engineer will provide an amendment to the scope of work and fee schedule.
- Prepare project title sheet and index sheet.
- Prepare HCED Review Sheet and Harris County Flood Control Review Sheet.
- Prepare General Notes sheets.
- Prepare horizontal alignment data.
- Prepare typical sections.
- Prepare roadway plan and profile sheets to include existing topo, proposed roadway, proposed storm sewer and hydraulic grade line.
- Prepare Earthwork cross sections (including proposed roadway section) based on survey information. Includes slopes and critical elevations on proposed roadway section.
- Prepare hydrologic and hydraulic data summary sheet.
- Prepare culvert layout sheets with hydrologic and hydraulic data.
- Prepare cross sections and plan and profile sheets for outfall(s), channel and/or detention pond.
- Prepare storm sewer lateral sheets.
- Prepare drainage and roadway standard details.
- Prepare drainage area maps.
- Prepare signing and striping sheets and standard details.
- Prepare signalization sheets and standard details. TEDSI will prepare the traffic signal sheets. See Exhibit No. 4 for detailed scope of work.



## **Scope of Services Pitts Road**

- Prepare traffic control plans and standard details.
- Prepare air bridge or Zero load slab details for projects crossing pipelines. Air bridge or Zero load slab will be designed by Linfield, Hunter & Junius, Inc. See Exhibit No. 5 for detailed scope of work.
- Prepare erosion control sheets and standard details.
- Prepare survey control maps. Survey control maps will be prepared by TNP Inc. See Exhibit No. 1 for detailed scope of work.
- Prepare driveway summary sheet.
- Prepare intersection layouts.
- Provide updated construction cost estimates based on the final design.
- Prepare the complete package for letting including project manual with general notes, specification list, summary of work, utility adjustment summary, geotechnical report (if applicable) and bid form.

### **4. Bid/Construction Phase Services**

- Provide administrative documents.
- Attend pre-bid meeting.
- Respond to questions from bidders.
- Attend preconstruction meeting.
- Attend field meetings and make visits to site.
- Calculate quantities and assist the County Engineer in preparing change orders.
- Review and approval of shop drawings.
- Review and approval of forming details.
- Respond to requests for information (RFIs).
- Answer general questions.
- Provide record drawings.

# FEE SCHEDULE

| TASK DESCRIPTION                                                                                                                                                                              | SENIOR<br>PROJECT<br>MANAGER | PROJECT<br>MANAGER | SENIOR<br>ENGINEER | PROJECT<br>ENGINEER | DESIGN<br>ENGINEER | EIT | SENIOR<br>ENGR<br>TECH | ENGR<br>TECH | CADD<br>OPERATOR | ADMIN/<br>CLERICAL | TOTAL<br>LABOR HRS.<br>& COSTS | UNIT  | NO OF<br>UNITS | HOURS<br>PER UNIT |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------|--------------------|---------------------|--------------------|-----|------------------------|--------------|------------------|--------------------|--------------------------------|-------|----------------|-------------------|
| <b>GENERAL</b>                                                                                                                                                                                |                              |                    |                    |                     |                    |     |                        |              |                  |                    |                                |       |                |                   |
| DATA COLLECTION                                                                                                                                                                               |                              | 12                 | 8                  |                     |                    |     |                        |              |                  |                    | 20                             | NA    | NA             | NA                |
| PROJECT MEETINGS                                                                                                                                                                              | 4                            | 48                 | 8                  | 8                   |                    |     |                        |              |                  |                    | 68                             | NA    | NA             | NA                |
| HARRIS COUNTY/CITY OF KATY PERMITS                                                                                                                                                            | 4                            | 80                 | 40                 | 24                  |                    |     |                        |              |                  |                    | 148                            | NA    | NA             | NA                |
| RR COORDINATION                                                                                                                                                                               |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| COORDINATION WITH LOCAL AGENCIES<br>(WALLER COUNTY, HARRIS COUNTY, CITY OF KATY, BROOKSHIRE KATY DRAINAGE DISTRICT,<br>HARRIS COUNTY FLOOD CONTROL DISTRICT, PERMIT REVIEWS, TDLR/RAS REVIEW) | 20                           | 200                | 120                |                     |                    |     |                        |              |                  |                    | 340                            | NA    | NA             | NA                |
| INTERNAL QA/QC (PER, 30%, DRAINAGE REPORT, 70%, 95%, 100%)                                                                                                                                    | 46                           | 44                 | 24                 | 72                  |                    | 60  |                        |              |                  |                    | 246                            | NA    | NA             | NA                |
| SURVEY COORDINATION                                                                                                                                                                           | 2                            | 24                 | 4                  | 4                   |                    | 8   |                        |              |                  |                    | 42                             | NA    | NA             | NA                |
| SUE COORDINATION                                                                                                                                                                              | 2                            | 24                 | 4                  | 4                   |                    | 8   |                        |              |                  |                    | 42                             | NA    | NA             | NA                |
| GEOTECH COORDINATION                                                                                                                                                                          | 2                            | 12                 | 2                  | 2                   |                    | 2   |                        |              |                  |                    | 20                             | NA    | NA             | NA                |
| ENVIRONMENTAL COORDINATION                                                                                                                                                                    | 2                            | 8                  | 2                  |                     |                    | 2   |                        |              |                  |                    | 14                             | NA    | NA             | NA                |
| TRAFFIC SIGNAL COORDINATION                                                                                                                                                                   | 2                            | 20                 | 2                  | 10                  |                    | 8   |                        |              |                  |                    | 42                             | NA    | NA             | NA                |
| STRUCTURAL COORDINATION                                                                                                                                                                       | 2                            | 14                 | 4                  | 8                   |                    | 4   |                        |              |                  |                    | 32                             | NA    | NA             | NA                |
| PROJECT ADMINISTRATION                                                                                                                                                                        | 16                           | 160                |                    |                     |                    |     |                        |              |                  |                    | 176                            | NA    | NA             | NA                |
| <b>PRELIMINARY ENGINEERING (30%)</b>                                                                                                                                                          |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| FIELD SURVEYING (TNP)                                                                                                                                                                         |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| ENVIRONMENTAL CONTRAINTS EVALUATION (CONSOR)                                                                                                                                                  |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| ALIGNMENT OPTIONS                                                                                                                                                                             | 2                            | 12                 | 12                 | 44                  |                    | 12  |                        |              |                  |                    | 82                             | NA    | NA             | NA                |
| PREPARE SCHEMATIC ROLL PLOT                                                                                                                                                                   | 2                            | 8                  | 8                  | 32                  |                    | 12  |                        |              |                  |                    | 62                             | NA    | NA             | NA                |
| EVALUTE INTERSECTION SIGHT TRIANGLES (TEDSI)                                                                                                                                                  |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| PRELIMINARY CROSS SECTIONS (EVERY 100 FT)                                                                                                                                                     |                              | 12                 | 8                  | 40                  |                    | 12  |                        |              |                  |                    | 72                             | Sheet | 7              | 10                |
| EVALUATE ROW REQUIREMENTS                                                                                                                                                                     |                              | 8                  | 8                  | 16                  |                    |     |                        |              |                  |                    | 32                             | NA    | NA             | NA                |
| UTILITY COORDINATION (PDE)                                                                                                                                                                    |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| PERFORM A TRAFFIC STUDY                                                                                                                                                                       |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| SIGNAL WARRANT ANALYSIS (TEDSI)                                                                                                                                                               |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| DRAINAGE ANALYSIS                                                                                                                                                                             |                              | 12                 | 100                |                     |                    | 32  |                        |              |                  |                    | 144                            | NA    | NA             | NA                |
| DRAINAGE REPORT                                                                                                                                                                               |                              | 12                 | 80                 |                     |                    | 40  |                        |              |                  |                    | 132                            | NA    | NA             | NA                |
| CONSTRUCTION COST ESTIMATES                                                                                                                                                                   |                              | 16                 | 4                  | 16                  |                    | 12  |                        |              |                  |                    | 48                             | NA    | NA             | NA                |
| PROJECT LOCATION MAP                                                                                                                                                                          |                              | 2                  |                    |                     |                    | 6   |                        |              |                  |                    | 8                              | Sheet | 1              | 8                 |
| FEMA FLOOD INSURANCE RATE MAPS                                                                                                                                                                |                              |                    | 1                  |                     |                    | 2   |                        |              |                  |                    | 3                              | NA    | NA             | NA                |
| DRAINAGE AREA MAP (50 SCALE DOUBLE BANK)                                                                                                                                                      |                              | 2                  | 8                  | 6                   |                    | 20  |                        |              |                  |                    | 36                             | Sheet | 4              | 9                 |
| EXISTING TYPICAL SECTIONS                                                                                                                                                                     |                              | 2                  |                    | 2                   |                    | 9   |                        |              |                  |                    | 13                             | Sheet | 1              | 13                |
| PROPOSED TYPICAL SECTIONS                                                                                                                                                                     |                              | 2                  | 4                  | 4                   |                    | 24  |                        |              |                  |                    | 34                             | Sheet | 2              | 17                |
| PLAN AND PROFILE (ROADWAY/STORM SEWER)                                                                                                                                                        |                              | 20                 | 20                 | 86                  |                    | 57  |                        |              |                  |                    | 183                            | Sheet | 8              | 23                |
| PRELIMINARY TRAFFIC CONTROL PLAN                                                                                                                                                              |                              | 72                 | 16                 |                     |                    | 24  |                        |              |                  |                    | 112                            | Sheet | 8              | 14                |
| PREPARATION OF PER (DRAFT AND FINAL)                                                                                                                                                          | 8                            | 100                | 8                  | 12                  |                    |     |                        |              |                  |                    | 128                            | NA    | NA             | NA                |
| PER MEETING                                                                                                                                                                                   | 3                            | 6                  | 3                  |                     |                    |     |                        |              |                  |                    | 12                             | NA    | NA             | NA                |
| PREPARATION OF M&B FOR ROW (TNP)                                                                                                                                                              |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| <b>FINAL DESIGN (70%, 95%, 100%)</b>                                                                                                                                                          |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| TITLE SHEET                                                                                                                                                                                   |                              | 2                  |                    |                     |                    | 4   |                        |              |                  |                    | 6                              | Sheet | 1              | 6                 |
| INDEX SHEET                                                                                                                                                                                   |                              | 4                  |                    |                     |                    | 8   |                        |              |                  |                    | 12                             | Sheet | 1              | 12                |
| HCD REVIEW SHEET                                                                                                                                                                              |                              | 8                  | 4                  | 6                   |                    | 14  |                        |              |                  |                    | 32                             | Sheet | 1              | 32                |
| HARRIS COUNTY FLOOD CONTROL REVIEW SHEET                                                                                                                                                      |                              | 4                  | 8                  | 2                   |                    | 14  |                        |              |                  |                    | 28                             | Sheet | 1              | 28                |
| GENERAL NOTES                                                                                                                                                                                 |                              | 7                  | 4                  | 2                   |                    | 4   |                        |              |                  |                    | 17                             | NA    | NA             | NA                |
| HORIZONTAL ALIGNMENT DATA                                                                                                                                                                     |                              | 2                  |                    | 4                   |                    | 7   |                        |              |                  |                    | 13                             | Sheet | 1              | 13                |
| EXISTING TYPICAL SECTIONS                                                                                                                                                                     |                              | 2                  |                    | 3                   |                    | 6   |                        |              |                  |                    | 11                             | Sheet | 1              | 11                |
| PROPOSED TYPICAL SECTIONS (INCLUDING CHANNEL AND/OR POND)                                                                                                                                     |                              | 2                  | 8                  | 6                   |                    | 32  |                        |              |                  |                    | 48                             | Sheet | 3              | 16                |
| ROADWAY PLAN & PROFILE SHEETS (50 SCALE)                                                                                                                                                      |                              | 34                 |                    | 102                 |                    | 48  |                        |              |                  |                    | 184                            | Sheet | 8              | 23                |
| ROADWAY DETAILS                                                                                                                                                                               |                              | 2                  |                    | 10                  |                    |     |                        |              |                  |                    | 12                             | NA    | NA             | NA                |
| INTERSECTION LAYOUT (LAKES OF KATY LN, TIGE POINT DR, CLAY RD)                                                                                                                                |                              | 8                  | 6                  | 26                  |                    | 4   |                        |              |                  |                    | 44                             | Sheet | 3              | 15                |
| EARTHWORK/DESIGN CROSS SECTIONS (EVERY 100 FT)                                                                                                                                                |                              | 12                 | 12                 | 46                  |                    | 25  |                        |              |                  |                    | 95                             | Sheet | 8              | 12                |
| STORM SEWER PLAN AND PROFILES (50 SCALE)                                                                                                                                                      |                              | 8                  | 20                 |                     |                    | 50  |                        |              |                  |                    | 78                             | Sheet | 8              | 10                |
| STORM SEWER LATERALS                                                                                                                                                                          |                              | 4                  | 10                 |                     |                    | 26  |                        |              |                  |                    | 40                             | Sheet | 2              | 20                |
| CULVERT LAYOUT SHEETS                                                                                                                                                                         |                              | 4                  | 20                 |                     |                    | 40  |                        |              |                  |                    | 64                             | NA    | NA             | NA                |
| DRAINAGE DETAILS                                                                                                                                                                              |                              | 2                  | 6                  |                     |                    | 16  |                        |              |                  |                    | 24                             | NA    | NA             | NA                |
| DRAINAGE SUBAREA MAPS (50 SCALE DOUBLE BANK)                                                                                                                                                  |                              | 2                  | 8                  |                     |                    | 20  |                        |              |                  |                    | 30                             | Sheet | 4              | 8                 |
| SIGNING AND STRIPING LAYOUTS (50 SCALE DOUBLE BANK)                                                                                                                                           |                              | 32                 |                    |                     |                    | 16  |                        |              |                  |                    | 48                             | Sheet | 4              | 12                |
| SIGNING AND STRIPING DETAILS                                                                                                                                                                  |                              | 2                  |                    |                     |                    | 6   |                        |              |                  |                    | 8                              | NA    | NA             | NA                |
| SIGNALIZATION DETAILS (TEDSI)                                                                                                                                                                 |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| TCP LAYOUTS (50 SCALE DOUBLE BANK), INTERSECTION, AND NARRATIVE                                                                                                                               |                              | 108                |                    |                     |                    | 28  |                        |              |                  |                    | 136                            | Sheet | 12             | 11                |
| TCP DETAILS                                                                                                                                                                                   |                              | 5                  |                    |                     |                    | 2   |                        |              |                  |                    | 7                              | NA    | NA             | NA                |
| ILLUMINATION DETAILS                                                                                                                                                                          |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              |       |                |                   |
| PIPELINE STRUCTURAL DETAILS (LINFIELD)                                                                                                                                                        |                              |                    |                    |                     |                    |     |                        |              |                  |                    | 0                              | NA    | NA             | NA                |

