

## ENGINEERING SERVICES AGREEMENT

**THIS AGREEMENT** is made and entered by and between COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas, hereinafter referred to as "County", and, HALFF ASSOCIATES, INC., a Texas Corporation, hereinafter referred to as "Engineer", to be effective from and after the date as provided herein.

### WITNESSETH:

**WHEREAS**, the County desires to engage the services of the Engineer to prepare construction plans, specifications, details and special provisions and to perform other related engineering services in connection with the future extension of Park Boulevard from F.M. Highway No. 2514 (Parker Road) east to State Highway 78 in Wylie, Texas, hereinafter referred to as the "Project"; and;

**WHEREAS**, the Engineer desires to render such engineering services for the County upon the terms and conditions provided herein.

### NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

That for and in consideration of the covenants contained herein, and for the mutual benefits to be obtained hereby, the parties hereto agree as follows:

#### **1. Retention of the Engineer**

The County hereby agrees to retain the Engineer to perform professional engineering services in connection with the Project; Engineer agrees to perform such services in accordance with the terms and conditions of this Agreement, exercising the same degree of care, skill, and diligence as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances.

#### **II. Summary of Tasks and Scope of Services**

2.1 The parties agree that Engineer shall perform such services as are set forth herein and described in Exhibits "A" and "B", which is attached hereto and thereby made a part of this Agreement. Work for each phase shall be preceded by a Notice to Proceed issued by County. The parties understand and agree that deviations or modifications in the form of written contract amendments may be authorized from time to time by the County.

2.2 The Engineer will serve as the County's professional engineering representative under this Agreement, providing professional engineering, consultation, advice and furnishing customary services incidental thereto. The Engineer agrees to cooperate and coordinate with other design professionals, the County and its contractors to help facilitate efficient construction of the Project and maintain the Project schedule.

2.3 The Engineer shall advise the County with regard to the necessity for subcontract work such as special surveys, tests, test borings, or other subsurface investigations in connection with design and engineering work to be performed hereunder. The Engineer shall also advise the County concerning the results of same. Such survey, test, and investigations shall be furnished to the County.

2.4 The presence or duties of the Engineer's personnel at a construction site, whether as on-site representatives or otherwise, do not make the Engineer or its personnel in any way responsible for those duties that belong to County's construction contractors or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties, and responsibilities, including but not limited to, all construction methods, means, techniques, sequences and procedures necessary for completing all portions of the construction work in accordance with the Contract Documents and any health or safety precautions required by such construction work. The Engineer and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions.

2.5 The Engineer will make periodic recommendations for periodic construction progress payments to the construction contractor. Recommendations by the Engineer to the County for periodic construction progress payments to the construction contractor will be based on the Engineer's knowledge, information, and belief from sampling and observation that the work has progressed to the point indicated. Such recommendations do not represent that there are not other matters at issue between the County and the construction contractor that affect the amount that should be paid.

2.6 The Engineer agrees to provide a complete and coordinated set of drawings and specifications for the construction of the Project, exercising the same degree of care, skill, and diligence as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. Construction drawings, specifications, and other construction documents prepared by the Engineer or its consultants and submitted to the County for approval or contractors for bidding or negotiation purposes shall be complete and capable of construction "as is". While the utility of communications between design professionals and construction contractors for the purpose of clarifying design intent is recognized, the Project should be capable of construction without the necessity of formal revisions or contract modifications to provide missing design information after construction contracts are awarded. Said documents shall comply with all applicable codes, ordinances, statutes, and regulations governing the design of the Project.

2.7 The Engineer shall assist the County in the preparation and filing of documents required for the approval of governmental authorities having jurisdiction over the Project.

### **III. Schedule of Services**

3.1 The Engineer agrees to commence its services immediately upon execution of this Agreement, or as otherwise directed in writing by the County, and to proceed diligently with said services to completion. Engineer shall not be considered in default of this Agreement for delays in performance caused by circumstances beyond its reasonable control. Should such circumstances occur, the Engineer shall, within a reasonable time of being prevented from performing, give written notice to the County describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

3.2 In the event that the Engineer is delayed in the progress of the work on the Project by an act or neglect of the County, County's employees, or separate contractors employed by the County, or by changes ordered in the Project, fire, adverse weather conditions not reasonably anticipated, unavoidable casualties or other causes beyond the Engineer's control, or delay authorized by the County pending arbitration, or by other causes which the County and Engineer agree may justify delay, then the Contract Time shall be reasonably extended by Contract Amendment. The County shall have the right at any time to delay or

suspend the work or any part thereof for any reasonable time and if this happens, the Engineer's sole remedy for any delays or suspension shall be any extension of time. However, should the delay continue for more than one year past the original completion date in the completion schedule, the Engineer may request to renegotiate their professional fee provided that the fee is reasonable and substantiated by documents showing the need for the requested increase. Any request for a fee increase shall be submitted to Collin County Commissioners' Court for final approval. The County shall not be independently liable to the Engineer for any delay or interference caused by circumstances beyond the County's control or any delay caused by any other person or entity.

#### **IV. Compensation and Method of Payment**

The parties agree that Engineer shall be compensated for all services provided pursuant to this Agreement in the amount and manner described and set forth in the Payment Schedule attached hereto as Exhibit "C" and thereby made a part of this Agreement. Engineer further agrees that it will prepare and present such monthly progress reports and itemized statements as are described in said Exhibit "C". Payment will be made in accordance with The Texas Government Code, Title 10, Subtitle F, Chapter 2251. Engineer further agrees to the following terms prior to payment being due by County:

##### **A. Invoice and Payment**

- (1) The Engineer shall provide the County sufficient documentation to reasonably substantiate the invoices.
- (2) The Engineer will issue monthly invoices for all work performed under the Agreement.
- (3) In the event of disputed or contested billing, only that portion so contested will be withheld from payment, and the undisputed portion will be paid. The County will exercise reasonableness in contesting any portion thereof. NO interest will accrue on any contested portion of the billing until mutually resolved.
- (4) In the event of any conflict between Paragraph IV and Chapter 2251 of the Texas Government Code, The Texas Government Code shall prevail.

#### **V. Information to be provided by the County**

5.1 The County agrees to furnish to Engineer, prior to the Engineer's commencement of its services, all that information set forth and described on Exhibit "E", which is attached hereto and thereby made a part of this Agreement.

5.2 The County will make its facilities accessible to the Engineer as required for the Engineer's performance of its services. The Engineer represents that it understands the scope of this Agreement and has reviewed and inspected the Project sites, and can fully perform its obligations pursuant to this Agreement. Any failure of the Engineer to acquaint itself with the available information will not relieve the Engineer from its responsibilities pursuant to this Agreement.

5.3 The County shall disclose, to the extent known to the County, the results of prior tests, inspections or investigations conducted for the Project upon request by the Engineer.

## **VI. Progress Meetings**

In addition to providing the monthly progress reports as required under Paragraph IV herein above, Engineer agrees to attend all monthly progress meetings scheduled by County, and at such meetings to outline work accomplished and special problem or delays encountered in connection with the Project during the previous report period, as well as planned work activities and special problems and delays anticipated for the next report period. The Engineer agrees to cooperate and coordinate with other design professionals, the County and its contractors to help facilitate efficient construction of the Project and maintain the Project schedule.

## **VII. Insurance**

Engineer agrees to meet all insurance requirements as set forth on Exhibit "F" which is attached hereto and thereby made a part of this Agreement.

## **VIII. Indemnity**

8.1 The Engineer agrees to the fullest extent permitted by law, to indemnify and hold harmless the County and its officers, agents and employees of and from damages, injuries (including death), claims, property damages (including loss of use), losses, demands, suits, judgments and costs, including reasonable attorney's fees and expenses, arising out of or occasioned by Engineer's breach of any of the terms or provisions of this Agreement, or by any other negligent act, error or omission of the Engineer, its agents, servants, employees, subcontractors, licensees, invitees, or any other persons or entities for whose acts the Engineer is legally liable.

8.2 In claims against any person or entity indemnified under this Section 8.1 by an employee of the Engineer, anyone directly or indirectly employed by the Engineer or anyone for whose acts the Engineer may be liable, the indemnification obligation under this Section 8.1 shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the Engineer under workers' compensation acts, disability benefit acts or other employee benefit acts.

## **IX. Independent Contractor**

In the performance of services hereunder, the Engineer shall be deemed an independent contractor and shall not, with respect to its acts or omissions, be deemed an agent, subcontractor or employee of the County.

## **X. Assignment and Subletting**

The Engineer agrees that neither this Agreement nor the services to be performed hereunder will be assigned or sublet without the prior written consent of the County. The Engineer further agrees that the assignment or subletting or any portion or feature of the services required in the performance of this Agreement shall not relieve the Engineer from its full obligations to the County as provided by this Agreement.

