This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD FORM OF AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
a practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

_____

AMERICAN CONSULTING ENGINEERS COUNCIL

_____

AMERICAN SOCIETY OF CIVIL ENGINEERS

This Agreement has been prepared for use with the Standard General Conditions of the Construction Contract (No. 1910-8, 1996 Edition) of the Engineers Joint Contract Documents Committee. Their provisions are interrelated, and a change in one may necessitate a change in the other. For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. 1910-17) (1996 Edition). For guidance on the completion and use of this Agreement, see EJCDC Users Guide, No. 1910-50.

EJCDC No. 1910-1 (1996 Edition)
Revised by City of Killeen 3/03/04

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STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND ENGINEER
FOR
PROFESSIONAL SERVICES

THIS IS AN AGREEMENT effective as of _____("Effective Date") between the CITY OF KILLEEN ("OWNER") and Pape-Dawson Engineers, Inc. ("ENGINEER").

OWNER and ENGINEER in consideration of their mutual covenants as set forth herein agree as follows: To provide engineering services as described in Exhibit A of this contract in the amount of $1,982,000.

ARTICLE 1 - SERVICES OF ENGINEER

1.01 Scope

A. ENGINEER shall provide the Basic and Additional Services set forth herein and in Exhibit A.

B. Upon this Agreement becoming effective, ENGINEER is authorized to begin Basic Services as set forth in Exhibit A.

C. If authorized by OWNER, ENGINEER shall furnish Resident Project Representative(s) with duties, responsibilities and limitations of authority as set forth in Exhibit D.

ARTICLE 2 - OWNER'S RESPONSIBILITIES

2.01 General

A. OWNER shall have the responsibilities set forth herein and in Exhibit B.

ARTICLE 3 - TIMES FOR RENDERING SERVICES

3.01 General

A. ENGINEER's services and compensation under this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion. Unless specific periods of time or specific dates for providing services are specified in this Agreement, ENGINEER's obligation to render services hereunder will be for a period which may reasonably be required for the completion of said services.

B. If in this Agreement specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided, and if such periods of time or dates are changed through no fault of ENGINEER, the rates and amounts of compensation provided for herein shall be subject to equitable adjustment. If OWNER has requested changes in the scope, extent, or character of the Project, the time of performance of ENGINEER's services shall be adjusted equitably.

C. For purposes of this Agreement the term "day" means a calendar day of 24 hours.

3.02 Suspension

A. If OWNER fails to give prompt written authorization to proceed with any phase of services after completion of the immediately preceding phase, or if ENGINEER's services are delayed through no fault of ENGINEER, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement.

B. If ENGINEER's services are delayed or suspended in whole or in part by OWNER, or if ENGINEER's services are extended by Contractor's actions or inactions for more than 90 days through no fault of ENGINEER, ENGINEER shall be entitled to equitable adjustment of rates and amounts of compensation provided for elsewhere in this Agreement to reflect, reasonable costs incurred by ENGINEER in connection with, among other things, such delay or suspension and reactivation and the fact that the time for performance under this Agreement has been revised.

ARTICLE 4 - PAYMENTS TO ENGINEER

4.01 Methods of Payment for Services and Reimbursable Expenses of ENGINEER

A. *For Basic Services*. OWNER shall pay ENGINEER for Basic Services performed or furnished under Exhibit A, Part 1, as set forth in Exhibit C.

B. *For Additional Services*. OWNER shall pay ENGINEER for Additional Services performed or furnished under Exhibit A, Part 2, as set forth in Exhibit C.

C. *For Reimbursable Expenses*. In addition to payments provided for in paragraphs 4.01.A and 4.01.B, OWNER shall pay ENGINEER for Reimbursable Expenses incurred by ENGINEER and ENGINEER's Consultants as set forth in Exhibit C.