FEE SCHEDULE

|                                       |             |              |              |              |          |              |          |          |          |            |              |       |             |    |
|---------------------------------------|-------------|--------------|--------------|--------------|----------|--------------|----------|----------|----------|------------|--------------|-------|-------------|----|
| SW3P LAYOUTS (50 SCALE DOUBLE BANK)   |             | 32           |              |              |          | 16           |          |          |          |            | 48           | Sheet | 4           | 12 |
| SW3P DETAILS                          |             | 5            |              |              |          | 2            |          |          |          |            | 7            | NA    | NA          | NA |
| MISCELLANEOUS DETAILS                 |             |              |              |              |          |              |          |          |          |            | 0            | NA    | NA          | NA |
| PREPARATION OF STANDARDS              |             |              |              |              |          |              |          |          |          |            | 0            | NA    | NA          | NA |
| DETAILED CONSTRUCTION COST ESTIMATE   |             | 40           | 6            | 60           |          | 28           |          |          |          |            | 134          | NA    | NA          | NA |
| PRODUCE PROJECT MANUAL                |             | 48           | 8            | 8            |          | 4            |          |          |          | 8          | 76           | NA    | NA          | NA |
| BID/CONSTRUCTION PHASE SERVICES       |             |              |              |              |          |              |          |          |          |            | 0            |       |             |    |
| ADMINISTRATIVE DOCUMENTS              | 8           | 40           | 12           | 12           |          |              |          |          |          | 16         | 88           | NA    | NA          | NA |
| ATTEND PRE-BID MEETING                | 2           | 4            |              |              |          |              |          |          |          |            | 6            | NA    | NA          | NA |
| RESPOND TO QUESTIONS                  | 4           | 40           | 12           | 12           |          | 16           |          |          |          |            | 84           | NA    | NA          | NA |
| PRECONSTRUCTION MEETING               | 2           | 4            |              |              |          |              |          |          |          |            | 6            | NA    | NA          | NA |
| ATTEND FIELD MEETINGS AND SITE VISITS | 4           | 60           | 8            | 8            |          | 4            |          |          |          |            | 84           | NA    | NA          | NA |
| PREPARATION OF CHANGE ORDERS          | 2           | 32           | 8            | 8            |          | 24           |          |          |          |            | 74           | NA    | NA          | NA |
| REVIEW AND APPROVE SHOP DRAWINGS      | 4           | 12           | 2            | 2            |          | 50           |          |          |          |            | 70           | NA    | NA          | NA |
| REVIEW AND APPROVE FORMING DETAILS    | 2           | 12           |              |              |          | 24           |          |          |          |            | 38           | NA    | NA          | NA |
| RESPOND TO RFIS                       | 4           | 80           | 16           | 18           |          | 24           |          |          |          |            | 142          | NA    | NA          | NA |
| ANSWER GENERAL QUESTIONS              | 4           | 40           | 16           | 16           |          | 24           |          |          |          |            | 100          | NA    | NA          | NA |
| PROVIDE RECORD DRAWINGS               | 2           | 12           | 4            | 4            |          | 40           |          |          |          |            | 62           | NA    | NA          | NA |
|                                       |             |              |              |              |          |              |          |          |          |            |              |       |             |    |
| HOURS SUB-TOTALS                      | 155         | 1,647        | 696          | 745          | 0        | 980          | 0        | 0        | 0        | 24         | 4,247        |       | 93          |    |
| CONTRACT RATE PER HOUR                | \$300.00    | \$235.00     | \$195.00     | \$165.00     | \$100.00 | \$145.00     | \$100.00 | \$100.00 | \$100.00 | \$85.00    |              |       | # OF SHEETS |    |
| TOTAL LABOR COSTS                     | \$46,500.00 | \$387,045.00 | \$135,720.00 | \$122,925.00 | \$0.00   | \$142,100.00 | \$0.00   | \$0.00   | \$0.00   | \$2,040.00 | \$836,330.00 |       |             |    |
|                                       |             |              |              |              |          |              |          |          |          |            |              |       |             |    |
| LABOR SUBTOTAL                        |             |              |              |              |          |              |          |          |          |            | \$836,330.00 |       |             |    |

| OTHER DIRECT EXPENSES          | # OF UNITS | UNIT | COST/UNIT |  |  |  |  |  |  |  |          |
|--------------------------------|------------|------|-----------|--|--|--|--|--|--|--|----------|
| Mileage                        | 656        | mile | \$0.700   |  |  |  |  |  |  |  | \$459.20 |
| Overnight mail - letter size   |            | each |           |  |  |  |  |  |  |  | \$0.00   |
| Overnight mail - oversized box |            | each |           |  |  |  |  |  |  |  | \$0.00   |
| Photocopies B/W (8.5 x 11)     |            | each |           |  |  |  |  |  |  |  | \$0.00   |
| Photocopies B/W (11 x 17)      |            | each |           |  |  |  |  |  |  |  | \$0.00   |
|                                |            |      |           |  |  |  |  |  |  |  |          |
| SUBTOTAL DIRECT EXPENSES       |            |      |           |  |  |  |  |  |  |  | \$459.20 |

| SUMMARY               |  |              |
|-----------------------|--|--------------|
|                       |  |              |
| TOTAL LABOR COSTS     |  | \$836,330.00 |
| OTHER DIRECT EXPENSES |  | \$459.20     |
| TOTAL                 |  | \$836,789.20 |