## **XI. Audits and Records/Conflict of Interest**

11.1 The Engineer agrees that at any time during normal business hours, and as often as County may deem necessary, Engineer shall make available to representatives of the County for examination all of its records with respect to all matters covered by this Agreement, and will permit such representatives of the County to audit, examine, copy and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement, all for a period of three (3) years from the date of final settlement of this Agreement or of such other or longer period, if any, as may be required by applicable statute or other lawful requirements.

11.2 The Engineer agrees that it is aware of the conflict of interest requirements of the state law which are applicable to persons entering into contracts with the County and will abide by the same. Further, a lawful representative of Engineer shall execute the Affidavit shown in Exhibit "F". Engineer understands and agrees that the existence of a conflict of interest during the term of this Agreement will render the agreement voidable.

11.3 The Engineer acknowledges to the County that it has made full disclosure in writing of any existing conflicts of interest or potential conflicts of interest, including personal financial interest, direct or indirect, in property abutting the proposed Project and business relationships with persons or entities with interest in abutting properties.

## **XII. Contract Termination**

The parties agree that County shall have the right to terminate this Agreement without cause upon thirty (30) days written notice to Engineer. In the event of such termination without cause, Engineer shall deliver to County all finished or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs or other items prepared by Engineer in connection with this Agreement. Engineer shall have the right to terminate this Agreement upon thirty (30) days written notice to County in the event of the County's breach of any material term of this Agreement, including but not limited to compensation and method of payment. Regardless of which party initiates termination, Engineer shall be entitled to compensation for any and all services completed to the satisfaction of County in accordance with the provisions of this Agreement prior to termination.

## **XIII. Cost Estimates**

The parties recognize and agree that any and all Engineer's estimates of probable construction costs (estimates) prepared by Engineer in connection with the Project represent the best judgment of Engineer as a design professional familiar with the construction industry, but that the Engineer has no control over costs or the price of labor, equipment or materials or over the Contractor's methods of pricing and does not guarantee that any bids solicited or received in connection with the Project will not vary from estimates prepared by Engineer.

## **XIV. Ownership of Documents**

Original drawings and specifications (Instruments of Service) created by Engineer are the property of the Engineer; however, the Project is the property of the County, and Engineer may not use the drawings and specifications for any purpose not relating to the Project without County's consent. County shall be furnished with such reproductions of drawings and specifications as County may reasonably require. Upon completion of the services or any

earlier termination of this Agreement under Article XII, and payment in full of all monies due Engineer, Engineer will revise drawings to reflect significant changes made during construction as per the marked-up prints, drawings, and other data furnished to the Engineer by or through the County or Contractor. Engineer will promptly furnish the County with one (1) complete set of reproducible record prints. All such reproductions shall be the property of the County who may use them without the Engineer's permission for any proper purpose relating to the Project, including but not limited to, maintenance of the Project, additions to the Project, or completion of the Project. The aforementioned revisions will be based upon information supplied by the County's construction contractor and will be assumed by Engineer to be complete and accurate. As such, Engineer shall not be responsible for errors or omissions resulting therefrom. Prints shall be furnished, as an additional service, at any other time requested by County. The County may use such drawings in any manner it desires; provided, however, that the Engineer shall not be liable for the use of such drawings for any project other than the Project described herein.

#### **XV. Complete Contract**

15.1 This Agreement, including the exhibits hereto numbered "A" through "G", constitute the entire agreement by and between the parties regarding the subject matter hereof and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified or canceled by a duly executed written instrument, signed by the County and the Engineer.

15.2 Warranties contained in this Agreement are in addition to and not in lieu of, any and all other liability imposed upon the Engineer by law with respect to the Engineer's duties, obligations, and performance hereunder. The Engineer's liability hereunder shall survive the County's final acceptance and payment for the Project. All representations and warranties set forth in this Agreement, including without limitation, this paragraph, shall survive the final completion of the Work or earlier termination of this Agreement. The Engineer acknowledges that the County is relying upon the Engineer's skill and experience in performing the services pursuant to this Agreement.

#### **XVI. Mailing of Notices**

Unless instructed otherwise in writing, Engineer agrees that all notices or communications to the County permitted or required under this Agreement shall be addressed to the County at the following address:

Collin County Engineering  
Attn: Ruben Delgado, PE  
4690 Community Ave., Ste. 200  
McKinney, TX 75071

County agrees that all notices or communications to Engineer permitted or required under this Agreement shall be addressed to Engineer at the following address:

Half Associates, Inc.  
Attn: Dennis Satre, PE  
3803 Parkwood Blvd., Ste. 800  
Frisco, TX 75034

All notices or communications required to be given in writing by one party or the other shall be considered as having been given to the date such notice or communication is posted by

the sending party.

## **XVII. Miscellaneous**

### **A. Paragraph Headings**

The paragraph headings contained herein are for convenience only and are not intended to define or limit the scope of any provision in this Agreement.

### **B. Interpret Contract Fairly**

Although this Agreement is drafted by County, should any part be in dispute, the parties agree that the Agreement shall not be construed more favorable for either party.

### **C. Venue/Governing Law**

The parties agree that the laws of the State of Texas shall govern this Agreement, and that it is performable in Collin County, Texas. The venue for any litigation related to this Agreement shall be in Collin County, Texas.

### **D. Parties Bound**

County and Engineer, and their partners, successors, subcontractors, executors, legal representatives, and administrators are hereby bound to the terms and conditions of this Agreement.

### **E. Severability**

In the event a term, condition, or provision of this Agreement is determined to be void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision shall be deleted and the remainder of the Agreement shall remain in full force and effect.

### **F. Effective Date**

This Agreement shall be effective from and after execution by both parties hereto.

### **G. Term of Agreement**

The term of Agreement shall conform to the schedule as stipulated in Exhibit "A" attached herein. No other extension shall be authorized unless granted by written agreement between the County and Engineer.

### **H. Observe and Comply**

Engineer shall at all times observe and comply with all federal and State laws and regulations and with all City ordinances and regulations which in any way affect this Agreement and the work hereunder, and shall observe and comply with all orders, laws, ordinances and regulations which may exist or may be enacted later by governing bodies having jurisdiction or authority for such enactment. No plea of misunderstanding or ignorance thereof shall be considered. Engineer agrees to defend, indemnify and hold harmless County and all of its officers, agents, and employees from and against all claims or liability arising out of the violation or any such order, law, ordinance, or regulation, whether it be by itself or its employees.

WITNESS OUR HANDS AND SEALS on the date indicated below.

Date: 2/27/14

COLLIN COUNTY, TEXAS

By: Michalyn Rains  
Michalyn Rains, CPPO, CPPB  
Purchasing Agent  
Court Order No. 2014-081-02-10

Date: 25 February 2014

Dennis Satre  
By: Dennis Satre  
Title: Vice - President  
HALFF ASSOCIATES, INC.

*4/2/14*

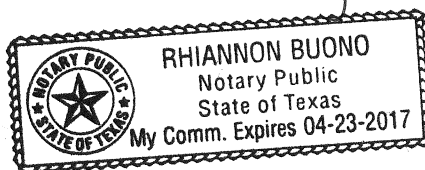
**ACKNOWLEDGMENT**

STATE OF TEXAS }  
 }  
COUNTY OF COLLIN }

BEFORE ME, Dennis Satri, on this day personally appeared Vice President, of Halt Associates, Inc., a Texas Corporation, known to me (or proved to me on the oath of \_\_\_\_\_ or through Texas Drivers License (description of identity card or other document) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of the corporation, for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 25<sup>th</sup> day of February, 2014.

Rhiannon Buono  
Notary Public, State of Texas



Rhiannon Buono  
Printed Name

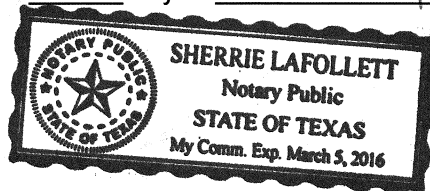
My Commission expires on the 23<sup>RD</sup> day of April, 2017.

STATE OF TEXAS }  
 }  
COUNTY OF COLLIN }

BEFORE ME, Sherrie LaFollett on this day personally appeared Michalyn Rains, CPPO, CPPB, Purchasing Agent of COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of COLLIN COUNTY, TEXAS, for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 27 day of February, 2014.

Sherrie LaFollett  
Notary Public, State of Texas



Sherrie LaFollett  
Printed Name

My Commission expires on the 5 day of March, 2016.

**Exhibit "A"**  
**Park Boulevard Summary of Tasks and Fees**

Phase 1 = \$145,900 (4 to 6 Months)

- Study scope intended to complete the "Preliminary Information" requirements in USACE's Non-Recreational Outgrant Policy (NROP) ENCLOSURE #1.
- Identify and prepare documents to support the project purpose, need and objective.
- Conduct coordination meetings with USACE and evaluate viable alternatives.
- Prepare a preliminary site plan for the roadway on USACE lands.
- Field survey critical topographic and property features.
- Identify and map wetlands and Waters of the US.