4.02 Other Provisions Concerning Payments

A. *Preparation of Invoices*. Invoices will be prepared in accordance with ENGINEER's standard invoicing practices and will be submitted to OWNER by ENGINEER, unless otherwise agreed. The amount billed in each invoice will be calculated as set forth in Exhibit C.

B. *Payment of Invoices*. Invoices are due and payable within 30 days of receipt. If OWNER fails to make any payment due ENGINEER for services and expenses within 30 days after receipt of ENGINEER's invoice therefore, the amounts due ENGINEER will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day. In addition, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement until ENGINEER has been paid in full all amounts due for services, expenses, and other related charges. Payments will be credited first to interest and then to principal.

C. *Disputed Invoices*. In the event of a disputed or contested invoice, only that portion so contested may be withheld from payment, and the undisputed portion will be paid.

D. *Payments Upon Termination*.

1. In the event of any termination under paragraph 6.06, ENGINEER will be entitled to invoice OWNER and will be paid in accordance with Exhibit C for all services performed or furnished and all Reimbursable Expenses incurred through the effective date of termination.

2. In the event of termination by OWNER for convenience or by ENGINEER for cause, ENGINEER, in addition to invoicing for those items identified in subparagraph 4.02.D.1, shall be entitled to invoice OWNER and shall be paid a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with ENGINEER's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Exhibit C. Engineer shall not incur additional expenses after receipt of notice of termination and shall make reasonable efforts to minimize costs.

E. *Records of ENGINEER's Costs*. Records of ENGINEER's costs pertinent to ENGINEER's compensation under this Agreement shall be kept in accordance with generally accepted accounting practices. To the extent necessary to verify ENGINEER's charges and upon OWNER's timely request, copies of such records will be made available to OWNER at cost.

F. *Legislative Actions*. In the event of legislative actions after the Effective Date of the Agreement by any level of government that impose taxes, fees, or costs on ENGINEER's services or other costs in connection with this Project or compensation therefor, such new taxes, fees, or costs shall be invoiced to and paid by OWNER as a Reimbursable Expense to which a Factor of 1.0 shall be applied. Should such taxes, fees, or costs be imposed, they shall be in addition to ENGINEER's estimated total compensation.

ARTICLE 5 - OPINIONS OF COST

5.01 Opinions of Probable Construction Cost

A. ENGINEER's opinions of probable Construction Cost provided for herein are to be made on the basis of ENGINEER's experience and qualifications and represent ENGINEER's best judgment as an experienced and qualified professional generally familiar with the industry. However, since ENGINEER has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, ENGINEER cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by ENGINEER. If OWNER wishes greater assurance as to probable Construction Cost, OWNER shall employ an independent cost estimator as provided in Exhibit B.

5.02 Designing to Construction Cost Limit

A. If a Construction Cost limit is established between OWNER and ENGINEER, such Construction Cost limit and a statement of ENGINEER's rights and responsibilities with respect thereto will be specifically set forth in Exhibit F, "Construction Cost Limit," to this Agreement.

5.03 Opinions of Total Project Costs

A. ENGINEER assumes no responsibility for the accuracy of opinions of Total Project Costs.

ARTICLE 6 - GENERAL CONSIDERATIONS

6.01 Standards of Performance

A. The standard of care for all professional engineering and related services performed or furnished by ENGINEER under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.

B. ENGINEER shall be responsible for the technical accuracy of its services and documents resulting therefrom, and OWNER shall not be responsible for discovering deficiencies therein. ENGINEER shall correct such deficiencies without additional compensation except to the extent such action is directly attributable to deficiencies in OWNER-furnished information.

C. ENGINEER shall perform or furnish professional engineering and related services in all phases of the Project to which this Agreement applies. ENGINEER shall serve as OWNER's prime professional for the Project. ENGINEER may employ such ENGINEER's Consultants as ENGINEER deems necessary to assist in the performance or furnishing of the services. ENGINEER shall not be required to employ any ENGINEER's Consultant unacceptable to ENGINEER.