FEE SCHEDULE

| TASK DESCRIPTION                                | PROJECT<br>MANAGER | SENIOR<br>ENGINEER | PROJECT<br>ENGINEER | DESIGN<br>ENGINEER | EIT      | SENIOR<br>ENGR<br>TECH | ENGR<br>TECH | CADD<br>OPERATOR | ADMIN/<br>CLERICAL | TOTAL<br>LABOR HRS.<br>& COSTS | UNIT | NO OF<br>UNITS | HOURS<br>PER UNIT |
|-------------------------------------------------|--------------------|--------------------|---------------------|--------------------|----------|------------------------|--------------|------------------|--------------------|--------------------------------|------|----------------|-------------------|
| GENERAL                                         |                    |                    |                     |                    |          |                        |              |                  |                    |                                |      |                |                   |
| DATA COLLECTION                                 |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| PROJECT MEETINGS                                |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| TXDOT PERMIT                                    |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| RR COORDINATION                                 |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| COORDINATION WITH LOCAL AGENCIES                |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| PROJECT ADMINISTRATION                          |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| PRELIMINARY ENGINEERING                         |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| DRAINAGE ANALYSIS                               |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| DRAINAGE REPORT                                 |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| ASSIST IN CONSTRUCTION COST ESTIMATES           |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| ASSIST WITH PREPARATION OF PER                  |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| ASSIST WITH PER MEETING                         |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| FINAL DESIGN                                    |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| STORM SEWER PLAN AND PROFILES (50 SCALE)        |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| CULVERT LAYOUT SHEETS                           |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| DRAINAGE DETAILS                                |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| DRAINAGE SUBAREA MAPS (50 SCALE DOUBLE BANK)    |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| SW3P LAYOUTS (50 SCALE DOUBLE BANK)             |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| MISCELLENAEIOUS DETAILS                         |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| PREPARATION OF STANDARDS                        |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| ASSIST WITH DETAILED CONSTRUCTION COST ESTIMATE |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| ASSIST WITH PRODUCTION OF PROJECT MANUAL        |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| CONSTRUCTION PHASE SERVICES                     |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| RESPOND TO QUESTIONS                            |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| ATTEND FIELD MEETINGS AND SITE VISITS           |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| PREPARATION OF CHANGE ORDERS                    |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| REVIEW AND APPROVE SHOP DRAWINGS                |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| REVIEW AND APPROVE FORMING DETAILS              |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| RESPOND TO RFIS                                 |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| ANSWER GENERAL QUESTIONS                        |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| PROVIDE RECORD DRAWINGS                         |                    |                    |                     |                    |          |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
|                                                 |                    |                    |                     |                    |          |                        |              |                  |                    |                                |      |                |                   |
| HOURS SUB-TOTALS                                | 0                  | 0                  | 0                   | 0                  | 0        | 0                      | 0            | 0                | 0                  | 0                              |      | 0              |                   |
| CONTRACT RATE PER HOUR                          | \$100.00           | \$100.00           | \$100.00            | \$100.00           | \$100.00 | \$100.00               | \$100.00     | \$100.00         | \$100.00           |                                |      | # OF SHEETS    |                   |
| TOTAL LABOR COSTS                               | \$0.00             | \$0.00             | \$0.00              | \$0.00             | \$0.00   | \$0.00                 | \$0.00       | \$0.00           | \$0.00             | \$0.00                         |      |                |                   |
|                                                 |                    |                    |                     |                    |          |                        |              |                  |                    |                                |      |                |                   |
| LABOR SUBTOTAL                                  |                    |                    |                     |                    |          |                        |              |                  |                    | \$0.00                         |      |                |                   |

| OTHER DIRECT EXPENSES          | # OF UNITS | UNIT | COST/UNIT |  |  |  |  |  |  |        |
|--------------------------------|------------|------|-----------|--|--|--|--|--|--|--------|
| Mileage                        |            | mile |           |  |  |  |  |  |  | \$0.00 |
| Overnight mail - letter size   |            | each |           |  |  |  |  |  |  | \$0.00 |
| Overnight mail - oversized box |            | each |           |  |  |  |  |  |  | \$0.00 |
| Photocopies B/W (8.5 x 11)     |            | each |           |  |  |  |  |  |  | \$0.00 |
| Photocopies B/W (11 x 17)      |            | each |           |  |  |  |  |  |  | \$0.00 |
|                                |            |      |           |  |  |  |  |  |  |        |
|                                |            |      |           |  |  |  |  |  |  |        |
| SUBTOTAL DIRECT EXPENSES       |            |      |           |  |  |  |  |  |  | \$0.00 |

| SUMMARY               |        |
|-----------------------|--------|
|                       |        |
| TOTAL LABOR COSTS     | \$0.00 |
| OTHER DIRECT EXPENSES | \$0.00 |
| TOTAL                 | \$0.00 |

FEE SCHEDULE

| TASK DESCRIPTION                                         | PROJECT<br>MANAGER | SENIOR<br>ENGINEER | PROJECT<br>ENGINEER | DESIGN<br>ENGINEER | EIT         | SENIOR<br>ENGR<br>TECH | ENGR<br>TECH | CADD<br>OPERATOR | ADMIN/<br>CLERICAL | TOTAL<br>LABOR HRS.<br>& COSTS | UNIT | NO OF<br>UNITS | HOURS<br>PER UNIT |
|----------------------------------------------------------|--------------------|--------------------|---------------------|--------------------|-------------|------------------------|--------------|------------------|--------------------|--------------------------------|------|----------------|-------------------|
|                                                          |                    |                    |                     |                    |             |                        |              |                  |                    |                                |      |                |                   |
| GENERAL                                                  |                    |                    |                     |                    |             |                        |              |                  |                    |                                |      |                |                   |
| DATA COLLECTION (12-HR TRAFFIC COUNTS & SPOT SPEED DATA) | 1                  |                    | 2                   |                    | 8           |                        |              |                  | 1                  | 12                             | NA   | NA             | NA                |
| PROJECT MEETINGS                                         | 2                  |                    | 2                   |                    |             |                        |              |                  |                    | 4                              | NA   | NA             | NA                |
| TXDOT PERMIT                                             |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| COORDINATION WITH LOCAL AGENCIES                         | 2                  |                    | 6                   |                    |             |                        |              |                  |                    | 8                              | NA   | NA             | NA                |
| PROJECT ADMINISTRATION                                   | 5                  |                    |                     |                    |             |                        |              |                  | 5                  | 10                             | NA   | NA             | NA                |
| PRELIMINARY ENGINEERING                                  |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| EVALUTE INTERSECTION SIGHT TRIANGLES                     | 2                  |                    | 4                   |                    | 5           |                        |              | 9                |                    | 20                             | NA   | NA             | NA                |
| PERFORM A TRAFFIC STUDY                                  |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| SIGNAL WARRANT ANALYSIS                                  | 2                  |                    | 12                  |                    | 25          |                        |              | 2                | 1                  | 42                             | NA   | NA             | NA                |
| ASSIST IN CONSTRUCTION COST ESTIMATES                    |                    |                    | 3                   |                    | 3           |                        |              |                  |                    | 6                              | NA   | NA             | NA                |
| ASSIST WITH PREPARATION OF PER                           | 1                  |                    | 4                   |                    |             |                        |              |                  |                    | 5                              | NA   | NA             | NA                |
| ASSIST WITH PER MEETING                                  | 1                  |                    | 2                   |                    |             |                        |              |                  |                    | 3                              | NA   | NA             | NA                |
| FINAL DESIGN                                             |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| SIGNALIZATION DETAILS                                    | 4                  | 8                  | 26                  |                    | 65          |                        |              | 92               | 2                  | 197                            | NA   | 6              | 33                |
| ILLUMINATION DETAILS                                     |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| PREPARATION OF STANDARDS                                 | 1                  |                    | 2                   |                    | 2           |                        |              | 4                |                    | 9                              | NA   | 15             | 1                 |
| ASSIST WITH DETAILED CONSTRUCTION COST ESTIMATE          | 1                  |                    | 4                   |                    | 4           |                        |              |                  |                    | 9                              | NA   | NA             | NA                |
| ASSIST WITH PRODUCTION OF PROJECT MANUAL                 | 1                  |                    | 5                   |                    |             |                        |              |                  |                    | 6                              | NA   | NA             | NA                |
| CONSTRUCTION PHASE SERVICES                              |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| RESPOND TO QUESTIONS                                     | 2                  |                    | 2                   |                    |             |                        |              |                  |                    | 4                              | NA   | NA             | NA                |
| ATTEND FIELD MEETINGS AND SITE VISITS                    | 3                  |                    | 3                   |                    |             |                        |              |                  |                    | 6                              | NA   | NA             | NA                |
| PREPARATION OF CHANGE ORDERS                             | 1                  |                    | 2                   |                    | 3           |                        |              | 6                |                    | 12                             | NA   | NA             | NA                |
| REVIEW AND APPROVE SHOP DRAWINGS                         | 2                  |                    | 18                  |                    |             |                        |              |                  |                    | 20                             | NA   | NA             | NA                |
| REVIEW AND APPROVE FORMING DETAILS                       |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| RESPOND TO RFIS                                          | 2                  |                    | 4                   |                    |             |                        |              |                  |                    | 6                              | NA   | NA             | NA                |
| ANSWER GENERAL QUESTIONS                                 |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA   | NA             | NA                |
| PROVIDE RECORD DRAWINGS                                  | 1                  |                    | 3                   |                    | 4           |                        |              | 7                |                    | 15                             | NA   | NA             | NA                |
|                                                          |                    |                    |                     |                    |             |                        |              |                  |                    |                                |      |                |                   |
| HOURS SUB-TOTALS                                         | 34                 | 8                  | 104                 | 0                  | 119         | 0                      | 0            | 120              | 9                  | 394                            |      | 21             | # OF SHEETS       |
| CONTRACT RATE PER HOUR                                   | \$350.91           | \$314.92           | \$256.44            | \$215.96           | \$175.46    | \$184.45               | \$160.00     | \$155.22         | \$130.46           |                                |      |                |                   |
| TOTAL LABOR COSTS                                        | \$11,930.94        | \$2,519.36         | \$26,669.76         | \$0.00             | \$20,879.74 | \$0.00                 | \$0.00       | \$18,626.40      | \$1,174.14         | \$81,800.34                    |      |                |                   |
|                                                          |                    |                    |                     |                    |             |                        |              |                  |                    |                                |      |                |                   |
| LABOR SUBTOTAL                                           |                    |                    |                     |                    |             |                        |              |                  |                    | \$81,800.34                    |      |                |                   |

| OTHER DIRECT EXPENSES          | # OF UNITS | UNIT | COST/UNIT |  |  |  |  |  |  |         |
|--------------------------------|------------|------|-----------|--|--|--|--|--|--|---------|
|                                |            |      |           |  |  |  |  |  |  |         |
| Mileage                        | 105        | mile | \$0.625   |  |  |  |  |  |  | \$65.63 |
| Overnight mail - letter size   |            | each |           |  |  |  |  |  |  | \$0.00  |
| Overnight mail - oversized box |            | each |           |  |  |  |  |  |  | \$0.00  |
| Photocopies B/W (8.5 x 11)     |            | each |           |  |  |  |  |  |  | \$0.00  |
| Photocopies B/W (11 x 17)      |            | each |           |  |  |  |  |  |  | \$0.00  |
|                                |            |      |           |  |  |  |  |  |  |         |
| SUBTOTAL DIRECT EXPENSES       |            |      |           |  |  |  |  |  |  | \$65.63 |

| SUMMARY               |             |
|-----------------------|-------------|
|                       |             |
| TOTAL LABOR COSTS     | \$81,800.34 |
| OTHER DIRECT EXPENSES | \$65.63     |
| TOTAL                 | \$81,865.97 |