Phase 2 = \$287,200 (10 to 12 months with EA, 6 to 8 months without EA)

- Contingent on positive response from USACE for Phase 1
- Study scope intended to complete the "Detailed Information" requirements in NROP ENCLOSURE #1.
- Refine site plan for roadway and prepare detailed earthwork computation for lake storage modifications.
- Conduct coordination and negotiation with USACE to identify all required mitigation actions and/or payments (NROP ENCLOSURE #3).
- Detailed survey of existing Corp property boundary.
- Includes Environmental Assessment (EA) document to comply with USACE procedures (NROP ENCLOSURE #2).
- If USACE fully waives EA requirement, Phase 2 fee will be reduced approximately 50%.

Phase 3 = \$425,500 (8 to 10 months)

- Contingent on positive response from USACE for Phase 2
- Scope is intended to provide the County with all information necessary to obtain an executed road easement document.
- Includes preliminary roadway design for the segment between Paul Wilson Road and the revised connection to Forrest Ross Road.
- Includes signed and seal paving, drainage, grading and bridge layouts for roadway on USACE lands (NROP ENCLOSURE #4).
- Detailed field survey legal descriptions and parcel exhibits for proposed roadway easement on USACE lands.
- Preliminary geotechnical work to confirm bridge and/or culvert design assumptions
- Existing utility mapping for preliminary design limits.

**TOTAL COST for Phases 1 thru 3                    \$858,600**

Phase 4 = \$1,473,800\*\* (12 to 15 months)

- Contingent on USACE approval and availability of Collin County construction funds.
- Complete construction documents for a 4 lane divided roadway from Parker Road to SH78.
- Estimated construction cost in today's dollars is \$18.5 million.
- Includes at grade crossing of KCS railroad.
- Revised ROW parcel acquisition documents for new alignment.
- Prepare NCTCOG Environmental checklist and Section 404 permit documentation.
- Final geotechnical work

\*\* Subject to successful completion of Phases 1 thru 3 and future approval by Commissioners Court. Fee shown is approximate based on current project design elements.

EXHIBIT "B"  
SCOPE OF SERVICES

TO BE PROVIDED BY HALFF ASSOCIATES, INC.  
TO  
COLLIN COUNTY, TEXAS  
FOR  
PARK BOULEVARD EXTENSION  
**BOND PROJECT #07-099**

**A. PROJECT DESCRIPTION**

The COUNTY proposes to construct Park Boulevard from FM2514 (Parker Road) to SH78 which consists of approximately 13,300 linear feet of a 4-lane divided concrete pavement section that will accommodate an ultimate 6-lane facility within a 120' wide right of way. Services by the CONSULTANT shall include all aspects of the work set forth in the following scope of services.

The parameters for planning and design of the improvements shall include all or part of the following as authorized by Collin County:

1. Preliminary design of Park Boulevard as a new location facility from Paul Wilson Road to Skyview Road at a point approximately 2,000 feet east of Paul Wilson Road. Designs shall include work extending 200' north and south along and within the existing Paul Wilson Road right of way for intersection improvements that will not include traffic signal design. Design shall include the termination and abandonment of a portion of Skyview by use of a new cul-de-sac. CONSULTANT shall coordinate with North Texas Municipal Water District (NTMWD) and Oncor Transmission (ONCOR) to determine acceptability of alignment for Park Boulevard across existing NTMWD and ONCOR facilities. Designs for the relocation or adjustment of any existing utilities impacted by Park Boulevard construction are not included.
2. Preliminary Design of Park Boulevard as an expansion of existing Skyview Drive and Forrest Ross Road from a point approximately 2,000' east of Paul Wilson Road to Spencer Street.. CONSULTANT shall coordinate with NTMWD regarding the reconstruction of the existing treatment plant access driveways and design intersection improvements to match the existing alignment and elevation within 50' of the proposed Park Boulevard right of way. CONSULTANT shall coordinate with the United States Army Corps of Engineers (USACE) regarding 404 permit requirements and develop mitigation strategies to address impacts to the USACE property and Lavon Lake storage volumes as a result of the proposed Park Boulevard construction. Designs shall include necessary structural and grading improvements to be accomplished within the proposed right of way. Designs shall include grading only improvements at one off-site location on adjacent ONCOR right of way if allowed by USACE and by ONCOR. CONSULTANT shall prepare customary

documentation, including Final design plans as described in section B below, for USACE required permits, submit permits for approval and address all documentation comments from USACE. CONSULTANT shall prepare an Environmental Assessment (EA) of the project in compliance with USACE requirements. Designs shall include the reconstruction of the existing intersections with Lynda Lane and Skyview Drive to match existing pavement alignments and elevations within 50' of the proposed Park Boulevard right of way. Designs shall include the reconstruction of Skyview Drive between proposed Park Blvd Extension and the USCAE entrance to East Fork Park as a 4-lane collector. CONSULTANT shall coordinate with North Texas Municipal Water District (NTMWD) and shall prepare customary documents to determine acceptability of alignment for Park Boulevard across existing NTMWD facilities.

3. CONSULTANT shall evaluate the possibility of a future grade separation of Park Blvd at the KCS rail crossing and provide a design sketch for review by City of Wylie and NTMWD.
4. Survey scope shall include parcel descriptions for modified right of way and/or abandonments but survey for and preparation of subdivision plats is not included.
5. Designs shall include replacement of existing sidewalks and barrier free ramps. New sidewalks and ramps shall be installed to meet CITY requirements along with ADA and TDLR requirements.
6. Typical scale of full-size plans is to be: 1"=20' Horizontal; 1"=5' Vertical.
7. Submittals to the COUNTY of work-in-progress shall be at 30%, 65%, 90%, and 100% stages of completion. For each stage of review, two (2) full size (22" X 34") and four (4) half size (11" X 17") sets of drawings will be furnished to the COUNTY along with a CD containing PDFs of the plan sheets.
8. Standards and typical construction details of the City of Wylie and TxDOT may be referred to in the specifications and on the drawings. Special details that are not included as a standard shall be included in both plans and specifications.
9. Assist the COUNTY in preparing applications/letters/plan sets to be distributed to any entity for review purposes.

The CONSULTANT shall perform the necessary engineering and related technical services for the Planning and Design Services, including necessary Additional Services, for development of County authorized segments of this Project according to the following sections of this Contract.

## **B. TASK DESCRIPTIONS – SCOPE OF SERVICES**

### **I. Preliminary Engineering**

- A. Data Collection - Obtain pertinent utility plans, street plans, plats, right-of-way maps, existing easement information, contour maps, and other features within and pertaining to the Project area from the COUNTY and City of Wylie. The CONSULTANT will also coordinate with franchise utilities in the area and

obtain record information where available. Existing Project conditions shall also be documented using digital photography and/or video. Perform site visit to obtain necessary information/confirm information obtained from other sources.

1. Subsurface Utility Engineering
  - a. Halff will perform SUE in accordance with ASCE CI/ASCE 38-02 "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."
  - b. Locating (Vacuum Excavation) – Level A: Up to ten (10) test holes will be performed on the various utilities as identified by the appropriate utility owner. Halff will dig an approximately 12" x 12" test hole, record the depth, take a digital picture of the identified utility and the tape measurement between the utility and the top of the ground, backfill and compact the hole, and restore the surface to its original condition. An iron rod with cap or "x-cut" will be set to mark the location of the test hole.
  - c. Designating – Level B: Halff will designate, mark and field survey up to 20,000 linear feet of utilities, if tonable and/or accessible, in support of the proposed project designs using geophysical prospecting equipment and reference to established survey control. Designating (Quality Level B) Services are inclusive of Quality levels C and D.
  - d. Traffic Control: Halff will provide routine/ordinary traffic control consisting of cones and free-standing signage for this project. The scope does not include lane closure(s), flag person(s), arrow board(s) and changeable message board(s). Halff will use standard Texas Manual on Uniform Traffic Control Devices (TMUTCD) traffic control details when appropriate.
- B. Pre-Design Conference - Meet with COUNTY engineering staff to review Project requirements, design criteria, communication procedures, Project scheduling, personnel, and other pertinent matters that may impact the Project. Additional meetings will be scheduled throughout the length of the Project.
- C. Preliminary Engineering Design – Prepare preliminary engineering plans with submittals at thirty percent (30%) and sixty-five percent (65%) completion. The preliminary engineering design phase will include the following:
  1. Utilizing information obtained from the data collection (Section I.A) and the field survey (Section V.A), the CONSULTANT will prepare preliminary plans including the following:
    - a. Approximate locations of existing utilities, infrastructure, buildings, property lines, landscaping, and other pertinent information.
    - b. Establish preliminary horizontal and vertical alignments for paving improvements.