D. ENGINEER and OWNER shall comply with applicable Laws or Regulations and OWNER-mandated standards. This Agreement is based on these requirements as of its Effective Date. Changes to these requirements after the Effective Date of this Agreement may be the basis for modifications to OWNER's responsibilities or to ENGINEER's scope of services, times of performance, or compensation.

E. OWNER shall be responsible for, and ENGINEER may rely upon, the accuracy and completeness of all requirements, programs, instructions, reports, data, and other information furnished by OWNER to ENGINEER pursuant to this Agreement. ENGINEER may use such requirements, reports, data, and information in performing or furnishing services under this Agreement.

F. OWNER shall make decisions and carry out its other responsibilities in a timely manner and shall bear all costs incident thereto so as not to delay the services of ENGINEER.

G. Prior to the commencement of the Construction Phase, OWNER shall notify ENGINEER of any variations from the language indicated in Exhibit E, "Notice of Acceptability of Work," or of any other notice or certification that ENGINEER will be requested to provide to OWNER or third parties in connection with the Project. OWNER and ENGINEER shall reach agreement on the terms of any such requested notice or certification, and OWNER shall authorize such Additional Services as are necessary to enable ENGINEER to provide the notices or certifications requested.

H. ENGINEER shall not be required to sign any documents, no matter by whom requested, that would result in the ENGINEER's having to certify, guarantee or warrant the existence of conditions whose existence the ENGINEER cannot ascertain. OWNER agrees not to make resolution of any dispute with the ENGINEER or payment of any amount due to the ENGINEER in any way contingent upon the ENGINEER's signing any such certification.

I. During the Construction Phase, ENGINEER shall not supervise, direct, or have control over Contractor's work, nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected by Contractor, for safety precautions and programs incident to the Contractor's work in progress, nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work.

J. ENGINEER neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.

K. ENGINEER shall not be responsible for the acts or omissions of any Contractor(s), subcontractor or supplier, or of any of the Contractor's agents or employees or any other persons (except ENGINEER's own employees) at the Site or otherwise furnishing or performing any of the Contractor's work; or for any decision made on interpretations or clarifications of the Contract Documents given by OWNER without consultation and advice of ENGINEER.

L. The General Conditions for any construction contract documents prepared hereunder are to be the "Standard General Conditions of the Construction Contract" as prepared by the Engineers Joint Contract Documents Committee (Document No. 1910-8, 1996 Edition) unless both parties mutually agree to use other General Conditions as specifically referenced in Exhibit H.

6.02 Authorized Project Representatives

A. Contemporaneous with the execution of this Agreement, ENGINEER and OWNER shall designate specific individuals to act as ENGINEER's and OWNER's representatives with respect to the services to be performed or furnished by ENGINEER and responsibilities of OWNER under this Agreement. Such individuals shall have authority to transmit instructions, receive information, and render decisions relative to the Project on behalf of each respective party.

6.03 Design without Construction Phase Services

A. Should OWNER provide Construction Phase services with either OWNER's representatives or a third party, ENGINEER's Basic Services under this Agreement will be considered to be completed upon completion of the Final Design Phase or Bidding or Negotiating Phase as outlined in Exhibit A.

B. It is understood and agreed that if ENGINEER's Basic Services under this Agreement do not include Project observation, or review of the Contractor's performance, or any other Construction Phase services, and that such services will be provided by OWNER, then OWNER assumes all responsibility for interpretation of the Contract Documents and for construction observation or review and waives any claims against the ENGINEER that may be in any way connected thereto.

6.04 Use of Documents

A. All Documents are instruments of service in respect to this Project, and ENGINEER shall retain an ownership and property interest therein (including the right of reuse at

the discretion of the ENGINEER) whether or not the Project is completed.