FEE SCHEDULE

| TASK DESCRIPTION                                           | PROJECT<br>MANAGER | SENIOR<br>ENGINEER | PROJECT<br>ENGINEER | DESIGN<br>ENGINEER | EIT         | SENIOR<br>ENGR<br>TECH | ENGR<br>TECH | CADD<br>OPERATOR | ADMIN/<br>CLERICAL | TOTAL<br>LABOR HRS.<br>& COSTS | UNIT  | NO OF<br>UNITS | HOURS<br>PER UNIT |
|------------------------------------------------------------|--------------------|--------------------|---------------------|--------------------|-------------|------------------------|--------------|------------------|--------------------|--------------------------------|-------|----------------|-------------------|
|                                                            |                    |                    |                     |                    |             |                        |              |                  |                    |                                |       |                |                   |
| GENERAL                                                    |                    |                    |                     |                    |             |                        |              |                  |                    |                                |       |                |                   |
| DATA COLLECTION                                            |                    | 2                  |                     |                    | 4           |                        |              |                  |                    | 6                              | NA    | NA             | NA                |
| PROJECT MEETINGS (Assume 6)                                | 6                  |                    |                     |                    |             |                        |              |                  |                    | 6                              | NA    | NA             | NA                |
| PROJECT ADMINISTRATION                                     | 12                 |                    |                     |                    |             |                        |              |                  |                    | 12                             | NA    | NA             | NA                |
| PRELIMINARY ENGINEERING                                    |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA    | NA             | NA                |
| GEOTECH COORDINATION                                       |                    | 2                  |                     |                    | 4           |                        |              |                  |                    | 6                              | NA    | NA             | NA                |
| CONCRETE PROTECTIVE SLAB CALCULATIONS (ASSUME 8 LOCATIONS) | 1                  | 2                  | 3                   |                    | 15          |                        |              |                  |                    | 21                             | NA    | NA             | NA                |
| ASSIST IN CONSTRUCTION COST ESTIMATES                      |                    | 2                  |                     |                    | 4           |                        |              |                  |                    | 6                              | NA    | NA             | NA                |
| ASSIST WITH PREPARATION OF PER                             | 1                  | 2                  | 4                   |                    | 16          |                        |              | 32               |                    | 55                             | Sheet | 2              | 28                |
| ASSIST WITH PER MEETING                                    | 2                  |                    |                     |                    |             |                        |              |                  |                    | 2                              | NA    | NA             | NA                |
| FINAL DESIGN                                               |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA    | NA             | NA                |
| CONCRETE PROTECTIVE SLAB DETAILS                           | 1                  | 2                  | 4                   |                    | 16          |                        |              | 32               |                    | 55                             | Sheet | 2              | 28                |
| MISCELLENAEIOUS DETAILS                                    | 1                  | 2                  | 4                   |                    | 16          |                        |              | 16               |                    | 39                             | Sheet | 1              | 39                |
| PREPARATION OF STANDARDS                                   | 1                  | 2                  | 4                   |                    | 12          |                        |              |                  | 6                  | 25                             | NA    | NA             | NA                |
| ASSIST WITH DETAILED CONSTRUCTION COST ESTIMATE            | 1                  | 3                  | 6                   |                    | 8           |                        |              |                  |                    | 18                             | NA    | NA             | NA                |
| ASSIST WITH PRODUCTION OF PROJECT MANUAL                   | 1                  | 3                  | 6                   |                    | 8           |                        |              |                  | 6                  | 24                             | NA    | NA             | NA                |
| CONSTRUCTION PHASE SERVICES                                |                    |                    |                     |                    |             |                        |              |                  |                    | 0                              | NA    | NA             | NA                |
| RESPOND TO QUESTIONS                                       | 1                  | 1                  | 2                   |                    | 4           |                        |              | 4                | 1                  | 13                             | NA    | NA             | NA                |
| ATTEND FIELD MEETINGS AND SITE VISITS                      | 8                  | 8                  |                     |                    |             |                        |              |                  |                    | 16                             | NA    | NA             | NA                |
| PREPARATION OF CHANGE ORDERS                               | 1                  | 1                  |                     |                    | 2           |                        |              |                  | 1                  | 5                              | NA    | NA             | NA                |
| REVIEW AND APPROVE SHOP DRAWINGS                           | 1                  | 2                  | 4                   |                    | 16          |                        |              |                  |                    | 23                             | NA    | NA             | NA                |
| REVIEW AND APPROVE FORMING DETAILS                         | 1                  | 2                  | 4                   |                    | 8           |                        |              |                  |                    | 15                             | NA    | NA             | NA                |
| RESPOND TO RFIS                                            | 1                  | 2                  | 2                   |                    | 4           |                        |              |                  |                    | 9                              | NA    | NA             | NA                |
| ANSWER GENERAL QUESTIONS                                   | 1                  | 2                  | 2                   |                    | 4           |                        |              |                  |                    | 9                              | NA    | NA             | NA                |
| PROVIDE RECORD DRAWINGS                                    | 2                  |                    |                     |                    | 8           |                        |              | 8                |                    | 18                             | NA    | NA             | NA                |
|                                                            |                    |                    |                     |                    |             |                        |              |                  |                    |                                |       |                |                   |
| HOURS SUB-TOTALS                                           | 43                 | 40                 | 45                  | 0                  | 149         | 0                      | 0            | 92               | 14                 | 383                            |       | 5              |                   |
| CONTRACT RATE PER HOUR                                     | \$290.00           | \$230.00           | \$190.00            | \$145.00           | \$135.00    | \$220.00               | \$135.00     | \$125.00         | \$70.00            |                                |       | # OF SHEETS    |                   |
| TOTAL LABOR COSTS                                          | \$12,470.00        | \$9,200.00         | \$8,550.00          | \$0.00             | \$20,115.00 | \$0.00                 | \$0.00       | \$11,500.00      | \$980.00           | \$62,815.00                    |       |                |                   |
|                                                            |                    |                    |                     |                    |             |                        |              |                  |                    |                                |       |                |                   |
| LABOR SUBTOTAL                                             |                    |                    |                     |                    |             |                        |              |                  |                    | \$62,815.00                    |       |                |                   |

| OTHER DIRECT EXPENSES          | # OF UNITS | UNIT | COST/UNIT |  |  |  |  |  |  |          |
|--------------------------------|------------|------|-----------|--|--|--|--|--|--|----------|
|                                |            |      |           |  |  |  |  |  |  |          |
| Mileage                        | 360        | mile | \$0.700   |  |  |  |  |  |  | \$252.00 |
| Overnight mail - letter size   |            | each |           |  |  |  |  |  |  | \$0.00   |
| Overnight mail - oversized box |            | each |           |  |  |  |  |  |  | \$0.00   |
| Photocopies B/W (8.5 x 11)     |            | each |           |  |  |  |  |  |  | \$0.00   |
| Photocopies B/W (11 x 17)      |            | each |           |  |  |  |  |  |  | \$0.00   |
|                                |            |      |           |  |  |  |  |  |  |          |
| SUBTOTAL DIRECT EXPENSES       |            |      |           |  |  |  |  |  |  | \$252.00 |

| SUMMARY               |             |
|-----------------------|-------------|
|                       |             |
| TOTAL LABOR COSTS     | \$62,815.00 |
| OTHER DIRECT EXPENSES | \$252.00    |
| TOTAL                 | \$63,067.00 |

FEE SCHEDULE

| TASK DESCRIPTION                                                                 | PROJECT<br>MANAGER | SR<br>ENV PLANNER | PROJECT<br>ENV PLANNER | JR<br>ENV PLANNER |        | GIS<br>TECH |          |          | ADMIN/<br>CLERICAL | TOTAL<br>LABOR HRS.<br>& COSTS | UNIT | NO OF<br>UNITS | HOURS<br>PER UNIT |
|----------------------------------------------------------------------------------|--------------------|-------------------|------------------------|-------------------|--------|-------------|----------|----------|--------------------|--------------------------------|------|----------------|-------------------|
|                                                                                  |                    |                   |                        |                   |        |             |          |          |                    |                                |      |                |                   |
| GENERAL                                                                          |                    |                   |                        |                   |        |             |          |          |                    |                                |      |                |                   |
| DATA COLLECTION / FIELD RECONNAISSANCE                                           |                    | 2                 |                        | 20                |        | 16          |          |          |                    | 38                             | NA   | NA             | NA                |
| PROJECT MEETINGS (up to 4 meetings)                                              |                    | 2                 | 4                      | 4                 |        |             |          |          |                    | 10                             | NA   | NA             | NA                |
| COORDINATION WITH LOCAL AGENCIES (up to 2 meetings)                              |                    | 2                 |                        |                   |        |             |          |          |                    | 2                              | NA   | NA             | NA                |
| PROJECT ADMINISTRATION (up to 4 months)                                          |                    | 6                 |                        |                   |        |             |          |          | 12                 | 18                             | NA   | NA             | NA                |
| PRELIMINARY ENGINEERING                                                          |                    |                   |                        |                   |        |             |          |          |                    | 0                              | NA   | NA             | NA                |
| ENVIRONMENTAL CONSTRAINTS EVALUATION (preparation of Constraints Map)            |                    | 1                 | 2                      | 4                 |        | 16          |          |          |                    | 23                             | NA   | NA             | NA                |
| PREPARATION OF PER (Environmental Constraints Report - up to 2 rounds of review) |                    | 1                 | 6                      | 24                |        |             |          |          |                    | 31                             | NA   | NA             | NA                |
| PER MEETING (assumes one in person meeting)                                      |                    | 1                 |                        |                   |        |             |          |          |                    | 1                              | NA   | NA             | NA                |
| FINAL DESIGN                                                                     |                    |                   |                        |                   |        |             |          |          |                    | 0                              | NA   | NA             | NA                |
| ASSIST WITH PRODUCTION OF PROJECT MANUAL                                         |                    |                   |                        |                   |        |             |          |          |                    | 0                              | NA   | NA             | NA                |
|                                                                                  |                    |                   |                        |                   |        |             |          |          |                    |                                |      |                |                   |
| HOURS SUB-TOTALS                                                                 | 0                  | 15                | 12                     | 52                | 0      | 32          | 0        | 0        | 12                 | 123                            |      | 0              | # OF SHEETS       |
| CONTRACT RATE PER HOUR                                                           | \$100.00           | \$276.00          | \$218.00               | \$117.00          | \$0.00 | \$133.00    | \$100.00 | \$100.00 | \$75.00            |                                |      |                |                   |
| TOTAL LABOR COSTS                                                                | \$0.00             | \$4,140.00        | \$2,616.00             | \$6,084.00        | \$0.00 | \$4,256.00  | \$0.00   | \$0.00   | \$900.00           | \$17,996.00                    |      |                |                   |
|                                                                                  |                    |                   |                        |                   |        |             |          |          |                    |                                |      |                |                   |
| LABOR SUBTOTAL                                                                   |                    |                   |                        |                   |        |             |          |          |                    | \$17,996.00                    |      |                |                   |

| OTHER DIRECT EXPENSES                                                 | # OF UNITS | UNIT | COST/UNIT |  |  |  |  |  |  |          |  |
|-----------------------------------------------------------------------|------------|------|-----------|--|--|--|--|--|--|----------|--|
|                                                                       |            |      |           |  |  |  |  |  |  |          |  |
| Mileage (.67 cents/mile)                                              |            | mile | \$67.00   |  |  |  |  |  |  | \$67.00  |  |
| ASTM Haz Mat Search (based on land use density and length of project) |            | each | \$800.00  |  |  |  |  |  |  | \$800.00 |  |
|                                                                       |            |      |           |  |  |  |  |  |  |          |  |
| SUBTOTAL DIRECT EXPENSES                                              |            |      |           |  |  |  |  |  |  | \$867.00 |  |

| SUMMARY               |             |
|-----------------------|-------------|
|                       |             |
|                       |             |
| TOTAL LABOR COSTS     | \$17,996.00 |
| OTHER DIRECT EXPENSES | \$867.00    |
|                       |             |
| TOTAL                 | \$18,863.00 |