- c. Delineate drainage areas and make evaluations as to the extent of drainage facilities required for the project.
  - d. Establish preliminary locations for drainage, water, and sewer lines.
  - e. Establish right-of-way and easement needs. Final documents for right-of-way and/or easement acquisition shall be provided along with the sixty-five percent (65%) plan submittal.
  - f. Determine any conflicts with private property including fences, mailboxes, driveways, sidewalks, landscaping, etc., and provide preliminary replacement or alternate design options if required.
  - g. Preliminary engineering plan sheets shall meet COUNTY and City of Wylie standard criteria.
2. Work with affected franchise utilities to obtain accurate information for horizontal and vertical data of existing facilities and identify those to be protected or relocated.
  3. Prepare updated estimated construction quantities and opinion of probable construction costs for thirty percent (30%) and sixty-five percent (65%) submittals.

## **II. Final Engineering**

- A. Final Engineering Design – Incorporating comments from the COUNTY, franchise utilities, and other interested parties, prepare final engineering plans and specifications with submittals at ninety percent (90%) and one-hundred percent (100%) completion. The final engineering design phase will include the following:
  1. Revise and complete preliminary drawings consisting of drawings for grading, paving, drainage and bridge layouts in project areas subject to USACE approval.
  2. Prepare lake volume mitigation site grading plan.
  3. Final engineering plan sheets shall meet COUNTY standard criteria.
- B. Project Manual – prepare document that delineates required special conditions, and technical specifications using COUNTY standard standard specifications.
- C. Final Submittal – Prepare updated estimated construction quantities and opinion of probable construction costs and submit two (2) sets of full size (22" X 34"), ten (10) half size (11" X 17") sets of the engineering plans and five (5) sets of the project manual, along with revised estimates and a CD containing PDFs of the plan sheets to the COUNTY for review.
  1. Submittals will occur at ninety percent (90%) and one hundred percent (100%) completion stages.

2. Supply one (1) set of plans (hardcopy) and bid documents (both hard copy and electronic copy) to COUNTY purchasing department prior to advertisement.

### **III. Special Services**

A. Surveying for Engineering Design – Perform necessary surveying operations for the complete design of the Project as outlined in this Exhibit A, Scope of Services. Surveying for design shall include the following:

1. Establish horizontal and vertical control using City of Wylie criteria.
2. Tie right-of-way lines and corners, property lines and corners, trees three (3) inches in diameter and larger, fence lines, and other visible surface features.
3. Topographic Information including cross sections of the existing ground features as needed for design.
4. Horizontal and vertical location of all existing facilities within the Project limits including existing paving, driveways, sidewalks, buildings, mailboxes, landscaping, etc.
5. Tie existing visible franchise utilities and appurtenances, and public utilities such as water valves, fire hydrants, manholes, etc.
6. Tie underground utilities if exposed.
7. Provide detailed tree survey (where applicable).

B. Right-of-Way / Easement Documents – The CONSULTANT's scope of work does not include revision of existing right of way documents to correct accuracy deficiencies. Surveying for ROW shall include the following:

1. Prepare metes and bounds descriptions for the acquisition of all modified right-of-way and additional easements necessary for the construction of the Project. Submit three (3) copies of right-of-way documents to the COUNTY at the sixty-five percent (65%) plan submittal.
2. Establish proposed easement and right-of-way corners on the ground (one-time).
3. Provide individual Right-of-Way Parcel Maps for modified right-of-way and additional easements showing adjacent properties with ownership and existing and proposed right-of-way and easements.
4. Provide Right-of-Way staking at 100 ft stations and property corners for franchise utility relocation purposes (one time per parcel as needed).

C. Geotechnical Investigation – Provide geotechnical investigation through sub-contract services with a qualified geotechnical engineering firm on an as-needed basis.

D. Environmental Services –

1. Preliminary Information

CONSULTANT will develop the preliminary information listed below as requested in the USACE Memorandum regarding Non-Recreational Outgrant Policy dated March 30, 2009 (NROP), which is applicable to real estate outgrant requests for use of USACE Civil Works lands for activities such as roadways. The scope of work for the items below is limited to that portion of the Project that is crossing and/or immediately adjacent to USACE parcels required for the roadway.

- a. Identify applicant, including the point of contact for processing with the County, to whom the proposed outgrant would be assigned.
- b. Describe the existing and proposed facility.
- c. Identify the purpose and need for the proposed facility.
- d. Justify placement of the proposed facility on government property, including a description of alternative locations/routes that were considered off of project lands. Provide rationale for why other alternatives were either not considered viable or were not selected for detailed analysis.
- e. State the duration for which the proposed outgrant is requested, including the duration of the temporary license that would be needed for construction.
- f. Generally describe the location and dimensions of the requested outgrant area to include preliminary plans.
- g. Provide basic construction methods and timeline.
- h. Provide preliminary discussion of anticipated impacts to the natural and human environment based on a limited review to identify obvious environmental constraints in the project area.
- i. Deliverables
  - Electronic version of the Non-Recreational Outgrant Request document in Adobe Acrobat format, and up to six (6) hard copies upon request, for review by the USACE and the County.

2. Detailed Information

CONSULTANT will provide information specifically enumerated below as the anticipated USACE requirements necessary to comply with the NROP section describing Detailed Information. The scope of work for the items below is limited to that portion of the Project that is crossing and/or immediately adjacent to USACE parcels required for the roadway.

- a. Coordinate with State and Federal resource agencies and third parties as necessary to receive general concurrence with Consultant's evaluation of impacts related to implementation of the Project.
- b. Provide a detailed Site Plan of the Project that includes available existing contour data, property lines, fences, roads, structures, monuments, trails, parks, natural resources and environmental resources.
- c. Prepare a document summarizing the general parameters of mitigation measures shown on the Project site plan and include proper tabulation of property, improvement and natural resource values that are impacted by the Project within the specific NROP request area.
- d. Evaluate existing vegetation and provide preliminary recommendations for storm water pollution prevention techniques, details and revegetation species.

### 3. Jurisdictional Determination/Verification

CONSULTANT will perform a jurisdictional determination/verification for the proposed project. The jurisdictional determination is the first step in determining if a Section 404 permit from the USACE is required. An on-the-ground jurisdictional determination will be performed for the project area to identify the limits of waters of the United States, including wetlands. The jurisdictional determination will employ the use of GPS surveying techniques to map the edge of jurisdictional areas. Necessary wetland data forms will be completed and on-site photographs will be taken for representative sites. A jurisdictional determination report consistent with the USACE "Procedures for Jurisdictional Determinations" (dated March 24, 2003) in addition to the "Interim Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Great Plains Region (Version 2.0)" will be prepared describing the methodology and results of the investigation, so that the report may satisfy the jurisdictional determination requirement for a permit application. Jurisdictional Determination reports prepared for Department of the Army permit applications to document the process should include the following:

- a. Purpose of the investigation, defining limits of the investigations;
- b. Methods, including:
  - description of the approach used to delineate wetlands and other waters of the United States; and
  - description of the conventions used to map the limits of waters of the United States.

c. Results, including:

- a vicinity map or maps, (preferably USGS 7.5 minute or other smaller scale topographic maps) depicting the location of the site and showing the limits of the site investigated;
- a narrative addressing the size of the site in square feet and/or acres; a description of any physical features;
- a characterization of hydrology addressing direction, source, frequency, and duration of on-site drainage;
- identification of any named waterways on or in the vicinity of the site; and other pertinent information on hydrology;
- a characterization of vegetative communities and dominant species occurring within each community type;
- a characterization of soils present on the project site using information derived from county soil surveys, evaluation of soil samples, and other sources;
- a comparison of the soils, vegetative, and hydrologic conditions between wetland and upland areas, a description of riparian and other buffer features around water features;
- preparation of wetland determination data forms;
- photographs taken from several locations throughout the project site;
- current and historic aerial photographs; and
- any other relevant historic permit information or maps.

d. Conclusions, including:

- a description of, and map depicting, potential waters of the United States (water features that have an ordinary high water mark or are wetlands) present in the study area, including:
  - i. wetland type(s), e.g. emergent, forested, scrub-shrub, etc. and
  - ii. other water type(s), e.g. perennial, intermittent, or ephemeral stream, reservoir, pond, etc., as appropriate.

e. Deliverables

- Bound copies (up to six hard copies) of the jurisdictional determination report to satisfy the requirement for a permit application for submittal to the USACE Fort Worth District.

4. USACE Section 404 Permit Application and Preconstruction Notification (PCN)

Half will prepare Section 404 permit applications for project impacts that do not exceed thresholds allowed by nationwide permits. Activities that do not qualify for authorization under the nationwide permit program may qualify for authorization by standard individual permit (IP), which would require additional services under a supplemental work authorization.