B. Copies of OWNER-furnished data that may be relied upon by ENGINEER are limited to the printed copies (also known as hard copies) that are delivered to the ENGINEER pursuant to Exhibit B. Files in electronic media format of text, data, graphics, or of other types that are furnished by OWNER to ENGINEER are only for convenience of ENGINEER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

C. Copies of Documents that may be relied upon by OWNER are limited to the printed copies (also known as hard copies) that are signed or sealed by the ENGINEER. Files in electronic media format of text, data, graphics, or of other types that are furnished by ENGINEER to OWNER are only for convenience of OWNER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

D. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. ENGINEER shall not be responsible to maintain documents stored in electronic media format after acceptance by OWNER.

E. When transferring documents in electronic media format, ENGINEER makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by ENGINEER at the beginning of this Project.

F. OWNER may make and retain copies of Documents for information and reference in connection with use on the Project by OWNER. Such Documents are not intended or represented to be suitable for reuse by OWNER or others on extensions of the Project or on any other project. Any such reuse or modification without written verification or adaptation by ENGINEER, as appropriate for the specific purpose intended, will be at OWNER's sole risk and without liability or legal exposure to ENGINEER or to ENGINEER's Consultants. OWNER shall indemnify and hold harmless ENGINEER and ENGINEER's Consultants from all claims, damages, losses, and expenses, including attorneys' fees arising out of or resulting therefrom.

G. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

H. Any verification or adaptation of the Documents for extensions of the Project or for any other project will entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

6.05 Insurance

A. ENGINEER shall procure and maintain insurance as set forth in Exhibit G, "Insurance."

B. OWNER shall procure and maintain insurance as set forth in Exhibit G, "Insurance." OWNER shall cause ENGINEER and ENGINEER's Consultants to be listed as additional insureds on any general liability or property insurance policies carried by OWNER which are applicable to the Project.

C. OWNER shall require Contractor to purchase and maintain general liability and other insurance as specified in the Contract Documents and to cause ENGINEER and ENGINEER's Consultants to be listed as additional insureds with respect to such liability and other insurance purchased and maintained by Contractor for the Project

D. OWNER and ENGINEER shall each deliver to the other certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates shall be furnished prior to commencement of ENGINEER's services and at renewals thereafter during the life of the Agreement.

E. All policies of property insurance shall contain provisions to the effect that ENGINEER's and ENGINEER's Consultants' interests are covered and that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder.

F. At any time, OWNER may request that ENGINEER, at OWNER's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in Exhibit G. If so requested by OWNER, with the concurrence of ENGINEER, and if commercially available, ENGINEER shall obtain and shall require ENGINEER's Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by OWNER, and Exhibit G will be supplemented to incorporate these requirements.

6.06 Termination

A. The obligation to provide further services under this Agreement may be terminated:

1. *For cause*,

a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

b. By ENGINEER:

1) upon seven days written notice if ENGINEER believes that ENGINEER is being requested by OWNER to furnish or perform services contrary to ENGINEER's responsibilities as a licensed professional; or

2) upon seven days written notice if the ENGINEER's services for the Project are delayed or suspended for more than 90 days for reasons beyond ENGINEER's control.

3) ENGINEER shall have no liability to OWNER on account of such termination.

c. Notwithstanding the foregoing, this Agreement will not terminate as a result of such substantial failure if the party receiving such notice begins, within seven days of receipt of such notice, to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

2. *For convenience*,

a. By OWNER effective upon the receipt of notice by ENGINEER.

B. The terminating party under paragraphs 6.06.A.1 or 6.06.A.2 may set the effective date of termination at a time up to 30 days later than otherwise provided to allow ENGINEER to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.

6.07 Controlling Law

A. This Agreement is to be governed by the law of the State of Texas and venue shall be in Bell County.

6.08 Successors, Assigns, and Beneficiaries

A. OWNER and ENGINEER each is hereby bound and the partners, successors, executors, administrators and legal representatives of OWNER and ENGINEER (and to the extent permitted by paragraph 6.08.B the assigns of OWNER and ENGINEER) are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this Agreement.

