FARMERS BRANCH

PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is made as of the Effective Date by and between **Teague, Nall, and Perkins, Inc.,** hereinafter called "ENGINEER," and the **City of Farmers Branch, Texas**, hereinafter called "OWNER".

RECITALS

WHEREAS, OWNER desires ENGINEER to perform certain work and services set forth in Section 1, Scope of Services.

WHEREAS, ENGINEER has expressed a willingness to perform said work and services, hereinafter referred to only as "services", specified in said Scope of Services, and enumerated under Section 1, of this Agreement.

NOW, THEREFORE, for and in consideration of the covenants and promises made one to the other herein, OWNER and ENGINEER agree as follows:

**Section 1. Scope of Services**

Upon issuance of a written Notice to Proceed by OWNER, ENGINEER agrees to provide to OWNER the necessary professional engineering services related to the preparation of plans and specifications for the **Brookhaven College Campus – Intercity Connections** as set forth in the Scope of Services attached hereto as Exhibit "A" and incorporated herein by reference ("the Scope of Services").

**Section 2. Term of Agreement**

The term of this Agreement shall begin on the last date of execution hereof (the "Effective Date") and shall continue until ENGINEER completes the services required herein to the satisfaction of OWNER, unless sooner terminated as provided in Section 8, below.

**Section 3. Engineer Obligations**

A. ENGINEER shall devote such time as reasonably necessary for the satisfactory performance of the work under this Agreement. Should OWNER require additional services not included under this Agreement, ENGINEER shall make reasonable effort to provide such additional services at mutually agreed charges or rates, and within the time schedule prescribed by OWNER; and without decreasing the effectiveness of the performance of services required under this Agreement.

B. To the extent reasonably necessary for ENGINEER to perform the services under this Agreement, ENGINEER shall be authorized to engage the services of any agents, assistants, persons, or corporations that ENGINEER may deem proper to aid or assist in the performance of the services under this Agreement with the prior written approval of OWNER. The cost of such personnel and assistance shall be a reimbursable expense to ENGINEER only if authorized in writing in advance by OWNER.

C. ENGINEER shall furnish and pay for all labor, tools, materials, equipment, supplies, transportation and management necessary to perform all services set forth in the Scope of Services.

**Section 4. Payment**

A. OWNER agrees to pay ENGINEER for all services authorized in writing and properly performed by ENGINEER in accordance with the Payment Schedule set forth in Exhibit "B," attached hereto and incorporated herein by reference, subject to additions or deletions for changes or extras agreed upon in writing. All fees paid to ENGINEER by OWNER shall be based on invoices submitted by ENGINEER for work performed monthly by ENGINEER, less any previous payments. Payments shall be made within 30 days of receipt of invoice by OWNER.

B. OWNER reserves the right to delay, without penalty, any partial payment when, in the opinion of OWNER, ENGINEER has not made satisfactory progress on the design of this Project based on the Scope of Services and the Completion Schedule Estimate.

C. The Total Engineering Fee shall be as specified in Exhibit "B," which shall not exceed **$119,000.00 for BASIC SERVICES plus reimbursable fees for SPECIAL SERVICES** as specified in Exhibit "B". OWNER may deduct from any amounts due or to become due to ENGINEER any sum or sums owing by ENGINEER to OWNER. In the event of any breach by ENGINEER of any provision or obligation of this Agreement, or in the event of the assertion by other parties of any claim or lien against OWNER, or the OWNER's premises, arising out of ENGINEER's performance of this Agreement, OWNER shall have the right to retain out of any payments due or to become due to ENGINEER an amount sufficient to completely protect the OWNER from any and all loss, damage or expense therefrom, until the breach, claim or lien has been satisfactorily remedied or adjusted by ENGINEER.

**Section 5. Responsibilities**

A. ENGINEER shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, plans and other services furnished by ENGINEER under this Agreement. ENGINEER shall, without additional compensation, correct or revise any errors or deficiencies in the design, drawings, specifications, plans and other services.

B. Neither OWNER's review, approval or acceptance of, nor payment for any of the services required under this Agreement, shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and ENGINEER shall be and remain liable to OWNER in accordance with applicable law for all damages to OWNER caused by ENGINEER's negligent performance of any of the services furnished under this Agreement.

C. The rights and remedies of OWNER under this Agreement are as provided by law.

**Section 6. Time For Performance**

A. ENGINEER shall perform all services as provided for under this Agreement in a proper, efficient and professional manner in accordance with OWNER's requirements. As time is of the essence of this Agreement, such services shall be completed within 90 calendar days after written Notification to Proceed from OWNER to ENGINEER, exclusive of OWNER and other governmental review time.