\$17,996.00  
\$867.00  
\$18,863.00



## Base Geo Proposal

| TASK DESCRIPTION                                 |                                                                                          | NO OF DWGS                  | PROJECT / SUPPORT MANAGER | GEOTECHNICAL ENGINEER | PROJECT ENGINEER | ENGINEER TECH | ADMIN/ CLERICAL | TOTAL HRS. & COSTS |
|--------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------|---------------------------|-----------------------|------------------|---------------|-----------------|--------------------|
| CONTRACT RATE PER HOUR (Loaded Rate)             |                                                                                          |                             | \$ 245.39                 | \$ 216.52             | \$ 162.39        | \$ 101.04     | \$ 83.00        |                    |
| FUNCTION CODE (110) – ROUTE AND DESIGN STUDIES   |                                                                                          |                             |                           |                       |                  |               |                 |                    |
| 110                                              | Geotechnical Borings and Investigations                                                  |                             |                           |                       |                  |               |                 |                    |
|                                                  | a). Manage, Coord., & Boring Log / Geo Data Creation                                     |                             |                           |                       |                  |               |                 |                    |
|                                                  | a-1). Management, Oversight, Invoicing, etc.                                             |                             |                           |                       | 1                |               |                 | 1                  |
|                                                  | a-2). Coordination of Field Activities                                                   |                             |                           |                       | 1                |               |                 | 1                  |
|                                                  | a-3). Stake Borings/Utility Locates/Coord. - Eng. Tech                                   |                             |                           |                       |                  | 2             |                 | 2                  |
|                                                  | a-5). Boring Log / Geo Data Creation                                                     |                             |                           |                       | 4                |               | 4               | 8                  |
|                                                  | b). Engineering & Evaluation of Data                                                     |                             |                           |                       |                  |               |                 |                    |
|                                                  | b-1). Pavement Geo Parameter Analysis                                                    |                             |                           | 2                     |                  |               |                 | 2                  |
|                                                  | c). Geo Report                                                                           |                             |                           |                       |                  |               |                 |                    |
|                                                  | c-1). Geo Report/Memo (Data Report)                                                      |                             |                           | 2                     | 2                | 2             | 2               | 8                  |
|                                                  | c-2). Meetings/Addl. Coord. (Coord. Time w/ Client)                                      |                             | 2                         |                       |                  |               |                 | 2                  |
|                                                  | HOURS SUB-TOTALS                                                                         |                             | 2                         | 4                     | 8                | 4             | 6               | 24                 |
|                                                  | TOTAL LABOR COSTS                                                                        |                             | \$ 490.78                 | \$ 866.08             | \$ 1,299.12      | \$ 404.16     | \$ 498.00       | \$ 3,558.14        |
|                                                  | SUBTOTAL FC 110                                                                          |                             |                           |                       |                  |               |                 | \$ 3,558.14        |
|                                                  |                                                                                          |                             |                           |                       |                  |               |                 |                    |
| FUNCTION CODE (160) – ROADWAY DESIGN CONTROLS    |                                                                                          |                             |                           |                       |                  |               |                 |                    |
| 160                                              | Pavement Design (All) (incl Pavement Design Report - Rigid)                              |                             | 8                         | 30                    | 62               | 8             | 16              | 124                |
|                                                  | HOURS SUB-TOTALS                                                                         |                             | 8                         | 30                    | 62               | 8             | 16              | 124                |
|                                                  | TOTAL LABOR COSTS                                                                        |                             | \$ 1,963.12               | \$ 6,495.60           | \$ 10,068.18     | \$ 808.32     | \$ 1,328.00     | \$ 20,663.22       |
|                                                  | SUBTOTAL FC 160                                                                          |                             |                           |                       |                  |               |                 | \$ 20,663.22       |
|                                                  |                                                                                          |                             |                           |                       |                  |               |                 |                    |
| UNIT COST - MATERIALS / TESTING (FC110)          |                                                                                          | TEST DESC                   | UNIT                      | QUANTITY              | COST             | TOTAL         |                 |                    |
|                                                  | Soil Boring (Solid Stem)                                                                 |                             | LF                        | 60                    | \$ 38.00         | \$ 2,280.00   |                 |                    |
|                                                  | Determining Moisture Content in Soil Materials                                           | ASTM D 2216 / Tex-103-E     | each                      | 24                    | \$ 12.00         | \$ 288.00     |                 |                    |
|                                                  | Atterberg Limits of Soils                                                                | ASTM D 4318 / Tex-104-106-E | each                      | 16                    | \$ 135.00        | \$ 2,160.00   |                 |                    |
|                                                  | Determining the Amount of Material in Soils Finer than the 75 micrometer (No. 200) Sieve | ASTM D 1140 / Tex-111-E     | each                      | 16                    | \$ 60.00         | \$ 960.00     |                 |                    |
|                                                  | Full Sieve Gradation & Hydrometer                                                        | ASTM D 422 / Tex-110-E      | each                      | 2                     | \$ 90.00         | \$ 180.00     |                 |                    |
|                                                  | Determining Sulfate Content in Soils - Colorimetric Method                               | Tex-145-E                   | each                      | 4                     | \$ 95.00         | \$ 380.00     |                 |                    |
|                                                  | Lime Series Testing (pH Relation)                                                        | Tex-121-E Part III          | each                      | 2                     | \$ 400.00        | \$ 800.00     |                 |                    |
|                                                  | SUBTOTAL UNIT COST - MATERIALS / TESTING                                                 |                             |                           |                       |                  | \$ 7,048.00   |                 |                    |
|                                                  |                                                                                          |                             |                           |                       |                  |               |                 |                    |
| UNIT COST - DIRECT EXPENSES (FC110)              |                                                                                          | UNIT                        | QUANTITY                  | UNIT                  | TOTAL            |               |                 |                    |
|                                                  | Traffic Control Services, Arrow Boards & Attenuator Trucks                               | DAY                         | 1                         | \$ 2,500.00           | \$ 2,500.00      |               |                 |                    |
|                                                  | Mobilization of Drilling Rig                                                             | DAY                         | 1                         | \$ 475.00             | \$ 475.00        |               |                 |                    |
|                                                  | Pavement Hole Patch for Bores in Rdwy (ACP Cold-Mix)                                     | EA                          | 4                         | \$ 150.00             | \$ 600.00        |               |                 |                    |
|                                                  | SUBTOTAL UNIT COST - DIRECT EXPENSES                                                     |                             |                           |                       | \$ 3,575.00      |               |                 |                    |
|                                                  |                                                                                          |                             |                           |                       |                  |               |                 |                    |
| SUMMARY                                          |                                                                                          |                             |                           |                       |                  |               |                 |                    |
| TOTAL LABOR COSTS (FC 110)                       |                                                                                          |                             |                           |                       | \$3,558.14       |               |                 |                    |
| TOTAL LABOR COSTS (FC 160)                       |                                                                                          |                             |                           |                       | \$20,663.22      |               |                 |                    |
| TOTAL UNIT COST - MATERIALS / TESTING (FC 110)   |                                                                                          |                             |                           |                       | \$7,048.00       |               |                 |                    |
| TOTAL UNIT COST - OTHER DIRECT EXPENSES (FC 110) |                                                                                          |                             |                           |                       | \$3,575.00       |               |                 |                    |
| GRAND TOTAL                                      |                                                                                          |                             |                           |                       | \$34,844.36      |               |                 |                    |



PROJECT NAME: Waller County - Pitts Rd Project  
CLIENT: Schaumberg & Polk, Inc. (SPI) (for Waller County)  
PRIME CONSULTANT: Schaumberg & Polk, Inc. (SPI)  
SUB-CONSULTANT: B2Z Engineering