B. Neither OWNER nor ENGINEER may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

C. Unless expressly provided otherwise in this Agreement:

1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by OWNER or ENGINEER to any Contractor, Contractor's subcontractor, supplier, other individual or entity, or to any surety for or employee of any of them.

2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of OWNER and ENGINEER and not for the benefit of any other party. The OWNER agrees that the substance of the provisions of this paragraph 6.08.C shall appear in the Contract Documents.

6.09 Hazardous Environmental Condition

A. OWNER represents to Engineer that to the best of its knowledge a Hazardous Environmental Condition does not exist.

B. OWNER has disclosed to the best of its knowledge to ENGINEER the existence of all Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Material located at or near the Site, including type, quantity and location.

C. If a Hazardous Environmental Condition is encountered or alleged, ENGINEER shall have the obligation to notify OWNER and, to the extent of applicable Laws and Regulations, appropriate governmental officials.

D. It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to a Hazardous Environmental Condition. In

the event ENGINEER or any other party encounters a Hazardous Environmental Condition, ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Hazardous Environmental Condition; and (ii) warrants that the Site is in full compliance with applicable Laws and Regulations.

E. OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the Site in connection with ENGINEER's activities under this Agreement.

F. If ENGINEER's services under this Agreement cannot be performed because of a Hazardous Environmental Condition, the existence of the condition shall justify ENGINEER's terminating this Agreement for cause on 30 days notice.

6.10 Allocation of Risks

A. Indemnification

1. To the fullest extent permitted by law, ENGINEER shall indemnify and hold harmless OWNER, OWNER's officers, directors, partners, and employees from and against any and all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused solely by the negligent acts or omissions of ENGINEER or ENGINEER's officers, directors, partners, employees, and ENGINEER's Consultants in the performance and furnishing of ENGINEER's services under this Agreement.

2. To the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER, ENGINEER's officers, directors, partners, employees, and ENGINEER's Consultants from and against any and all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused solely by the negligent acts or omissions of OWNER or OWNER's officers, directors, partners, employees, and OWNER's consultants with respect to this Agreement or the Project.

3. In addition to the indemnity provided under paragraph 6.10.A.2 of this Agreement, and to the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER and its officers, directors, partners, employees, and ENGINEER's Consultants from and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused by, arising out of or resulting from a Hazardous Environmental Condition, provided that (i) any such cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than completed Work), including the loss of use resulting therefrom, and (ii) nothing in this paragraph 6.10.A.4. shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence or willful misconduct.

4. The indemnification provision of paragraph 6.10.A.1 is subject to and limited by the provisions agreed to by OWNER and ENGINEER in Exhibit I, "Allocation of Risks," if any.

6.11 Notices

A. Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

6.12 Survival

A. All express representations, indemnifications, or limitations of liability included in this Agreement will survive its completion or termination for any reason.

6.13 Severability

A. Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and ENGINEER, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

6.14 Waiver

A. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it

affect the enforceability of that provision or of the remainder of this Agreement.

6.15 Headings

A. The headings used in this Agreement are for general reference only and do not have special significance.

ARTICLE 7 - DEFINITIONS

7.01 Defined Terms

A. Wherever used in this Agreement (including the Exhibits hereto) and printed with initial or all capital letters, the terms listed below have the meanings indicated, which are applicable to both the singular and plural thereof:

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Documents.

2. *Additional Services*--The services to be performed for or furnished to OWNER by ENGINEER in accordance with Exhibit A, Part 2 of this Agreement.

3. *Agreement*--This "Standard Form of Agreement between OWNER and ENGINEER for Professional Services," including those Exhibits listed in Article 8 hereof.

4. *Application* for Payment--The form acceptable to ENGINEER which is to be used by Contractor in requesting progress or final payments for the completion of its Work and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

5. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

6. *Basic Services*--The services to be performed for or furnished to OWNER by ENGINEER in accordance with Exhibit A, Part 1, of this Agreement.