B. In the event ENGINEER's performance of this Agreement is delayed or interfered with by acts of the OWNER or others, ENGINEER may request an extension of time for the performance of same as hereinafter provided, but shall not be entitled to any increase in fee or price, or to damages or additional compensation as a consequence of such delays.

C. No allowance of any extension of time, for any cause whatever, shall be claimed or made to ENGINEER, unless ENGINEER shall have made written request upon OWNER for such extension within forty-eight (48) hours after the cause for such extension occurred, and unless OWNER and ENGINEER have agreed in writing upon the allowance of additional time to be made.

**Section 7. Documents**

A. All surveys, studies, proposals, applications, drawings, plans, specifications and other documents, including those in electronic form, prepared by ENGINEER and its consultants, subcontractors, agents, representatives, and/or employees in connection with this Agreement ("Project Documents") are intended for the use and benefit of OWNER. ENGINEER and its consultants, subcontractors, agents, representatives, and/or employees shall be deemed the authors of their respective part of the Project Documents. Notwithstanding, OWNER shall own, have, keep and retain all rights, title and interest in and to all Project Documents, including all ownership, common law, statutory, and other reserved rights, including copyrights (except copyrights held by the ENGINEER) in and to all Project Documents, whether in draft form or final form, which are produced at OWNER's request and in furtherance of this Agreement. OWNER shall have full authority to authorize contractor(s), subcontractors, sub-subcontractors, OWNER consultants, and material or equipment suppliers to reproduce applicable portions of the Project Documents to and for use in their execution of the work or for any other purpose. All materials and reports prepared by ENGINEER in connection with this Agreement are "works for hire" and shall be the property of OWNER. OWNER shall have the right to publish, disclose, distribute and otherwise use Project Documents in accordance with the Engineering Practice Act of the State of Texas (Texas Occupation Code, Chapter 1001, as amended) and/or Texas Occupations Code, Chapter 1051, as amended. ENGINEER shall, upon completion of the services and full payment for the ENGINEER'S services by the OWNER, or earlier termination and appropriate compensation as provided by this Agreement, provide OWNER with reproductions of all materials, reports, and exhibits prepared by ENGNIEER pursuant to this Agreement in a TIFF, JPEG or PDF format, and a DXF format in current version of AutoCAD with NAD-83 coordinate format of all such instruments of service to the OWNER.

B. All instruments of service (including plans, specifications, drawings, reports, designs, computations, computer programs, estimates, surveys, other data or work items, etc.)

prepared under this Agreement shall be submitted for approval of OWNER. All instruments of service shall be professionally sealed as may be required by law or by OWNER.

C. Acceptance and approval of the Project Documents by OWNER shall not constitute nor be deemed a release of the responsibility and liability of ENGINEER, its employees, associates, agents and Engineers for the accuracy or competency of their designs, working drawings and specifications, or other documents and work; nor shall such approval be deemed to be an assumption of such responsibility by OWNER for any defect in the designs, working drawings and specifications, or other documents prepared by ENGINEER, its employees, contractor, agents and engineers.

**Section 8. Termination**

A. OWNER may suspend or terminate this Agreement for cause or without cause at any time by giving written notice to ENGINEER. In the event suspension or termination is without cause, payment to ENGINEER, in accordance with the terms of this Agreement, will be made on the basis of services reasonably determined by OWNER to be satisfactorily performed to the date of suspension or termination. Such payment will be due upon delivery of all instruments of service to OWNER.

B. Should OWNER require a modification of this Agreement with ENGINEER, and in the event OWNER and ENGINEER fail to agree upon a modification to this Agreement, OWNER shall have the option of terminating this Agreement and ENGINEER's services hereunder at no additional cost other than the payment to ENGINEER, in accordance with the terms of this Agreement, for the services reasonably determined by OWNER to be properly performed by ENGINEER prior to such termination date.

**Section 9. Insurance**

A. ENGINEER shall during the term hereof maintain in full force and effect the following insurance:

(i) a comprehensive general liability policy of insurance for bodily injury, death and property damage insuring against all claims, demands or actions relating to the ENGINEER's performance of services pursuant to this Agreement with a minimum combined single limit of not less than $1,000,000.00 per occurrence for injury to persons (including death), and for property damage;

(ii) A automobile liability insurance policy covering any vehicles owned and/or operated by ENGINEER, its officers, agents, and employees, and used in the performance of this Agreement with policy limits of not less than $500,000.00 combined single limit and aggregate for bodily injury and property damage;

(iii) statutory Worker's Compensation Insurance at the statutory limits and Employers Liability covering all of ENGINEER's employees involved in the provision of services under this Agreement with policy limit of not less than $500,000.00; and

(iv) Professional Liability covering negligent acts, errors and omissions in the performance of professional services with policy limit of not less than $1,000,000.00 per claim and $1,000,000.00 in the aggregate.