Outfall Geo Proposal



| TASK DESCRIPTION                                 |                                                                                          | NO OF DWGS                  | PROJECT / SUPPORT MANAGER | GEOTECHNICAL ENGINEER | PROJECT ENGINEER | ENGINEER TECH | ADMIN/ CLERICAL | TOTAL HRS. & COSTS |
|--------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------|---------------------------|-----------------------|------------------|---------------|-----------------|--------------------|
| CONTRACT RATE PER HOUR (Loaded Rate)             |                                                                                          |                             | \$ 245.39                 | \$ 216.52             | \$ 162.39        | \$ 101.04     | \$ 83.00        |                    |
| FUNCTION CODE (110) – ROUTE AND DESIGN STUDIES   |                                                                                          |                             |                           |                       |                  |               |                 |                    |
| 110                                              | Geotechnical Borings and Investigations                                                  |                             |                           |                       |                  |               |                 |                    |
|                                                  | a). Manage, Coord., & Boring Log / Geo Data Creation                                     |                             |                           |                       |                  |               |                 |                    |
|                                                  | a-1). Management, Oversight, Invoicing, etc.                                             |                             |                           |                       | 1                |               |                 | 1                  |
|                                                  | a-2). Coordination of Field Activities                                                   |                             |                           |                       | 1                |               |                 | 1                  |
|                                                  | a-3). Stake Borings/Utility Locates/Coord. - Eng. Tech                                   |                             |                           |                       |                  | 2             |                 | 2                  |
|                                                  | a-5). Boring Log / Geo Data Creation                                                     |                             |                           |                       | 8                |               | 8               | 16                 |
|                                                  | b). Engineering & Evaluation of Data                                                     |                             |                           |                       |                  |               |                 |                    |
|                                                  | b-1). Slope Stability Analysis                                                           |                             |                           | 4                     | 36               |               |                 | 40                 |
|                                                  | c). Geo Report                                                                           |                             |                           |                       |                  |               |                 |                    |
|                                                  | c-1). Geo Report/Memo (Data Report)                                                      |                             |                           | 4                     | 12               | 4             | 4               | 24                 |
|                                                  | c-2). Meetings/Addl. Coord. (Coord. Time w/ Client)                                      |                             | 4                         |                       |                  |               |                 | 4                  |
| HOURS SUB-TOTALS                                 |                                                                                          |                             | 4                         | 8                     | 58               | 6             | 12              | 88                 |
| TOTAL LABOR COSTS                                |                                                                                          |                             | \$ 981.56                 | \$ 1,732.16           | \$ 9,418.62      | \$ 606.24     | \$ 996.00       | \$ 13,734.58       |
| SUBTOTAL FC 110                                  |                                                                                          |                             |                           |                       |                  |               |                 | \$ 13,734.58       |
| FUNCTION CODE (160) – ROADWAY DESIGN CONTROLS    |                                                                                          |                             |                           |                       |                  |               |                 |                    |
|                                                  |                                                                                          |                             |                           |                       |                  |               |                 | 0                  |
|                                                  |                                                                                          |                             |                           |                       |                  |               |                 |                    |
| HOURS SUB-TOTALS                                 |                                                                                          |                             | 0                         | 0                     | 0                | 0             | 0               | 0                  |
| TOTAL LABOR COSTS                                |                                                                                          |                             | \$ -                      | \$ -                  | \$ -             | \$ -          | \$ -            | \$ -               |
| SUBTOTAL FC 160                                  |                                                                                          |                             |                           |                       |                  |               |                 | \$ -               |
| UNIT COST - MATERIALS / TESTING (FC110)          |                                                                                          |                             | TEST DESC                 | UNIT                  | QUANTITY         | COST          | TOTAL           |                    |
|                                                  | Soil Boring (Solid Stem)                                                                 |                             | LF                        | 120                   | \$ 38.00         | \$ 4,560.00   |                 |                    |
|                                                  | Determining Moisture Content in Soil Materials                                           | ASTM D 2216 / Tex-103-E     | each                      | 36                    | \$ 12.00         | \$ 432.00     |                 |                    |
|                                                  | Atterberg Limits of Soils                                                                | ASTM D 4318 / Tex-104-106-E | each                      | 24                    | \$ 135.00        | \$ 3,240.00   |                 |                    |
|                                                  | Determining the Amount of Material in Soils Finer than the 75 micrometer (No. 200) Sieve | ASTM D 1140 / Tex-111-E     | each                      | 24                    | \$ 60.00         | \$ 1,440.00   |                 |                    |
|                                                  | Full Sieve Gradation & Hydrometer                                                        | ASTM D 422 / Tex-110-E      | each                      | 4                     | \$ 90.00         | \$ 360.00     |                 |                    |
|                                                  | Determining Sulfate Content in Soils - Colorimetric Method                               | Tex-145-E                   | each                      | 0                     | \$ 95.00         | \$ -          |                 |                    |
|                                                  | Lime Series Testing (pH Relation)                                                        | Tex-121-E Part III          | each                      | 0                     | \$ 400.00        | \$ -          |                 |                    |
|                                                  | Unconfined Compressive Strength                                                          | ASTM D 2166                 | each                      | 4                     | \$ 95.00         | \$ 380.00     |                 |                    |
|                                                  | Consolidated Undrained Triaxial                                                          | ASTM D 4767                 | each                      | 4                     | \$ 2,300.00      | \$ 9,200.00   |                 |                    |
|                                                  | Dispersive Characteristics of Clay (Crumb)                                               | ASTM D 6572                 | each                      | 4                     | \$ 85.00         | \$ 340.00     |                 |                    |
|                                                  | Double Hydrometer                                                                        | ASTM D 4221                 | each                      | 4                     | \$ 350.00        | \$ 1,400.00   |                 |                    |
| SUBTOTAL UNIT COST - MATERIALS / TESTING         |                                                                                          |                             |                           |                       |                  | \$ 21,352.00  |                 |                    |
| UNIT COST - DIRECT EXPENSES (FC110)              |                                                                                          |                             | UNIT                      | QUANTITY              | UNIT             | TOTAL         |                 |                    |
|                                                  | Traffic Control Services, Arrow Boards & Attenuator Trucks                               | DAY                         | 0                         | \$ 2,500.00           | \$ -             |               |                 |                    |
|                                                  | Mobilization of Drilling Rig                                                             | DAY                         | 2                         | \$ 475.00             | \$ 950.00        |               |                 |                    |
|                                                  | Pavement Hole Patch for Bores in Rdwy (ACP Cold-Mix)                                     | EA                          | 0                         | \$ 150.00             | \$ -             |               |                 |                    |
| SUBTOTAL UNIT COST - DIRECT EXPENSES             |                                                                                          |                             |                           |                       | \$ 950.00        |               |                 |                    |
| SUMMARY                                          |                                                                                          |                             |                           |                       |                  |               |                 |                    |
| TOTAL LABOR COSTS (FC 110)                       |                                                                                          |                             |                           |                       |                  | \$13,734.58   |                 |                    |
| TOTAL LABOR COSTS (FC 160)                       |                                                                                          |                             |                           |                       |                  | \$0.00        |                 |                    |
| TOTAL UNIT COST - MATERIALS / TESTING (FC 110)   |                                                                                          |                             |                           |                       |                  | \$21,352.00   |                 |                    |
| TOTAL UNIT COST - OTHER DIRECT EXPENSES (FC 110) |                                                                                          |                             |                           |                       |                  | \$950.00      |                 |                    |
| GRAND TOTAL                                      |                                                                                          |                             | \$36,036.58               |                       |                  |               |                 |                    |

# FEE SCHEDULE

| TASK DESCRIPTION                                                  | PROJECT<br>MANAGER | SURVEYOR<br>RPLS<br>SENIOR | SURVEYOR<br>RPLS | SURVEYOR<br>RPLS<br>JUNIOR | SURVEY<br>TECHNICIAN<br>SIT | SURVEY<br>TECHNICIAN | ADMIN/<br>CLERICAL | TOTAL<br>LABOR HRS.<br>& COSTS | NO OF<br>DWGS | HR<br>/ SHT |
|-------------------------------------------------------------------|--------------------|----------------------------|------------------|----------------------------|-----------------------------|----------------------|--------------------|--------------------------------|---------------|-------------|
| <b>RIGHT-OF-WAY SURVEY</b>                                        |                    |                            |                  |                            |                             |                      |                    |                                |               |             |
|                                                                   |                    |                            |                  |                            |                             |                      |                    | 0                              |               |             |
| ABSTRACTING/PREPARE ABSTRACT MAP                                  | 2                  | 4                          |                  |                            | 4                           | 12                   |                    | 22                             | N/A           | N/A         |
| PREPARE PRELIMINARY RIGHT-OF-WAY SHEETS                           | 2                  | 4                          |                  |                            | 10                          | 18                   |                    | 34                             | N/A           | N/A         |
| PREPARE PARCEL PLATS AND FIELD NOTES (Assume 8 ROW & 2 Esmt Docs) | 4                  | 24                         |                  |                            | 12                          | 24                   |                    | 64                             | 10            |             |
| PREPARE FINAL RIGHT-OF-WAY SHEETS                                 | 3                  | 10                         |                  |                            | 6                           | 12                   |                    | 31                             | N/A           | N/A         |
| HOURS SUB-TOTALS                                                  | 11                 | 42                         | 0                | 0                          | 32                          | 66                   | 0                  | 151                            | 0             |             |
| CONTRACT RATE PER HOUR                                            | \$310.00           | \$265.00                   | \$265.00         | \$265.00                   | \$155.00                    | \$140.00             | \$100.00           |                                |               |             |
| TOTAL LABOR COSTS                                                 | \$3,410.00         | \$11,130.00                | \$0.00           | \$0.00                     | \$4,960.00                  | \$9,240.00           | \$0.00             | \$28,740.00                    |               |             |
| % DISTRIBUTION OF STAFFING                                        | 7.28%              | 27.81%                     | 0.00%            | 0.00%                      | 21.19%                      | 43.71%               | 0.00%              |                                |               |             |
| <b>SUBTOTAL FC 145</b>                                            |                    |                            |                  |                            |                             |                      |                    | <b>\$28,740.00</b>             |               |             |

| TASK DESCRIPTION                                                        | SUPPORT<br>MANAGER | SURVEYOR<br>RPLS<br>SENIOR | SURVEYOR<br>RPLS | SURVEYOR<br>RPLS<br>JUNIOR | SURVEY<br>TECHNICIAN<br>SIT | SURVEY<br>TECHNICIAN | ADMIN/<br>CLERICAL | TOTAL<br>LABOR HRS.<br>& COSTS | NO OF<br>DWGS | HR<br>/ SHT |
|-------------------------------------------------------------------------|--------------------|----------------------------|------------------|----------------------------|-----------------------------|----------------------|--------------------|--------------------------------|---------------|-------------|
| <b>DESIGN SURVEY - TASKS 1</b>                                          |                    |                            |                  |                            |                             |                      |                    |                                |               |             |
| ROE LETTERS, TRACKING, REPORTS                                          | 1                  | 1                          |                  |                            | 1                           | 4                    | 12                 | 19                             | N/A           | N/A         |
| ESTABLISH CONTROL AND DIGITAL LEVEL LOOP                                | 1                  | 2                          |                  |                            | 2                           | 4                    |                    | 9                              | N/A           | N/A         |
| PREPARE CONTROL AND DATA SHEETS                                         | 1                  | 2                          |                  |                            | 1                           | 4                    |                    | 8                              | 2             |             |
| OBSCURED FEATURES, CULVERTS, VISIBLE UTILITIES                          | 1                  | 1                          |                  |                            | 6                           | 10                   |                    | 18                             | N/A           | N/A         |
| MERGE AND UPDATE DTM AND TIN FILES                                      |                    | 1                          |                  |                            | 6                           | 10                   |                    | 17                             | N/A           | N/A         |
| MERGE AND UPDATE PLANIMETRIC FILES                                      | 1                  | 1                          |                  |                            | 8                           | 8                    |                    | 18                             | N/A           | N/A         |
| MAPPING; DRAINAGE FEATURES, VISIBLE UTILITIES, IMPROVEMENTS, X-SECTIONS | 1                  | 2                          |                  |                            | 10                          | 18                   |                    | 31                             | N/A           | N/A         |
| HOURS SUB-TOTALS                                                        | 6                  | 10                         | 0                | 0                          | 34                          | 58                   | 12                 | 120                            | 0             |             |
| CONTRACT RATE PER HOUR                                                  | \$310.00           | \$265.00                   | \$265.00         | \$265.00                   | \$155.00                    | \$140.00             | \$90.00            |                                |               |             |
| TOTAL LABOR COSTS                                                       | \$1,860.00         | \$2,650.00                 | \$0.00           | \$0.00                     | \$5,270.00                  | \$8,120.00           | \$1,080.00         | \$18,980.00                    |               |             |
| % DISTRIBUTION OF STAFFING                                              | 5.00%              | 8.33%                      | 0.00%            | 0.00%                      | 28.33%                      | 48.33%               | 10.00%             |                                |               |             |
| <b>SUBTOTAL FC 160 (150)</b>                                            |                    |                            |                  |                            |                             |                      |                    | <b>\$18,980.00</b>             |               |             |
| <b>DESIGN SURVEY - TASK 3</b>                                           |                    |                            |                  |                            |                             |                      |                    |                                |               |             |
| ROE LETTERS, TRACKING, REPORTS                                          |                    |                            |                  |                            |                             |                      |                    | 0                              | N/A           | N/A         |
| ESTABLISH CONTROL AND DIGITAL LEVEL LOOP                                |                    |                            |                  |                            |                             |                      |                    | 0                              | N/A           | N/A         |
| PREPARE CONTROL AND DATA SHEETS                                         |                    |                            |                  |                            |                             |                      |                    | 0                              | 2             |             |
| OBSCURED FEATURES, CULVERTS, VISIBLE UTILITIES                          |                    |                            |                  |                            |                             | 1                    |                    | 1                              | N/A           | N/A         |
| MERGE AND UPDATE DTM AND TIN FILES                                      |                    |                            |                  |                            |                             | 1                    |                    | 1                              | N/A           | N/A         |
| MERGE AND UPDATE PLANIMETRIC FILES                                      |                    |                            |                  |                            | 1                           | 1                    |                    | 2                              | N/A           | N/A         |
| MAPPING; DRAINAGE FEATURES, VISIBLE UTILITIES, IMPROVEMENTS, X-SECTIONS | 1                  | 1                          |                  |                            | 1                           | 1                    |                    | 4                              | N/A           | N/A         |
| HOURS SUB-TOTALS                                                        | 1                  | 1                          | 0                | 0                          | 2                           | 4                    | 0                  | 8                              | 0             |             |
| CONTRACT RATE PER HOUR                                                  | \$310.00           | \$265.00                   | \$265.00         | \$265.00                   | \$155.00                    | \$140.00             | \$90.00            |                                |               |             |
| TOTAL LABOR COSTS                                                       | \$310.00           | \$265.00                   | \$0.00           | \$0.00                     | \$310.00                    | \$560.00             | \$0.00             | \$1,445.00                     |               |             |
| % DISTRIBUTION OF STAFFING                                              | 12.50%             | 12.50%                     | 0.00%            | 0.00%                      | 25.00%                      | 50.00%               | 0.00%              |                                |               |             |
| <b>SUBTOTAL FC 160 (150)</b>                                            |                    |                            |                  |                            |                             |                      |                    | <b>\$1,445.00</b>              |               |             |