## 5. Environmental Assessment (EA)

CONSULTANT will prepare an EA in accordance with the Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500 - 1508) and USACE regulations implementing the National Environmental Policy Act of 1969 (NEPA), as established in 33 CFR 230 and Engineering Regulation 200-2-2, as well as applicable USACE Fort Worth District guidelines. The EA will involve the following tasks and objectives:

- a. Review and Incorporate Background Information - Review information concerning the proposed action provided by the County and incorporate appropriate information into the EA. Review relevant studies and any prior agency coordination related to the proposed action.
- b. Need and Purpose of the Proposed Action - Consult and coordinate with the County to define the need and purpose of the proposed action. Briefly describe the history of the planning process.
- c. Description of Alternatives - Consult and coordinate with the County to define and summarize the history and process involved to create and eliminate the project alternatives. Briefly identify the reasons alternatives were eliminated from detailed study. Describe the various alternatives considered and eliminated leading to the preferred alternative. The no-action alternative (i.e., do nothing) will also be discussed to serve as a baseline for determining environmental consequences.
- d. Data Review for Environmental Criteria - Collect and review data, maps, and literature to document the Existing/Affected Environment within the project study area. Obtain available information from appropriate local, state, and federal agencies. The data collected will include, but is not limited to the following Social, Economic, Natural, and Physical environmental resources:
  - Land use (i.e., park, wildlife management area, etc.)
  - Socio-economic conditions (employment, demographics, etc.)
  - Community growth and development
  - Relocations and displacements
  - Public facilities and services
  - Public health and safety
  - Utility relocations
  - Environmental justice
  - Community cohesion
  - Air quality
  - Noise
  - Water quality

- Water resources, including surface water and ground water
- Waters of the United States, including wetlands
- Floodplains and flood storage criteria
- Navigation
- Visual/Aesthetics
- Geology and soils
- Prime and unique farmland
- Parks and recreation
- Wildlife habitat (terrestrial and aquatic)
- Threatened and endangered species
- Vegetation
- Wild and scenic rivers
- Cultural resources - historic structures and archeological resources
- Hazardous, toxic, and radioactive wastes (HTRW)
- Energy needs and resources
- Construction impacts
- Controversy
- Indirect and cumulative effects

e. Field Surveys - A field visit will be conducted to verify land use and other existing conditions within the study area. It has been assumed that the project area will be accessible and appropriate right-of-entry to perform the tasks included in this scope of work will be coordinated and obtained by the County.

f. Evaluate Environmental Consequences - Evaluate and compare the environmental consequences of implementing the no-action alternative and the preferred alternative. Details concerning certain resource studies are provided below:

- Air Quality - A qualitative discussion of the impacts to air quality resulting from the proposed action will be performed. A detailed, quantitative air quality analysis, such as emissions modeling and data analysis for construction equipment, is not anticipated to be required for this project.

- Noise – Discuss potential noise impacts. Collect, analyze and input traffic data for the facility. Identify existing and proposed land use in the project area to locate representative receivers, and establish existing noise levels. Model existing and predicted traffic noise levels using Traffic Noise Model (TNM) 2.5. Model traffic noise contours for undeveloped land using TNM 2.5. Evaluate and document feasibility of noise abatement measures and placement of noise barrier(s).

- Jurisdictional Waters of the United States - A survey to determine the presence or absence of jurisdictional waters of the United States

and an evaluation of applicable Section 404 permit requirements is included in this scope of work including a PCN for all sites that meet Nationwide Permit (NWP) No. 14 requirements. Navigational clearance under Section 9 and Section 10 of the Rivers and Harbors Act of 1899 is not anticipated for this project.

- **Socio-economic Conditions** – Document the general population and income characteristics of the immediate project area, and identify public facilities/services and business operations in the study area likely to be affected by the proposed project. Identify potential relocations and displacements. A qualitative discussion concerning impacts, if any, in the immediate area will also be presented. A qualitative discussion of the potential economic benefits of the proposed project will be presented for comparison to the overall projected cost (i.e., operation and maintenance, etc.) of the project.
- **Wildlife Habitat** – Document vegetation and potential wildlife habitat in the study area using the TPWD Wildlife Habitat Appraisal Procedure (WHAP), and evaluate potential impacts. The WHAP allows a holistic (i.e. not species-specific) evaluation of wildlife habitat that can be applied at the statewide level. The WHAP provides a quantifiable and repeatable characterization of wildlife habitat. WHAP assumes that measuring habitat structure and composition is sufficient to define the habitat suitability for wildlife, and that a positive relationship exists between vegetative diversity and wildlife species diversity. Determine and delineate land cover types for the area that would be disturbed by project construction. Establish field sampling sites and collect data to provide a representative characterization of the study area. Document the methodology, cover type descriptions, habitat variable measurements, habitat suitability indices, and baseline habitat units for the project area.
- **Threatened/Endangered Species** - Review current species lists from the TPWD and the United States Fish and Wildlife Service (USFWS) for Collin County, and request a search from the Texas Natural Diversity Database (TXNDD). The TXNDD is a record of occurrences for rare plant and animal resources that is based upon the best available information maintained by TPWD. The TXNDD data is to support determinations of potential species occurrence for the study area, and provide specific information where available. Perform a walk through to make visual observations of the areas to be disturbed by construction. Supplemented by general observations from the visual survey, the literature review and database search will provide conclusions regarding whether preferred habitat or designated critical habitat for any listed species is present within the project area, whether any listed species is likely to occur, and whether there is a potential effect to listed species. Recommendations will be made if additional

surveys or species assessments and/or coordination with TPWD and USFWS appears warranted based on the limited investigation described above.

- Cultural Resources – This scope of work is based on the understanding that the proposed cultural resource services will be conducted to comply with the Antiquities Code of Texas (13 TAC 26 and Title 9, Chapter 191, Subchapters A-F of the Texas Natural Resources Code, as amended) due to the County being a political subdivision of the State of Texas. The cultural resources services will also be conducted to complete the requirements of Section 106 of the National Historic Preservation Act (NHPA) (16 U.S. Code § 470f) and its implementing regulations (36 CFR Part 800), due to the involvement of the USACE. This scope of work is based on the typical level of effort and extent of jurisdiction of similar projects performed in compliance with the Antiquities Code of Texas and Section 106 of the NHPA. A records review will be conducted utilizing the records at the Texas Archeological Research Laboratory (TARL) to identify recorded archeological or historic sites within and in the vicinity of the project area. Federal and State lists of recorded historic properties such as the National Register of Historic Places (NRHP), State Archeological Landmarks (SAL), and Official Texas Historic Markers will also be reviewed. Consultation with the USACE and the THC, acting on behalf of the State Historic Preservation Officer (SHPO), will be conducted. Based on the requirements of the NHPA, consultation with the USACE is necessary in order to determine if the proposed action is an undertaking, as defined by 36 CFR Part 800.16 in the Section 106 process of the NHPA. The USACE, serving as the federal responsible entity, in consultation with the THC will determine the level of effort and extent of jurisdiction, or the area of potential effects (APE), for further cultural resources investigations, if needed.

- Hazardous Materials - Hazardous materials sites will be identified in the project area through field surveys and review of historic aerial photography. Field surveys will consist of a visual survey of the project area to ascertain existing conditions, looking specifically for potential hazardous material concerns such as aboveground or underground tanks, drums, impoundments, waste piles, and landfills. If site inspections warrant, additional information such as State and Federal databases will be reviewed. The information reviewed will be sufficient to establish whether there are potential HTRW concerns that would affect the proposed project.

- Indirect and cumulative effects – A qualitative discussion of the direct and indirect impacts of the proposed project along with impacts on environmental resources from other past, present, and reasonably foreseeable future actions will be presented in the EA.

g. Avoidance, Minimization, and Mitigation - List and discuss the avoidance, minimization, and potential mitigation, if any, for the project. Generally discuss how mitigation would eliminate or minimize harm to the natural and human environment. General mitigation options for impacted environmental resources will be provided. Identify required permits and approvals for the project.

h. Deliverables

- Electronic version of the draft EA document in Adobe Acrobat format, and up to six (6) hard copies upon request, for review by the USACE and the County. Comments received will be addressed and the document will be re-submitted for approval.

- Final EA document to the USACE and the County upon completion of the public involvement process. The number of copies of the final EA is to be determined as requested by the County and the USACE (not to exceed 15 hard copies). A digital copy of the final EA will also be provided in Adobe Acrobat format. The schedule for final project completion will be dependent upon the government agency review and public comment process.

## 6. Public Involvement

a. Once the EA for the proposed project has been determined by the USACE to be satisfactory for further processing, prepare a draft Notice of Availability of the EA and submit to the County and the USACE for publication in a local newspaper and/or distribution to adjacent property owners and appropriate local, state, and federal government officials. It is assumed the County would place the public notice for publication as appropriate and would be responsible for associated fees.

b. Review comments received during the public comment period, and prepare responses to comments in coordination with the County and the USACE.