B. All insurance and certificate(s) of insurance shall contain the following provisions:

(i) name the CITY, its officers, and employees as additional insureds as to all applicable coverage with the exception of Workers Compensation Insurance and Professional Liability;

(ii) provide for at least thirty (30) days prior written notice to the CITY for cancellation of the insurance; and

(iii) provide for a waiver of subrogation against the CITY for injuries, including death, property damage, or any other loss to the extent the same is covered by the proceeds of insurance, except for Professional Liability Insurance.

C. All insurance companies providing the required insurance shall be authorized to transact business in Texas and rated at least "A" by AM Best or other equivalent rating service.

D. A certificate of insurance evidencing the required insurance and all endorsements shall be delivered to CITY prior to commencement of services.

**Section 10. Indemnification.**

**CITY shall not be liable for any loss, damage, or injury of any kind or character to any person or property arising from the services of ENGINEER pursuant to this Agreement. ENGINEER hereby waives all claims against CITY, its officers, agents and employees (collectively referred to in this section as "City Indemnitees") for damage to any property or injury to, or death of, any person arising at any time and from any cause other than the negligence or willful misconduct of the City Indemnitees. ENGINEER agrees to indemnify and save harmless the City Indemnitees from and against any and all liabilities, damages, claims, suits, costs (including court costs, attorneys' fees and costs of investigation) and actions of any kind by reason of injury to or death of any person or damage to or loss of property to the extent caused by the negligent performance of services under this Agreement or by reason of any negligent act or omission on the part of ENGINEER, its officers, directors, servants, employees, representatives, consultants, licensees, successors or permitted assigns (except when such liability, claims, suits, costs, injuries, deaths or damages arise from or are attributed to negligence of a City Indemnitee, in whole or in part, in which case ENGINEER shall indemnify the City Indemnitee only to the extent or proportion of negligence attributed to ENGINEER, its officer, as determined by a court or other forum of competent jurisdiction). ENGINEER's obligations under this section shall not be limited to the limits of coverage of insurance maintained or required to be maintained by ENGINEER under this Agreement. This provision shall survive the termination of this Agreement.**

**Section 11. Assignment**

ENGINEER shall not assign or sublet this Agreement, or any part thereof, without the prior written consent of OWNER.

**Section 12. Applicable Laws**

ENGINEER shall comply with all Federal, State, County and Municipal laws, ordinances, regulations, safety orders, resolutions and building codes relating or applicable to services to be performed under this Agreement. The laws of the State of Texas shall govern this Agreement; and venue for any action concerning this Agreement shall be in the State District Court of Dallas County, Texas. The parties agree to submit to the personal and subject matter jurisdiction of said court

**Section 13. Default of Engineer**

In the event ENGINEER fails to comply or becomes disabled and unable to comply with the provisions of this Agreement as to the quality or character of the service or time of performance, and the failure is not corrected within ten (10) days after written notice by OWNER to ENGINEER, OWNER may, at its sole discretion without prejudice to any other right or remedy:

A. Terminate this Agreement and be relieved of the payment of any further consideration to ENGINEER except for all work determined by OWNER to be satisfactorily completed prior to termination. Payment for work satisfactorily completed shall be for actual costs, including reasonable salaries and travel expenses of ENGINEER to and from meetings called by OWNER at which ENGINEER is required to attend, but shall not include any loss of profit of ENGINEER. In the event, of such termination, OWNER may proceed to complete the services in any manner deemed proper by OWNER, either by the use of its own forces or by resubletting to others.

B. OWNER may, without terminating this Agreement or taking over the services, furnish the necessary materials, equipment, supplies and/or help necessary to remedy the situation, at the expense of ENGINEER.

**Section 14. Adjustments in Services**

No claims for extra services, additional services or changes in the services will be made by ENGINEER without a written agreement with OWNER prior to the performance of such services.

**Section 15. Execution becomes Effective**

This Agreement will be effective upon execution of the Agreement by and between ENGINEER and OWNER.

**Section 16. Agreement Amendments**

This Agreement contains the entire understanding of the parties with respect to the subject matter hereof and there are no oral understandings, statements or stipulations bearing upon the

meaning or effect of this Agreement which have not been incorporated herein. This Agreement may only be modified, amended, supplemented or waived by a written instrument executed by the parties except as may be otherwise provided therein.