### FEE SCHEDULE

|                                                                         |          |          |          |          |          |          |         |            |     |     |
|-------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|---------|------------|-----|-----|
| <b>DESIGN SURVEY - TASK 4</b>                                           |          |          |          |          |          |          |         |            |     |     |
| ROE LETTERS, TRACKING, REPORTS                                          |          |          |          |          |          |          |         | 0          | N/A | N/A |
| ESTABLISH CONTROL AND DIGITAL LEVEL LOOP                                |          |          |          |          |          |          |         | 0          | N/A | N/A |
| PREPARE CONTROL AND DATA SHEETS                                         |          |          |          |          |          |          |         | 0          | 2   |     |
| OBSCURED FEATURES, CULVERTS, VISIBLE UTILITIES                          |          |          |          |          | 1        | 1        |         | 2          | N/A | N/A |
| MERGE AND UPDATE DTM AND TIN FILES                                      |          |          |          |          | 1        | 1        |         | 2          | N/A | N/A |
| MERGE AND UPDATE PLANIMETRIC FILES                                      |          |          |          |          | 1        | 1        |         | 2          | N/A | N/A |
| MAPPING; DRAINAGE FEATURES, VISIBLE UTILITIES, IMPROVEMENTS, X-SECTIONS | 1        | 1        |          |          | 1        | 1        |         | 4          | N/A | N/A |
| <b>HOURS SUB-TOTALS</b>                                                 | 1        | 1        | 0        | 0        | 4        | 4        | 0       | 10         | 0   |     |
| CONTRACT RATE PER HOUR                                                  | \$310.00 | \$265.00 | \$265.00 | \$265.00 | \$155.00 | \$140.00 | \$90.00 |            |     |     |
| TOTAL LABOR COSTS                                                       | \$310.00 | \$265.00 | \$0.00   | \$0.00   | \$620.00 | \$560.00 | \$0.00  | \$1,755.00 |     |     |
| % DISTRIBUTION OF STAFFING                                              | 10.00%   | 10.00%   | 0.00%    | 0.00%    | 40.00%   | 40.00%   | 0.00%   |            |     |     |
| <b>SUBTOTAL FC 160 (150)</b>                                            |          |          |          |          |          |          |         | \$1,755.00 |     |     |

| LABOR SUMMARY BY FUNCTION CODE   | SUPPORT<br>MANAGER | SURVEYOR<br>RPLS<br>SENIOR | SURVEYOR<br>RPLS | SURVEYOR<br>RPLS<br>JUNIOR | SURVEY<br>TECHNICIAN<br>SIT | SURVEY<br>TECHNICIAN | ADMIN/<br>CLERICAL | TOTAL MH BY FC | TOTAL COSTS BY FC |
|----------------------------------|--------------------|----------------------------|------------------|----------------------------|-----------------------------|----------------------|--------------------|----------------|-------------------|
| RIGHT-OF-WAY SURVEY FC 130 (130) | 11                 | 42                         | 0                | 0                          | 32                          | 66                   | 0                  | 151            | \$28,740.00       |
| Design Survey Task 1, 3 & 4      | 8                  | 12                         | 0                | 0                          | 40                          | 66                   | 12                 | 138            | \$22,180.00       |
| <b>SUBTOTAL LABOR EXPENSES</b>   | 19                 | 54                         | 0                | 0                          | 72                          | 132                  | 12                 |                | \$50,920.00       |

| UNIT COSTS                                         | # OF UNITS | Crew<br>COST/UNIT | UNIT |  |  |  |             |
|----------------------------------------------------|------------|-------------------|------|--|--|--|-------------|
| FIELD SURVEY - LOCATE ROW/PROPERTY CORNERS - ROW   | 30         | \$ 200.00         | hour |  |  |  | \$6,000.00  |
| SET ROW MONUMENTS AND PARCEL CORNERS - ROW         | 30         | \$ 200.00         | hour |  |  |  | \$6,000.00  |
| ESTABLISH HORIZONTAL AND VERTICAL CONTROL - Task 1 | 24         | \$ 200.00         | hour |  |  |  | \$4,800.00  |
| FIELD SURVEY - OBTAIN DESIGN SURVEY DATA - Task 1  | 60         | \$ 200.00         | hour |  |  |  | \$12,000.00 |
| FIELD SURVEY - OBTAIN DESIGN SURVEY DATA - Task 3  | 4          | \$ 200.00         | hour |  |  |  | \$800.00    |
| FIELD SURVEY - OBTAIN DESIGN SURVEY DATA - Task 4  | 5          | \$ 200.00         | hour |  |  |  | \$1,000.00  |
| <b>SUBTOTAL UNIT COSTS</b>                         | 153        |                   |      |  |  |  | \$30,600.00 |

| OTHER DIRECT EXPENSES           | # OF UNITS | COST/UNIT | UNIT  |  |  |  |          |
|---------------------------------|------------|-----------|-------|--|--|--|----------|
| Mileage                         | 920        | \$0.70    | mile  |  |  |  | \$644.00 |
| Certified Letter Return Receipt | 8          | \$5.00    | each  |  |  |  | \$40.00  |
| Standard Postage                | 0          | \$0.62    | each  |  |  |  | \$0.00   |
| Deed Copies                     | 26         | \$1.00    | sheet |  |  |  | \$26.00  |
| <b>SUBTOTAL DIRECT EXPENSES</b> |            |           |       |  |  |  | \$710.00 |

| SUMMARY                                         | Total       | ROW         | Design      |
|-------------------------------------------------|-------------|-------------|-------------|
| TOTAL COSTS FOR SUR ONLY                        | \$50,920.00 | \$28,740.00 | \$22,180.00 |
| NON-SALARY (UNIT COSTS) FOR SUR ONLY            | \$30,600.00 | \$12,000.00 | \$18,600.00 |
| NON-SALARY (OTHER DIRECT EXPENSES) FOR SUR ONLY | \$710.00    | \$260.00    | \$450.00    |
| TASK 2 - DETENTION POND SURVEY (OPTIONAL)       | \$3,500.00  |             | \$3,500.00  |
| <b>GRAND TOTAL</b>                              | \$85,730.00 | \$41,000.00 | \$44,730.00 |

**FEE SCHEDULE**

| TASK DESCRIPTION                                                                        | PROJECT<br>MANAGER | ENGINEER<br>SENIOR | ENGINEER<br>PROJECT | ENGINEER<br>UTILITIES | ENGINEER<br>TECHNICIAN | ENGINEER<br>IN<br>TRAINING I | UTILITIES<br>COORDINATOR<br>SENIOR | UTILITIES<br>COORDINATOR | UTILITIES<br>FIELD INSPECTOR<br>SENIOR | UTILITIES<br>FIELD<br>INSPECTOR | ENGINEERING<br>SPECIALIST<br>(UTILITY) | ADMIN/<br>CLERICAL | TOTAL<br>LABOR HRS.<br>& COSTS | NO OF<br>DWGS | HR<br>/ SHT |
|-----------------------------------------------------------------------------------------|--------------------|--------------------|---------------------|-----------------------|------------------------|------------------------------|------------------------------------|--------------------------|----------------------------------------|---------------------------------|----------------------------------------|--------------------|--------------------------------|---------------|-------------|
| <b>Utility Engineering</b>                                                              |                    |                    |                     |                       |                        |                              |                                    |                          |                                        |                                 |                                        |                    |                                |               |             |
| Utility Base Layout                                                                     | 2                  |                    |                     |                       | 24                     | 24                           | 8                                  |                          |                                        |                                 |                                        |                    | 58                             | N/A           | N/A         |
| Utility Coordination Meetings                                                           | 24                 |                    |                     |                       |                        | 20                           | 48                                 |                          |                                        |                                 |                                        |                    | 92                             | N/A           | N/A         |
| Utility Kick Off Mtg & Field Review                                                     | 8                  |                    |                     |                       |                        |                              | 8                                  |                          |                                        |                                 |                                        |                    | 16                             | N/A           | N/A         |
| Utility Conflict Matrix, CAD file and Contact List, Progress Mtgs w State and it's reps | 12                 |                    |                     |                       |                        | 20                           | 20                                 |                          |                                        |                                 |                                        | 12                 | 64                             | N/A           | N/A         |
| <b>Utility Coordination</b>                                                             |                    |                    |                     |                       |                        |                              |                                    |                          |                                        |                                 |                                        |                    |                                |               |             |
| HOURS SUB-TOTALS                                                                        | 46                 | 0                  | 0                   | 0                     | 24                     | 64                           | 84                                 | 0                        | 0                                      | 0                               | 0                                      | 12                 | 230                            | #REF!         |             |
| CONTRACT RATE PER HOUR                                                                  | \$380.00           | \$100.00           | \$200.00            | \$100.00              | \$135.00               | \$140.00                     | \$190.00                           | \$100.00                 | \$100.00                               | \$100.00                        | \$100.00                               | \$100.00           |                                |               |             |
| TOTAL LABOR COSTS                                                                       | \$17,480.00        | \$0.00             | \$0.00              | \$0.00                | \$3,240.00             | \$8,960.00                   | \$15,960.00                        | \$0.00                   | \$0.00                                 | \$0.00                          | \$0.00                                 | \$1,200.00         | \$46,840.00                    |               |             |
| % DISTRIBUTION OF STAFFING                                                              | 20.00%             | 0.00%              | 0.00%               | 0.00%                 | 10.43%                 | 27.83%                       | 36.52%                             | 0.00%                    | 0.00%                                  | 0.00%                           | 0.00%                                  | 5.22%              |                                |               |             |
| <b>SUBTOTAL</b>                                                                         |                    |                    |                     |                       |                        |                              |                                    |                          |                                        |                                 |                                        |                    | <b>\$46,840.00</b>             |               |             |