## **IV. Project Work Authorization**

The work described in this scope of services is intended to be authorized by the COUNTY in phases as described below:

A. Phase 1 – The work authorized in Phase 1 shall be limited to the Project area between Paul Wilson Road and SH78. Phase 1 shall consist of required planning, environmental evaluation and design necessary to establish documentation and coordination requirements for USACE to consider

approval of project designs across USACE lands. Primary scope elements shall include the following:

1. Project start-up activities including data collection and determination of project design criteria
2. Preliminary information as described in scope item E.1. above;
3. Jurisdictional waters of the US (WOUS) determination and report.
4. Establishment of Survey control network and recovery of existing ROW corners. Field ties to critical surface features and WOUS limits.

B. Phase 2 – The work authorized in Phase 2 shall be limited to the Project area between Paul Wilson Road and SH78. Phase 2 shall consist of required planning, environmental evaluation and design necessary to establish documentation that enumerates mitigation requirements, compensation and detailed design work that must be accomplished for USACE to conditionally approve a specific outgrant parcel request for roadway purposes. Primary scope elements shall include the following:

1. Resource agency and stakeholder coordination.;
2. Preparation of a detailed site plan, roadway schematic and summary document for resolution of mitigation and compensation requirements related to the proposed outgrant parcel.;
3. Preparation of a USACE Environmental Assessment document if required.
4. Field survey for required environmental resources and outgrant parcel legal descriptions with exhibits.
5. Preliminary culvert sizing and roadway grading using cross section generated earthwork quantities to determine impacts to Lavon Lake storage volumes. Prepare preliminary grading plans for compensatory grading site and determine all necessary temporary construction easement impacts on USACE lands.

C. Phase 3 – The work authorized in Phase 3 shall be limited to the Project area between Paul Wilson Road and SH78. Phase 3 shall consist of coordination and design work that is authorized to meet USACE requirements for execution of Collin County's outgrant parcel request. Primary scope elements shall include the following:

1. Design of paving, grading, drainage and bridge layouts for the portions of the Project roadway that impact USACE outgrant parcel.
2. Subsurface utility engineering activities necessary to support roadway design work limits.
3. Survey for design necessary to support roadway design work limits.
4. Geotechnical exploration, lab testing and engineering recommendations necessary to support roadway design work limits.
5. Final grading plans for compensatory excavation site include haul road and SWPPP.

## **V. Exclusions**

The scope of services identified herein specifically excludes the following items, however, these items can be provided if necessary with a revision to scope of work and fees as agreed between COUNTY and CONSULTANT in writing:

- A. Plats;
- B. Title Searches;
- C. Legal opinions, audits and financial reports;
- D. Phase I Environmental Site Assessments in accordance with ASTM standards or any surveys/investigations involving sampling and laboratory analysis (e.g., hazardous materials sampling and analysis, asbestos surveys, and lead-based paint surveys);
- E. Preparation and coordination of a Section 404 individual permit application and supporting documentation;
- F. Preparation of final compensatory mitigation construction plans and technical specifications including performance of mitigation monitoring and preparation of mitigation monitoring reports;
- G. Performance of biological surveys other than those specifically included in the above scope of work. It is anticipated that the proposed action would not lead to a determination of effects other than "no effect" or "may affect, not likely to adversely affect" for federally listed species under regulations implementing the Endangered Species Act. This scope of work does not include formal Section 7 consultation with the USFWS under the Endangered Species Act, such as preparing a Biological Assessment for the project and agency consultation to allow the USFWS to formulate a Biological Opinion;
- H. Performance of a historic resources structure survey and subsurface archeological investigations. If the records review and initial coordination results in the need for a cultural resource survey (e.g., visual inspection, shovel testing, etc.) of the proposed project area, a research design will need to be prepared in order to obtain a Texas Antiquities Permit for the cultural resource survey as required by the Antiquities Code of Texas. Archeological backhoe trenching of areas with deep soil deposits, project area modification surveys, and National Register of Historic Places (NRHP) eligibility testing and mitigation are not included in this scope of work;
- I. Section 408 (33 USC 408) coordination and documentation. Due to the federal interest established by the USACE ownership of lands associated with Lavon Lake in the project area, the USACE may have authority under Section 408 to ensure the proposed action would not change the federal flood control work's authorized scope, purpose, or functionality or increase risks to public

safety. In the event the proposed action is determined by the USACE to be subject to Section 408, additional documentation and coordination efforts beyond this scope of work may be necessary;

- J. Private property owner meetings or noise workshops;
- K. Public hearing;
- L. Preparation of National Environmental Policy Act documentation in accordance with FHWA and TxDOT implementing regulations and guidelines;
- M. Fees for permits, document reviews and bid advertising.
- N. Floodplain reclamation plans or analysis;
- O. Designs for Trench Safety;
- P. Railroad shoo-fly designs;
- Q. Masonry screen wall, Sound attenuation wall and/or privacy fence designs;
- R. Trail Design;
- S. Landscape Architecture and Irrigation design;
- T. Axle-load or PVR based pavement section designs;
- U. Materials quality control and testing services during construction;
- V. Full-time Construction Inspection;
- W. Project manuals, bid schedules and design plans for bidding and/or construction;
- X. Improvements outside the Project limits;
- Y. Items listed as COUNTY responsibilities on Exhibit "D" which is attached hereto and incorporated herein by reference and made a part hereof as if repeated verbatim.

## **EXHIBIT "C"**

### **PAYMENT SCHEDULE**

Invoices will be transmitted to the County on a monthly basis based on a percentage of completion up to that time. A derivation of the total contract fee amount is as follows:











**EXHIBIT C  
COLLIN COUNTY  
Park Boulevard Extension  
BOND PROJECT #07-099**

Galler County Park Boulevard Extension Fee Proposal - January 7, 2014	Labor Category	Project Mgr.	Principal	Sr. Civil Eng.	Civil Eng.	Civil EIT	Civil CADD	Sr. Struct. Eng.	Elec. or Struct. Eng.	Struct. CADD / GIS	Sr. Env. Scientists/ Landscape Architect	Env. Scientists/ Landscape Architect	Survey RPLS	Survey SIT / Bridge Inspector	Survey Crew	Clerical	SUE Crew	SUE Coordinator	hrs/week	Total Manhour	Total Labor \$	Print	Plot	Deliv./Travel Misc.	Total Expenses \$	Total \$				
																											Team Member	Hourly Billing Rate	AI	AI
	Task Description	Scope	Print																											
	a. access and haul route plan	Reference	1	2																										
	b. grading plan		2	4																										
	c. SWPPP		2	4																										
	7.1.2 Utilities																													
	a. sewer plan and profile																													
	b. NITWAD storm-relief plan																													
	7.1.3 Standard Drawings																													
	a. select, review and modify appropriate standards																													
	7.1.4 Earthwork Cross Sections																													
	a. select, review and modify appropriate standards																													
	b. AS sheets																													
	c. producer / check DTM point file data																													
	8.2 SPECIFICATIONS																													
	a. select, review and modify appropriate standards																													
	b. Review standard specifications																													
	c. Prepare final specifications / special provisions																													
	d. Prepare final specifications / special provisions																													
	e. Prepare bid document / prepare bid form list																													
	8.3 ESTIMATES																													
	a. unit price data collection																													
	b. 30% quantity takeoff and prepare estimate																													
	c. 50% quantity takeoff and prepare estimate																													
	d. 100% quantity takeoff and prepare estimate																													
	e. 100% quantity takeoff and prepare estimate																													
	10.0 CONSTRUCTION PHASE																													
	10.1 Site Construction																													
	10.2 Site Construction																													
	10.3 ERFs and Change Order Requests																													
	10.4 Record Plan Set																													
	10.5 Part-Time Budget Inspection																													
	Special Summary																													
	1.0 PROJECT MANAGEMENT / COORDINATION																													
	2.0 DATA COLLECTION & SUE																													
	3.0 ENVIRONMENTAL																													
	4.0 SURVEY / ROW																													
	5.0 HYDRAULIC STUDIES																													
	6.0 ENGINEERING DESIGN / PLAN SET																													
	7.0 SPECIFICATIONS																													
	8.0 ESTIMATES																													
	9.0 CONSTRUCTION PHASE																													
	TOTAL		17	160	22	84	216	213	282	2	8	132	566	864	26	72	56	75			2090				\$379,307	7410	570	\$3,048	\$7,883	\$287,200