**Section 17. Severability.**

In the event any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it.

**Section 18. Independent Contractor.**

It is understood and agreed by and between the parties that ENGINEER in satisfying the conditions of this Agreement is acting independently and that the OWNER assumes no responsibility or liabilities to any third party in connection with ENGINEER's actions. All services to be performed by ENGINEER pursuant to this Agreement shall be in the capacity of an independent contractor, and not as an agent or employee of OWNER. ENGINEER shall supervise the performance of its services and shall be entitled to control the manner and means by which its services are to be performed, subject to the terms of this Agreement. There is no intended third party beneficiary to this Agreement.

**Section 19. Right-Of-Access.**

OWNER will obtain and/or furnish right-of-access on any project site for ENGINEER to perform any required studies, surveys, tests or other necessary investigations in relation to any Task Order. ENGINEER will take reasonable precautions to minimize damage to the personal or real property in the performance of such surveys, tests, studies and investigations.

**Section 20. Notice.**

Any notice required or permitted to be delivered hereunder may be sent by first class mail, overnight courier or by confirmed telefax or facsimile to the address specified below, or to such other party or address as either party may designate in writing, and shall be deemed received three (3) days after delivery set forth herein:

| | |
|---|---|
| If to OWNER:<br>(Physical Address) | Director of Public Works<br>City of Farmers Branch<br>13000 William Dodson Pkwy<br>Farmers Branch, TX 75234 |
| (Mailing address): | P.O. Box 819010<br>Farmers Branch, TX 75381 |
| (With copy to): | Peter G. Smith<br>Nichols, Jackson, Dillard, Hager & Smith, L.L.P.<br>1800 Ross Tower<br>500 North Akard<br>Dallas, Texas 75201 |
| If to ENGINEER: | Chris Schmitt, P.E. - Principal<br>Teague, Nall, and Perkins, Inc.<br>17304 Preston Road, Suite 1340<br>Dallas, TX 75252 |

**Section 21. Counterparts.**

This Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument. Each counterpart may consist of any number of copies hereof each signed by less than all, but together signed by all of the parties hereto.

**Section 22. Exhibits.**

The exhibits attached hereto are incorporated herein and made a part hereof for all purposes.

**Section 23. Survival of Obligations.**

Any of the representations and obligations of the parties, as well as any rights and benefits of the parties pertaining to a period of time following the termination of this Agreement shall survive termination.

(Signature page to follow)

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates indicated below.

OWNER:
**City of Farmers Branch, Texas**

By: _____
City Manager

Date: _____

ATTEST:

_____
City Secretary

APPROVED AS TO FORM:

_____
City Attorney

ENGINEER:
**Teague, Nall, and Perkins, Inc.**

By: Chris Schmitt
Chris Schmitt, P.E. - Principal

Date: 12/9/2016

## EXHIBIT "A"

### Scope of Services

The **Scope of Services** shall consist of the following:

**Task 1 – Project Validation and Planning**

To assist City with validating and planning the project, the Engineer has collected, reviewed and evaluated data as follows:

1.1 Met with OWNER as necessary to develop and confirm project intent.

1.2 Located City right-of-way and property boundaries in the project area.

1.3 Identified and generally located existing utilities within project corridor.

1.4 Determined extents of floodplain, floodway, and other FEMA zones for Farmers Branch Creek in the vicinity of the proposed project, and evaluated potential impacts to project.

1.5 Assisted OWNER in establishing potential alignment options for pedestrian bridge and sidewalk connections.

1.6 Developed Opinions of Probable Construction Cost for various options identified.

1.7 Evaluated options for risk factors including impacts to floodplain, conflicts with existing utilities, proximity to existing sidewalks, schedule, and cost.

1.8 Assisted OWNER in determining impact of changes to proposed bridge alignment to OWNER's funding program and compliance with state Local Government Project Procedures.

1.9 Met with OWNER to present findings and make recommendations.

**Task 2 – Data Collection and Field Reconnaissance**

The Engineer shall collect, review and evaluate data as follows:

2.1 Data, if available, from the State, including "as-built plans", existing schematics, right-of-way maps, Subsurface Utility Engineering (SUE) mapping, existing cross sections, existing planimetric mapping, environmental documents, existing channel and drainage easement data existing traffic counts, accident data, Bridge Inspection records, Project Management Information system (PM IS) data, identified endangered species, identified hazardous material sites, current unit bid price information, current special provisions, special specifications, and standard drawings.

2.2 Per TxDOT – Preliminary Design Report will not be required (Form 1002)

2.3 Utility plans and documents from appropriate municipalities and agencies.

2.4 Hydraulic study previously performed for reconstruction of west (southbound) bridge, along with any study revisions or addendums which may be performed prior to project design.