| LABOR SUMMARY BY FUNCTION CODE | PROJECT<br>MANAGER | ENGINEER<br>SENIOR | ENGINEER<br>PROJECT | ENGINEER<br>UTILITIES | ENGINEER<br>IN<br>TRAINING II | ENGINEER<br>IN<br>TRAINING I | UTILITIES<br>COORDINATOR<br>SENIOR | UTILITIES<br>COORDINATOR | UTILITIES<br>FIELD INSPECTOR<br>SENIOR | UTILITIES<br>FIELD<br>INSPECTOR | ENGINEERING<br>SPECIALIST<br>(UTILITY) | ADMIN/<br>CLERICAL | TOTAL MH | TOTAL COSTS |
|--------------------------------|--------------------|--------------------|---------------------|-----------------------|-------------------------------|------------------------------|------------------------------------|--------------------------|----------------------------------------|---------------------------------|----------------------------------------|--------------------|----------|-------------|
| Utility Engineering            | 46                 | 0                  | 0                   | 0                     | 24                            | 64                           | 84                                 | 0                        | 0                                      | 0                               | 0                                      | 12                 | 230      | \$46,840.00 |
| <b>SUBTOTAL LABOR EXPENSES</b> | 46                 | 0                  | 0                   | 0                     | 24                            | 64                           | 84                                 | 0                        | 0                                      | 0                               | 0                                      | 12                 |          | \$46,840.00 |

| UNIT COSTS                                                                 | # OF UNITS | COST/UNIT  | UNIT |  |  |  |  |  |  |  |  |  |                    |
|----------------------------------------------------------------------------|------------|------------|------|--|--|--|--|--|--|--|--|--|--------------------|
| SUE Mobilization/Demobilization                                            | 80         | \$5.50     | mile |  |  |  |  |  |  |  |  |  | \$440.00           |
| SUE (Quality Level D)                                                      | 5,600      | \$0.40     | LF   |  |  |  |  |  |  |  |  |  | \$2,240.00         |
| SUE (Quality Level C)                                                      | 0          | \$0.40     | LF   |  |  |  |  |  |  |  |  |  | \$0.00             |
| SUE (Quality Level B - Utility Designation)                                | 2,800      | \$1.85     | LF   |  |  |  |  |  |  |  |  |  | \$5,180.00         |
| SUE (Quality Level A - Utility Locate, Test Holes) Level A: 0 to 5 ft      | 4          | \$1,500.00 | each |  |  |  |  |  |  |  |  |  | \$6,000.00         |
| SUE (Quality Level A - Utility Locate, Test Holes) Level A: > 5 to 8 ft    | 4          | \$1,750.00 | each |  |  |  |  |  |  |  |  |  | \$7,000.00         |
| SUE (Quality Level A - Utility Locate, Test Holes) Level A: > 8 to 13 ft   | 2          | \$1,900.00 | each |  |  |  |  |  |  |  |  |  | \$3,800.00         |
| SUE (Quality Level A - Utility Locate, Test Holes) Level A: > 13 to 20 ft  | 0          | \$2,500.00 | each |  |  |  |  |  |  |  |  |  | \$0.00             |
| SUE (Quality Level A - Utility Locate, Test Holes) Level A: > 20 ft        | 0          | \$175.00   | FT   |  |  |  |  |  |  |  |  |  | \$0.00             |
| One (1) Designating Person with equipment                                  | 8          | \$150.00   | hour |  |  |  |  |  |  |  |  |  | \$1,200.00         |
| Two (2) Designating Person with equipment                                  | 8          | \$200.00   | hour |  |  |  |  |  |  |  |  |  | \$1,600.00         |
| Two (2) Person Vacuum Excavation with equipment                            | 0          | \$300.00   | hour |  |  |  |  |  |  |  |  |  | \$0.00             |
| Coring and repairing the pavement includes labor, equipment, and materials | 2          | \$250.00   | each |  |  |  |  |  |  |  |  |  | \$500.00           |
| <b>SUBTOTAL UNIT COSTS</b>                                                 |            |            |      |  |  |  |  |  |  |  |  |  | <b>\$27,960.00</b> |

| OTHER DIRECT EXPENSES                                                                               | # OF UNITS | COST/UNIT  | UNIT |  |  |  |  |  |  |  |  |  |                   |
|-----------------------------------------------------------------------------------------------------|------------|------------|------|--|--|--|--|--|--|--|--|--|-------------------|
| Mileage                                                                                             | 0          | \$5.500    | mile |  |  |  |  |  |  |  |  |  | \$0.00            |
| Traffic Control Services, Arrow Boards and Attenuator trucks - (Includes labor, equipment and fuel) | 1          | \$5,250.00 | day  |  |  |  |  |  |  |  |  |  | \$5,250.00        |
| <b>SUBTOTAL DIRECT EXPENSES</b>                                                                     |            |            |      |  |  |  |  |  |  |  |  |  | <b>\$5,250.00</b> |

| SUMMARY                                         |                    |
|-------------------------------------------------|--------------------|
| TOTAL COSTS FOR SUE ONLY                        | \$46,840.00        |
| NON-SALARY (UNIT COSTS) FOR SUE ONLY            | \$27,960.00        |
| NON-SALARY (OTHER DIRECT EXPENSES) FOR SUE ONLY | \$5,250.00         |
| <b>GRAND TOTAL</b>                              | <b>\$80,050.00</b> |

**APPENDIX A-2**  
**Scope of Services (Hourly)**

The work to be performed by the Engineer for additional services shall be approved in writing by the County, or LJA, prior to the Engineer starting any work on the task. Prior to initiating any work, the Engineer shall submit a scope of services and a proposed fee for each requested task for the County's review and approval. Tasks may include, but are not limited to, Construction Phase services or any other services deemed necessary by the County for the project.

**Appendix B**  
**Maximum Hourly Rates and Expenses**

Schaumburg & Polk, Inc.

| <b>Job Classification</b>                           | <b>Maximum Raw Salary Rate</b> |
|-----------------------------------------------------|--------------------------------|
| Principal                                           | \$120.00                       |
| Senior Project Manager                              | \$113.00                       |
| Deputy Project Manager                              | \$100.00                       |
| Support Manager                                     | \$104.00                       |
| Quality Manager                                     | \$113.00                       |
| Senior Project Engineer                             | \$98.00                        |
| Project Engineer                                    | \$80.00                        |
| Design Engineer                                     | \$67.00                        |
| Senior Traffic Engineer                             | \$98.00                        |
| Traffic Engineer                                    | \$80.00                        |
| Senior Structural Engineer                          | \$92.00                        |
| Structural Engineer                                 | \$50.00                        |
| Engineer-In-Training II                             | \$55.00                        |
| Engineer-In-Training I                              | \$49.00                        |
| Senior CADD Technician                              | \$58.00                        |
| CADD Technician                                     | \$48.00                        |
| Junior CADD Technician                              | \$40.00                        |
| Senior Engineering Technician                       | \$58.00                        |
| Engineering Technician                              | \$50.00                        |
| Junior Engineering Technician                       | \$40.00                        |
| GIS Technician                                      | \$45.00                        |
| Admin/Clerical                                      | \$41.00                        |
| Geotechnical Project Manager                        | \$82.00                        |
| Geotechnical Engineer                               | \$73.00                        |
| Senior Environmental Planner                        | \$92.00                        |
| Environmental Planner                               | \$73.00                        |
| Junior Environmental Planner                        | \$39.00                        |
| Survey Project Manager (TX RPLS)                    | \$104.00                       |
| Project Manager (TX RPLS)                           | \$89.00                        |
| Survey Technician                                   | \$52.00                        |
| 2-Person Survey Crew                                | \$67.00                        |
| SUE Project Manager                                 | \$127.00                       |
| SUE Senior Utility Coordinator                      | \$64.00                        |
| SUE Engineer-In-Training                            | \$47.00                        |
| SUE Engineering Technician                          | \$45.00                        |
| SUE One (1) designating person with equipment       | \$50.00                        |
| SUE Two (2) designating person with equipment       | \$67.00                        |
| SUE Two (2) person vacuum excavation with equipment | \$100.00                       |

## **Appendix C**

### **Insurance**

Engineer's Insurance Requirements. Throughout the term of this Agreement, Engineer shall carry and maintain in force the insurance described herein.

Commercial General Liability Insurance at least as broad as CG 00 01 (including protective liability coverage on operations of independent Engineers engaged in construction, blanket contractual liability coverage, products liability coverage, and explosion, collapse and underground hazards coverage) for the benefit of Engineer, against claims for personal injury, bodily injury and property damage, with a limit of not less than One Million Dollars (\$1,000,000) in the event of personal injury or bodily injury to any number of persons or of damage to property arising out of any one occurrence, and not less than \$1,000,000 in the aggregate applicable to this Program.

Workers' compensation insurance covering all employees of Engineer employed in, on or about the Program in order to provide statutory benefits as required by the laws of the State of Texas.

Automobile Liability: \$300,000 combined single limit per accident for bodily injury and property damage. County shall be named as Additional Insured for this coverage.

Professional Liability: \$1,000,000 aggregate covering Engineer in connection with the services to be provided by Engineer under this Agreement.

Engineer shall, upon County's request, furnish County with appropriate certificates evidencing the insurance required to be maintained by Engineer hereunder.