EXHIBIT C  
COLLIN COUNTY  
Park Boulevard Extension  
BOND PROJECT #07-099

**PARK BOULEVARD FEE SUMMARY**

TASK	PHASE I		PHASE II		PHASE III		TOTAL (PHASES I TO III)	
	Hours	Fee \$	Hours	Fee \$	Hours	Fee \$	Hours	Fee \$
1.0 PROJECT MANAGEMENT / COORDINATION	222	\$35,514	204	\$34,218	164	\$24,582	590	\$94,314
2.0 DATA COLLECTION & SUE	100	\$13,962	0	\$0	298	\$39,899	398	\$53,861
3.0 ENVIRONMENTAL	519	\$70,862	1157	\$158,733	0	\$0	1676	\$229,595
4.0 SURVEY / ROW	194	\$25,562	238	\$30,782	266	\$34,488	698	\$90,832
5.0 GEOTECHNICAL	0	\$0	0	\$0	19	\$15,450	19	\$15,450
6.0 HYDRAULIC STUDIES	0	\$0	40	\$5,662	32	\$4,324	72	\$9,986
7.0 ENGINEERING DESIGN / PLAN SET	0	\$0	451	\$57,805	2312	\$295,232	2763	\$353,037
8.0 SPECIFICATIONS	0	\$0	0	\$0	20	\$3,594	20	\$3,594
9.0 ESTIMATES	0	\$0	0	\$0	54	\$7,931	54	\$7,931
10.0 CONSTRUCTION PHASE	0	\$0	0	\$0	0	\$0	0	\$0
<b>TOTALS</b>	<b>1035</b>	<b>\$145,900</b>	<b>2090</b>	<b>\$287,200</b>	<b>3165</b>	<b>\$425,500</b>	<b>6290</b>	<b>\$858,600</b>

## ENGINEER'S STATEMENT OF PROBABLE CONSTRUCTION COST

## PARK BOULEVARD EXTENSION

FROM FM 2514 (PARKER ROAD) TO SH 78 (13,300 LF)

MAJOR COLLECTOR - 4-LANE DIVIDED ROADWAY (EXPANDABLE TO 6-LANE)

Project: Park Boulevard Extension

Prepared by: Brian C. Haynes, P.E.

Client: Collin County

Date: December 5, 2013

Pavement Material:	Concrete Pavement	
Pavement Width:	50	feet
Pavement Thickness:	8	in
Right-of-Way Width:	120	feet
Roadway Length:	13300	feet
Current Date:	2013	year
Estimated Construction Date:	2018	year

ITEM NO.	DESCRIPTION	UNIT	QTY	Engineer's Estimate	
				UNIT PRICE	EXTENDED PRICE
<b>Section I - General</b>					
1	Mobilization (10% Maximum of Total Bid)	LS	1.0	\$1,550,000.00	\$1,550,000.00
2	Project Signs	EA	4.0	\$750.00	\$3,000.00
3	Barricades, Signs and Traffic Control	MO	24.0	\$2,400.00	\$57,600.00
				<b>Subtotal General</b>	<b>\$1,610,600.00</b>
<b>Section II - Park Boulevard - Paving Improvements</b>					
1	Roadway Preparation (Clearing & Grubbing)	STA	136.0	\$2,600.00	\$353,600.00
2	Remove and Dispose of Asphalt	SY	14,000.0	\$5.00	\$70,000.00
3	Remove and Dispose of Concrete Paving	SY	8,000.0	\$10.00	\$80,000.00
4	Earthwork (Excavation)(Assuming 2.0-ft depth)	CY	119,000	\$7.50	\$892,500.00
5	Earthwork (Embankment)	CY	121,000	\$5.00	\$605,000.00
6	Lime or Cement Treated Subgrade (8")	SY	91,960.0	\$2.50	\$229,900.00
7	Lime or Cement Slurry (6%) (36 lbs./SY)	TON	1,660.0	\$150.00	\$249,000.00
8	Concrete Pavement (Reinforced)(8")(4,000 PSI)	SY	89,000.0	\$45.00	\$4,005,000.00
9	Concrete Driveway (Reinforced) (6") (4,000 PSI)	SY	1,400.0	\$50.00	\$70,000.00
10	Sidewalk (5' Width)	SY	16,000.0	\$45.00	\$720,000.00
11	Wire Fencing	LF	26,600.0	\$10.00	\$266,000.00
12	Gates	EA	27.0	\$1,200.00	\$32,400.00
13	Signage Assembly	EA	100.0	\$450.00	\$45,000.00
14	Pavement Markings	LF	13,300.0	\$3.00	\$39,900.00
15	Street Lighting	EA	70	\$4,000.00	\$280,000.00
16	Electrical Conduit/Wiring for Street Lights	LF	20,000	\$22.00	\$440,000.00
17	Electrical Connection	EA	6	\$5,000.00	\$30,000.00
18	Metal Beam Guardrail	LF	1,400	\$25.00	\$35,000.00
19	Single Guardrail Terminal	EA	28	\$2,500.00	\$70,000.00
20	Traffic Signals (At FM 2514 and SH 78)	LS	2	\$175,000.00	\$350,000.00
21	Railroad Crossing - At Grade	LS	1	\$350,000.00	\$350,000.00
22	NTMWD Pond #1 Modifications (Earthwork & Seeding)	LS	1	\$97,500.00	\$97,500.00
23	NTMWD Pond #2 Modifications (Earthwork & Seeding)	LS	1	\$220,000.00	\$220,000.00
				<b>Subtotal Paving Improvements</b>	<b>\$9,530,800.00</b>

ITEM NO.	DESCRIPTION	UNIT	QTY	Engineer's Estimate	
				UNIT PRICE	EXTENDED PRICE
<b>Section III - Park Boulevard - Drainage Improvements</b>					
1	Reinforced Concrete Pipe (CL III) (18 IN)	LF	1,300.0	\$45.00	\$58,500.00
2	Reinforced Concrete Pipe (CL III) (24 IN)	LF	1,700.0	\$55.00	\$93,500.00
3	Reinforced Concrete Pipe (CL III) (36 IN)	LF	1,900.0	\$85.00	\$161,500.00
4	Reinforced Concrete Pipe (CL III) (42 IN)	LF	1,600.0	\$110.00	\$176,000.00
5	Reinforced Concrete Pipe (CL III) (48 IN)	LF	1,750.0	\$135.00	\$236,250.00
6	Reinforced Concrete Box Culvert (6 FT X 4 FT)	LF	120.0	\$275.00	\$33,000.00
7	Reinforced Concrete Box Culvert (6 FT X 5 FT)	LF	120.0	\$300.00	\$36,000.00
8	Reinforced Concrete Box Culvert (7 FT X 4 FT)	LF	240.0	\$325.00	\$78,000.00
9	Reinforced Concrete Box Culvert (7 FT X 6 FT)	LF	120.0	\$350.00	\$42,000.00
10	Trench Safety	LF	8,850.0	\$2.00	\$17,700.00
11	Storm Drain Junction Box	EA	8.0	\$4,000.00	\$32,000.00
12	Curb Inlet	EA	36.0	\$3,500.00	\$126,000.00
13	Stormwater Treatment Unit	EA	8.0	\$4,000.00	\$32,000.00
14	Wingwall (HW=6 FT)	EA	4.0	\$10,000.00	\$40,000.00
15	Wingwall (HW=7 FT)	EA	2.0	\$15,000.00	\$30,000.00
16	Wingwall (HW=8 FT)	EA	2.0	\$20,000.00	\$40,000.00
17	Rock Riprap (24 IN)	CY	1,500.0	\$120.00	\$180,000.00
18	Seeding (Cell Fiber Mulch)	SY	160,000.0	\$1.00	\$160,000.00
19	Erosion Control Fence	LF	27,200.0	\$2.00	\$54,400.00
20	Rock Filter Dams	LF	500.0	\$30.00	\$15,000.00
<b>Subtotal Drainage Improvements</b>					<b>\$1,641,850.00</b>
<b>Section IV - Park Boulevard - Bridges and Structures</b>					
1	Conc Bridge Structure at Corps Crossing (72 FT Wide Deck) (200')	SF	14,400.0	\$100.00	\$1,440,000.00
2	Retaining Wall (Average Height =6 FT)	SF	9,000	\$50.00	\$450,000.00
<b>Subtotal Bridges and Structures</b>					<b>\$1,890,000.00</b>
<b>Section V - Park Boulevard - Wastewater Improvements</b>					
1	8-inch Wastewater Line (PVC)	LF	2,000.0	\$65.00	\$130,000.00
2	Trench Safety (Water Line Installation)	LF	2,000.0	\$2.00	\$4,000.00
3	Manhole (4' Diam)	EA	5.0	\$4,000.00	\$20,000.00
4	WasteWater Service Line (Short Service)(6")	EA	5	\$500.00	\$2,500.00
5	WasteWater Service Line (Long Service)(6")	EA	5.0	\$1,000.00	\$5,000.00
6	Connections to Existing Manholes	EA	2.0	\$1,500.00	\$3,000.00
<b>Subtotal Wastewater Improvements</b>					<b>\$164,500.00</b>