2.5 Findings of the HVJ report prepared on 12/11/2013 for HNTB for the adjacent S. Bound bridge replacement for Marsh Lane. ENGINEER may rely on data from this report in lieu of performing additional geotechnical investigations.

**Task 3 – Topographic Design Survey and Base Map**

The ENGINEER shall verify the benchmark coordinates and establish additional horizontal and vertical control for the project. The ENGINEER shall provide field surveying services necessary to verify the Digital Terrain Model (DTM), produce topographic maps, establish the project baseline on the ground, and locate and tie existing utilities to the project baseline. Coordinate geometry shall be based on and tied into State plane surface coordinate system. The ENGINEER shall:

3.1 Establish horizontal and vertical control. All coordinates shall be based on the North American datum (NAD) 83 (2011) (2010 epoch), and all elevations shall be based on the North American vertical datum (NAVD) of 1988, or as approved by TxDOT. All coordinates shall be adjusted to surface using the TxDOT Dallas District Dallas County Surface Adjustment Factor.

3.2 Perform a Topographic Design Survey of the project area identifying topography, visible features and above ground improvements such as buildings, pavement, curbs, bridge features, walks, fences, creek, visible utilities, and other pertinent features as necessary for engineering design. The survey limits shall extend approximately 50 feet north and south and approximately 50 feet east from the intersection of the centerline median of Marsh Lane with Farmers Branch Creek.

3.3 Obtain profiles of existing drainage facilities.

3.4 Obtain measurement of hydraulic opening under existing bridges.

3.5 The Surveyor shall control traffic in and near surveying operations adequately to comply with the latest edition of the TMUTCD. In the event field personnel must divert traffic or close traveled lanes, a Traffic Control Plan shall be prepared by the ENGINEER'S Surveyor and approved by the OWNER prior to commencement of field work. A copy of the approved plans shall be in the possession of field personnel on the job site at all times and shall be made available to OWNER and TxDOT personnel upon request.

3.6 Provide a Base Map of the project area in AutoCAD format for in-house design.

3.7 City will provide traffic control support during surveying operations, if required. Traffic control services are specifically excluded from this scope. ENGINEER can provide traffic control during design surveys as an Additional Service for a flat fee of $1,500 per day.

3.8 City has previously located sufficient property corners on and adjacent to the project area to verify and/or establish the East right-of-way for Marsh Lane and the property line between Wooded Creek Estates and Brookhaven College. As such, these services are specifically excluded from this scope.

**Task 4 – Easement Documents**

4.1 Provide a metes and bounds description (Exhibit A) and easement plat (Exhibit B) for each permanent and/or temporary construction easement required. These documents will be signed and sealed by a Texas Registered Professional Land Surveyor.

**Task 5 – Subsurface Utility Engineering (Quality Levels B/C/D)**

ENGINEER will perform Subsurface Utility Engineering (SUE) services. These SUE services are for the purpose of aiding the design of the project by providing information related to subsurface utilities in order to allow potential utility conflicts to be minimized or eliminated, and to allow the OWNER to confidently provide the required utility clearance certification to TxDOT.

Quality Level "D" (QL-"D") generally indicates information collected or derived from research of existing records and/or oral discussions. Quality Level "C" (QL-"C") generally indicates information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to QL-"D" information. QL-"C" incorporates QL-"D" information. Generally QL-"B", also known as "designating," indicates information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. QL "B" data should be reproducible by surface geophysics at any point of their depiction. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents.

Ground penetrating radar will not be used as a part of the field investigation of the project site unless that use has been specifically addressed with the scope of services described herein.

ENGINEER will:

5.1 Provide services that meet the standard of care for existing subsurface utility location and mapping as established in CI/ASCE 38-02 by exercising due diligence with regard to records research and acquisition of utility information, including visually inspecting the work area for evidence of utilities and reviewing the available utility record information from the various utility owners; however, the ENGINEER makes no guarantee that all utilities can or will be identified and shown as there still may be utilities within the project area that are undetectable or unknown.

5.2 Provide QL-"C" information in the project deliverables for all unknown utilities (facilities that are discovered through field investigative efforts by the ENGINEER but for which no plan records or ownership data can be identified) that may be identified in the field investigation of the project.

5.3 Request utility records on all crossing utilities from the OWNER, public utilities and private utility companies known to provide service within the project area, as well as

other sources, in an effort to develop a comprehensive inventory of utility systems likely to be encountered. Record documents may include construction plans, system diagrams, distribution maps, transmission maps, geographic information system data, as well as oral descriptions of the existing systems. Record information will not be used as a substitute for field location methods unless it is determined to be the most appropriate method for depicting the utilities at the site. The depiction of utilities from records (QL-"C" or "D") will be based on thorough field and office activities and shall be based on the most reliable indication of position available.

5.4 Investigate all utility systems shown on the record drawings that are included within the project site. Visible surface features and appurtenances of subsurface utilities found within the project site will also be evaluated. Using appropriate surface geophysical methods, TNP will search for detectible indications of the location of anticipated subsurface utilities.

5.5 Mark all locations that can be validated, using paint, flags or other devices.

5.6 Prepare documentation of the utilities encountered and marked, including their general location, orientation, type & size, if known.

5.7 Provide Quality Level "B" SUE services for applicable utilities located within the project area.

5.8 Deliver a QL-"B"/"C"/"D" AutoCAD 2D (DGN) file depicting all visible utility features and records, with a .pdf of the same, signed and sealed by a Professional Engineer registered in the State of Texas, and a corresponding ASCII points file.

**Task 6 – Subsurface Utility Engineering (Quality Level A)**

ENGINEER will perform Subsurface Utility Engineering (SUE) services. These SUE services are for the purpose of aiding the design of the project by providing information related to subsurface utilities in order to allow potential utility conflicts to be minimized or eliminated, and to allow the OWNER to confidently provide the required utility clearance certification to TxDOT.

Generally QL-"A", also known as "locating," indicates the precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, at a specific point.

ENGINEER will:

6.1 Provide Quality Level "A" SUE services including up to 4 test holes to a depth of 12 feet.

6.2 Deliver a QL-"A" AutoCAD 2D (DGN) file depicting all visible utility features and records, with a .pdf of the same, signed and sealed by a Professional Engineer registered in the State of Texas, and a corresponding ASCII points file.

**Task 7 – Environmental Assessment and Mitigation**

ENGINEER will provide professional services to complete the field survey and associated documentation to provide TXDOT Dallas District Environmental Coordinator sufficient information to complete the TXDOT Environmental Compliance Oversight System (ECOS) Categorical Exclusion Determination. This information will include:

7.1 A Scope Development Form indicating what documentation will be required to receive environmental clearance;

7.2 A waters of the United States delineation, which will map and delineate all water features located within the project area;

7.3 Vegetation community mapping to identify the presence/absence of preferred habitat for protected species that could potentially occur within or adjacent to the project area and to identify if any unique vegetation communities are present;

7.4 A preliminary site evaluation that will be compliant with ASTM International Standard E1527-13 for a Phase I Environmental Site Assessment to determine the potential for the area to contain past evidence of hazardous materials or hazardous waste;

7.5 Appropriate database and geo-database searches for the listed biological elements as defined on the Biological Evaluation Form;

7.6 A cultural resources background review and desktop analysis identifying known cultural resources within and adjacent to the project area, the potential for encountering previously undocumented resources, and recommendations;

7.7 A Section 4(f) Exemptions Form for acquiring of the temporary easement within a designated public recreational area;

7.8 A Section 4(f) Exception Letter, which will serve as the required public involvement for acquiring the temporary easement within a designated public recreational area, and

7.9 Representative Photographs of the project area and surrounding areas.

This scope of services assumes that no archeological survey will be required for the project. If TxDOT determines an archeological survey is required, ENGINEER can perform this as Additional Services. This scope of services also assumes that no Pre-Construction Notification (PCN) will be required by TxDOT. If a PCN is required, ENGINEER can perform this as Additional Services.

**Task 8 – Design Phase Services**

ENGINEER will perform services required for the Preliminary Engineering and Design of the proposed improvements and for coordination and compliance with TxDOT Local Government Project Procedures (LGPP), including:

8.1 Perform required TxDOT LGPP Project Initiation services, including attending Project Kickoff Meeting with TxDOT and OWNER representatives.

8.2 Meet with OWNER and TxDOT as necessary.

8.3 Develop preliminary design and cost estimates, including preliminary geometric alignment, typical sections, pavement designs, and bridge layouts.

8.4 Identify environmental compliance issues.

8.5 Begin utility coordination.

8.6 Develop standard specifications.

8.7 Address accessibility standards in design.

8.8 Perform site visits as necessary for design.

8.9 Develop preferred geometric alignment.

8.10 Refine typical sections.

8.11 Determine potential needs for easements (construction, etc.) and access issues.

8.12 Identify/confirm existing utilities and coordinate with utility owners. Identify any potential conflicts and resolve.