ITEM NO.	DESCRIPTION	UNIT	QTY	Engineer's Estimate	
				UNIT PRICE	EXTENDED PRICE
<b>Section VI - Skyview Drive (1000 LF) - Paving (37 FT Wide) and Drainage Improvements</b>					
1	Roadway Preparation (Clearing & Grubbing)	STA	10.0	\$2,600.00	\$26,000.00
2	Remove and Dispose of Asphalt	SY	2,670.0	\$5.00	\$13,350.00
3	Earthwork (Excavation)(Assuming 2.0-ft depth)	CY	3,800	\$7.50	\$28,500.00
4	Lime or Cement Treated Subgrade (8")	SY	4,510.0	\$2.50	\$11,275.00
5	Lime or Cement Slurry (6%) (36 lbs./SY)	TON	80.0	\$150.00	\$12,000.00
6	Concrete Pavement (Reinforced)(8")(4,000 PSI)	SY	4,200.0	\$45.00	\$189,000.00
7	Sidewalk (5' Width)	SY	1,225.0	\$45.00	\$55,125.00
8	Reinforced Concrete Pipe (CL III) (42 IN)	LF	80.0	\$110.00	\$8,800.00
9	Trench Safety	LF	80.0	\$2.00	\$160.00
10	Curb Inlet	EA	2.0	\$3,500.00	\$7,000.00
11	Headwall (42 IN RCP)	EA	2.0	\$3,500.00	\$7,000.00
12	Wire Fencing	LF	2,000.0	\$10.00	\$20,000.00
13	Gates	EA	2.0	\$1,200.00	\$2,400.00
14	Signage Assembly	EA	8.0	\$450.00	\$3,600.00
15	Pavement Markings	LF	1,000.0	\$3.00	\$3,000.00
16	Street Lighting	EA	4	\$4,000.00	\$16,000.00
17	Electrical Conduit/Wiring for Street Lights	LF	1,000	\$22.00	\$22,000.00
18	Electrical Connection	EA	1	\$5,000.00	\$5,000.00
19	Seeding (Cell Fiber Mulch)	SY	3,335.0	\$1.00	\$3,335.00
20	Erosion Control Fence	LF	2,000.0	\$2.00	\$4,000.00
21	Rock Filter Dams	LF	50.0	\$30.00	\$1,500.00
<b>Subtotal Skyview Paving and Drainage Improvements</b>					<b>\$439,045.00</b>
<b>SUBTOTAL IMPROVEMENTS</b>					<b>\$15,276,800.00</b>
<b>CONSTRUCTION MATERIAL TESTING (1%)</b>					<b>\$152,768.00</b>
<b>CONTINGENCY (20%)</b>					<b>\$3,055,360.00</b>
<b>TOTAL IMPROVEMENTS</b>					<b>\$18,484,928.00</b>
<b>INFLATION ADJUSTMENT (2.5% PER YEAR)</b>					<b>\$2,007,500.00</b>
<b>TOTAL IMPROVEMENTS (ASSUMING CONSTRUCTION IN 2018)</b>					<b>\$20,493,000.00</b>
<b>Notes:</b>					
1. Waterlines, landscaping, and irrigation are excluded from this estimate.					
2. An inflation rate of 2.5% was assumed based on the average Consumer Price Index from 2000 to 2013					
3. Design, Construction Inspection, and Right-of-Way Acquisition are excluded from this estimate.					
4. Costs for Corps of Engineers Mitigation items are excluded from this estimate.					
<b>NOTE:</b> This statement was prepared utilizing standard cost and/or estimating practices. It is understood and agreed that this is a statement of probable construction cost only, and the Engineer shall not be liable to the Owner or any Third Party.					

## **EXHIBIT "E"**

### INFORMATION TO BE PROVIDED BY THE COUNTY

The County will make available to Engineer any and all information, data, etc., as it may have in its possession relating to the project described herein.

## EXHIBIT "F"

### INSURANCE REQUIREMENTS

1.0 Before commencing work, the vendor shall be required, at its own expense, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) required by Texas Law indicating the coverage is to remain in force throughout the term of this contract. In addition to any coverage required by Texas Law, the vendor shall provide the following coverages.

1.1 Broad Form Commercial General Liability insurance at minimum combined single limits of (\$1,000,000 per-occurrence and \$2,000,000 general aggregate) for bodily injury and property damage, which coverage shall include products/completed operations, independent contractors, and contractual liability each at \$2,000,000 per occurrence. Coverage must be written on an occurrence form.

1.2 Workers Compensation insurance at statutory limits, including employers liability coverage at \$500,000. In addition to these, the contractor must meet each stipulation below as required by the Texas Department of Insurance, Division of Workers' Compensation; (Note: If you have questions concerning these requirements, you are instructed to contact the DWC.)

1.2.1 Definitions: Certificate of coverage ("certificate"). A copy of a certificate of authority to self-insure issued by the commission, or a coverage agreement in a form approved by the DWC (i.e. DWC-81, DWC-82, DWC-83, OR DWC-84), showing statutory workers compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project. Duration of the project includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project includes, but is not limited to, all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project.

1.2.2 The contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Title 5 of the Texas Labor Code, for all employees of the contractor providing services on the project, for the duration of the project.

1.2.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.

1.2.4 If the coverage period shown on the contractor's current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

1.2.5 The contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

1.2.5.1 A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

1.2.5.2 no later than seven (7) days after receipt by the contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

1.2.6 The contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.

1.2.7 The contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

1.2.8 The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

1.2.9 The contractor shall contractually require each person with whom it contracts to provide services on a project, to:

1.2.9.1 provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Title 5 of the Texas Labor Code, for all of its employees providing services on the project, for the duration of the project;

1.2.9.2 provide to the contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;

1.2.9.3 provide the contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

1.2.9.4 obtain from each other person with whom it contracts, and provide to the contractor:

1.2.9.4.1 a certificate of coverage, prior to the other person beginning work on the project; and

1.2.9.4.2 a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project:

1.2.9.5 retain all required certificates of coverage on file for the duration of the project and for one year thereafter;

1.2.9.6 notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project: and

1.2.9.7 contractually require each person with whom it contracts, to perform as required by paragraphs 1.2.1 through 1.2.7, with the certificates of coverage to be provided to the person for whom they are providing services.

1.2.10 By signing this contract or providing or causing to be provided a certificate of coverage, the contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

1.2.11 The contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

1.3 Commercial Automobile Liability insurance shall be no less than \$1,000,000 combined single limits per accident for bodily injury and property damage, including owned, non-owned, and hired vehicle coverage.

1.4 Professional Liability Insurance at minimum limits of \$2,000,000. This policy must have a two (2) year extended period of coverage, (i.e. tail coverage). If you choose to have project coverage endorsed onto your base policy, this would be acceptable.

2.0 The required limits may be satisfied by any combination of primary, excess or umbrella liability insurances, provided the primary policy complies with the above requirements and the excess umbrella is following form. The vendor may maintain reasonable and customary deductibles, subject to approval by Collin County.

3.0 With reference to the foregoing insurance requirement, the vendor shall endorse applicable insurance policies as follows:

3.1 A waiver of subrogation in favor of Collin County, its officials, employees, volunteers and officers shall be contained on all policies.

3.2 The vendor's insurance coverage shall name Collin County as additional insured under the General Liability and Auto Liability policy.

3.3 All insurance policies shall be endorsed to require the insurer to immediately notify Collin County of any decrease in the insurance coverage limits.

3.4 All insurance policies shall be endorsed to the effect that Collin County will receive at least thirty (30) days notice prior to cancellation, non-renewal or termination of the policy.

3.5 All copies of Certificates of Insurance shall reference the project/contract number.

4.0 All insurance shall be purchased from an insurance company that meets the following requirements:

4.1 A financial rating of B+VII or better as assigned by the BEST Rating Company or equivalent.

5.0 Certificates of Insurance shall be prepared and executed by the insurance company or its authorized agent, and shall contain provisions representing and warranting the following:

5.1 Sets forth all endorsements and insurance coverages according to requirements and instructions contained herein.

5.2 Sets forth the notice of cancellation or termination to Collin County.

EXHIBIT "G"

AFFIDAVIT OF REGULATION OF CONFLICTS OF INTEREST

The undersigned declares and affirms that during the term of this contract they will maintain compliance as defined in Vernon's Texas Codes Annotated, Local Government Code Title 5, Section C, Chapter 171.

I further understand and acknowledge that the existence of a conflict of interest at any time during the term of this contract will render the contract voidable.

Name of Engineer: Dennis Satre - HALFF ASSOC.
Title of Officer: Vice - President
Signature of Officer: [Handwritten Signature]
Date: 25 February 2014

ACKNOWLEDGMENT

STATE OF TEXAS }
COUNTY OF Collin }

BEFORE ME, on this day personally appeared Dennis Satre, known to me (or proved to me on the oath of Drivers License (description of identity card or other document) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this, the 25th day of February, 2014.

[Handwritten Signature]
Notary Public, State of Texas

Rhiannon Buono
Printed Name



My Commission expires on the 23rd day of April, 2017.