8.13 Conduct constructability review.

8.14 Update cost estimates.

8.15 Perform quality control reviews of deliverables.

8.16 Obtain OWNER and TxDOT approval of preliminary design.

ENGINEER will perform services required for developing Plans, Specifications, and Estimates (PS&E) of the proposed improvements and for coordination and compliance with TxDOT LGPP. ENGINEER will comply with TxDOT and Federal standards, including: TxDOT Roadway Design Manual, AASHTO's "A Policy of Geometric Design of Highways and Streets," and the "Texas Manual on Uniform Control Devices." Services will include:

8.17 Perform structural design of bridge improvements.

8.18 Prepare bridge layout plan sheet, including bridge typical sections, structural dimensions, abutment and bent locations, superstructure and substructure types.

8.19 Locate and plot all soil borings and utilities, show proposed retaining walls, and, for staged construction, indicate limits of existing bridge for removal and reconstruction.

8.20 Perform calculations for design of bridge abutments, bridge slab design, to determine elevations of bridge substructure and super structure elements, and bridge beam design.

8.21 Prepare necessary foundation details and plan sheets, plan sheets for abutment and bent designs, plan sheets for additional abutment and bent details, framing plan and slab plan sheets, tables for slab and bearing seat elevations, dead load deflections, etc., and Bridge Summary Sheet.

8.22 Prepare detailed 60% design.

8.23 Update cost estimate.

8.24 Prepare proposal (bid documents) with all necessary forms. Forms will include standard forms required by OWNER and those required by TxDOT.

8.25 Complete EPICs (Environmental Permits, Issues and Commitments).

8.26 Verify registration of project with Texas Department of Licensing and Regulation (TDLR) and coordinate with RAS reviewer as required by TDLR. OWNER will hire RAS reviewer and pay applicable professional fees directly to RAS reviewer.

8.27 Update schedule including letting date.

8.28 Finalize detailed 90% design.

8.29 Finalize cost estimate.

8.30 Finalize proposal (bid documents).

8.31 Finalize EPICs.

8.32 Receive TDLR approval of plans.

8.33 Verify letting date.

8.34 Propose procurement procedures for construction Contractor and receive approval from OWNER and TxDOT.

8.35 Prepare final PS&E and related documents.

**Task 9 – Bidding Phase Services**

ENGINEER will assist the OWNER with bidding of the project as follows:

9.1 Prepare a .pdf electronic copy of plans and specifications for distribution to prospective bidders. Production of hard-copy sets of bidding documents can be provided as an Additional Service and billed to the CITY at TNP's standard reproduction rates.

9.2 Prepare for and participate in a Pre-Bid Meeting.

9.3 Assist OWNER with issuing addenda as required.

9.4 Assist OWNER with answering contractor questions.

9.5 OWNER will conduct bid opening and prepare a tabulation of bids. ENGINEER will not attend bid opening or tabulate bids.

9.6 OWNER will evaluate bids and recommend of award of contract to City Council and TxDOT.

9.7 Upon completion of construction and receipt of comments from the OWNER's Inspector and the Contractor, prepare the Record Drawings. Record Drawings will be revisions to the construction drawings that reflect changes during the construction process reported to the ENGINEER. One (1) set of Record Drawings will be delivered to the OWNER. The ENGINEER will also provide an electronic file of Record Drawings as PDF's and an AutoCAD base file of the Project.

**Task 10 – Construction Phase Services**

For this phase, ENGINEER will assist the OWNER as follows:

10.1 Assist OWNER in executing the construction contract.

10.2 Attend Project Coordination Meeting with OWNER and TxDOT.

10.3 Attend a pre-construction conference prior to commencement of work at the site.

10.4 Provide limited on-site construction observation services during construction phase. The ENGINEER will visit the site as directed by the OWNER. Weekly site visits shall be provided during active construction periods in order to observe the progress of the Work. Such visits and observations are not intended to be exhaustive or to extend to every aspect of the Contractor's work in progress. Observations are to be limited to confirming general conformance with the plans and specifications. Detailed daily construction inspection will be performed by the OWNER.

The purpose of the ENGINEER'S site visits will be to provide the OWNER a greater degree of confidence that the completed work will conform in general to the Contract Documents. ENGINEER shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have authority over or responsibility for the means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures, of construction selected by contractor, for safety precautions and programs incident to Contractors work, not for any failure of contractor to comply with the laws and regulations applicable to Contractors furnishing and performing the work. Accordingly, the ENGINEER neither guarantees the performance of any contractor nor assumes responsibility for any contractor's failure to furnish and perform its work in accordance with the Contract Documents.

10.5 Recommend to the OWNER that the contractor's work be disapproved and rejected while it is in progress if, on the basis of observations noted above, the ENGINEER believes that

such work will not produce a completed project that conforms generally to the Contract Documents.

10.6 Respond to reasonable contractor requests for information and issue necessary clarifications and interpretations of the contract documents. Any orders authorizing variations from the Contract Documents will be made by the OWNER.

10.7 Recommend Change Orders to the OWNER as appropriate and review and make recommendations related to Change Orders submitted or proposed by the Contractor.

10.8 Review and approve/comment on all submittals submitted by the Contractor. The review will only be for general conformance with the information given in the Contract Documents.

10.9 Evaluate and determine acceptability of substitute or "or-equal" materials and equipment proposed by Contractor in accordance with the Contract Documents.

10.10 Review the contractor's applications for payment and accompanying supporting documentation. The ENGINEER will issue a recommendation for payment in writing to the OWNER.

10.11 Upon notice and invitation from the OWNER, perform a site visit to determine if the work is substantially complete. Work will be considered substantially complete following satisfactory completion of all items in the Contract Documents with the exception of items identified on a final punch list.

10.12 Participate in a final site visit with the OWNER and contractor to determine if the completed work is generally in accordance with the Contract Documents and punch list so that the ENGINEER can recommend, in writing, final payment to the Contractor.

10.13 This contract does not include the following tasks during construction (which may be performed, if desired by OWNER, as an Additional Service): reviewing environmental compliance issues, monitoring DBE compliance, providing TxDOT Progress Reports, field-verifying Contractor compliance with SWPPP, verifying Contractor compliance with minimum labor rates, etc.

**EXHIBIT "B"**

**Payment Schedule**

**Compensation** shall be on the basis of the following:

1. **BASIC SERVICES:** The OWNER agrees to pay the ENGINEER a fixed lump sum fee (inclusive of expenses) of $119,000.00 for **BASIC ENGINEERING SERVICES** listed below as described in Exhibit "A". **BASIC SERVICES** shall be billed monthly based on the percentage of work complete. OWNER shall pay for any required permitting costs directly.

| | |
|---|---|
| Task 1 – Project Validation and Planning | $ 15,000.00 |
| Task 2 – Data Collection and Field Reconnaissance | $ 8,000.00 |
| Task 3 – Topographic Design Survey | $ 5,000.00 |
| Task 7 – Environmental Assessment and Mitigation | $ 12,000.00 |
| Task 8 – Design Phase Services | $ 75,500.00 |
| Task 9 – Bidding Phase Services | $ 3,500.00 |
| **TOTAL BASIC SERVICES:** | **$119,000.00** |

2. **SPECIAL SERVICES:** The OWNER agrees to pay the ENGINEER on a reimbursable basis for SPECIAL SERVICES as listed below and described in Exhibit "A". ENGINEER shall be reimbursed at standard TNP hourly rates or TNP standard rates for items provided in-house, or direct expenses times a multiplier of 1.10 for non-labor, subcontract or mileage items. SPECIAL SERVICES shall be billed monthly based on the work performed during the specified period.

| | |
|---|---|
| Task 4 – Easement Documents | $ 1,500.00 per easement |
| Task 5 – Subsurface Utility Engineering (QL B/C/D) | $ 8,500.00 (hourly)* |
| Task 6 – Subsurface Utility Engineering (QL A) | $ 1,800.00 per test hole |
| Task 10 – Construction Phase Services | $ 10,000.00 (hourly)* |

* *Budget estimates are provided for planning purposes only, and are not to be construed as maximum or minimum amounts required to complete the task. OWNER will be invoiced based upon actual time expended. ENGINEER will keep OWNER apprised of level of effort expended and percent of budgetary amount used on a monthly basis.*

3. **ADDITIONAL SERVICES: ADDITIONAL SERVICES** shall be any service provided by the ENGINEER which is not specifically included in **BASIC SERVICES** or **SPECIAL SERVICES** as described above. **ADDITIONAL SERVICES** shall include, but shall not be limited to:

   a. Design of utilities deemed necessary to be relocated;
   b. Property research and real property surveying for easements, right-of-ways or plats;
   c. Preparation of real property transfer documents, exhibits or plats;
   d. Participation in real property acquisition;

e. Traffic control during surveying operations;
f. Subcontract charges not described in Scope of Services, above;
g. Construction staking; and/or
h. Resident construction observation.

**ADDITIONAL SERVICES** shall be considered additional work and shall be reimbursed at standard TNP hourly rates or TNP standard rates for items provided in-house, or direct expenses times a multiplier of 1.10 for non-labor, subcontract or mileage items.