7. *Bid*--The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

8. *Bidding Documents*--The advertisement or invitation to Bid, instructions to bidders, the Bid form and attachments, the Bid bond, if any, the proposed Contract Documents, and all Addenda, if any.

9. *Change Order*--A document recommended by ENGINEER, which is signed by Contractor and OWNER to authorize an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Construction Agreement.

10. *Construction Agreement*--The written instrument which is evidence of the agreement, contained in the Contract Documents, between OWNER and Contractor covering the Work.

11. *Construction Contrac*t--The entire and integrated written agreement between the OWNER and Contractor concerning the Work.

12. *Construction Cost*--The cost to OWNER of those portions of the entire Project designed or specified by ENGINEER. Construction Cost does not include costs of services of ENGINEER or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or OWNER's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to OWNER pursuant to Exhibit B of this Agreement. Construction Cost is one of the items comprising Total Project Costs.

13. *Contract Documents*--Documents that establish the rights and obligations of the parties engaged in construction and include the Construction Agreement between OWNER and Contractor, Addenda (which pertain to the Contract Documents), Contractor's Bid (including documentation accompanying the Bid and any post-Bid documentation submitted prior to the notice of award) when attached as an exhibit to the Construction Agreement, the notice to proceed, the bonds, appropriate certifications, the General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Construction Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Construction Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents.

14. *Contract Price*--The moneys payable by OWNER to Contractor for completion of the Work in accordance with the Contract Documents and as stated in the Construction Agreement.

15. *Contract Times*--The numbers of days or the dates stated in the Construction Agreement to: (i) achieve Substantial Completion, and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.

16. *Contractor*--An individual or entity with whom OWNER enters into a Construction Agreement.

17. *Correction Period*--The time after Substantial Completion during which Contractor must correct, at no cost to OWNER, any Defective Work, normally one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee or specific provision of the Contract Documents.

18. *Defective*--An adjective which, when modifying the word Work, refers to Work that is unsatisfactory, faulty, or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment.

19. *Documents*--Data, reports, Drawings, Specifications, Record Drawings, and other deliverables, whether in printed or electronic media format, provided or furnished in appropriate phases by ENGINEER to OWNER pursuant to this Agreement.

20. *Drawings*--That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings are not Drawings as so defined.

21. *Effective Date of the Construction Agreement*--The date indicated in the Construction Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Construction Agreement is signed and delivered by the last of the two parties to sign and deliver.

22. *Effective Date of the Agreement*--The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

23. *ENGINEER's Consultants*--Individuals or entities having a contract with ENGINEER to furnish services with respect to this Project as ENGINEER's independent professional associates, consultants, subcontractors, or vendors. The term ENGINEER includes ENGINEER's Consultants.

24. *Field Order*--A written order issued by ENGINEER which directs minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

25. *General Conditions*-That part of the Contract Documents which sets forth terms, conditions, and procedures that govern the Work to be performed or furnished by Contractor with respect to the Project.

26. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Materials in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

27. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

28. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, standards, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

29. PCB's--Polychlorinated biphenyls.

30. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

31. *Radioactive Materials*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

32. *Record Drawings*--The Drawings as issued for construction on which the ENGINEER, upon completion of the Work, has shown changes due to Addenda or Change Orders and other information which ENGINEER considers significant based on record documents furnished by Contractor to ENGINEER and which were annotated by Contractor to show changes made during construction.

33. *Reimbursable Expenses*--The expenses incurred directly by ENGINEER in connection with the

performing or furnishing of Basic and Additional Services for the Project for which OWNER shall pay ENGINEER as indicated in Exhibit C.

34. *Resident Project Representative*--The authorized representative of ENGINEER, if any, assigned to assist ENGINEER at the Site during the Construction Phase. The Resident Project Representative will be ENGINEER's agent or employee and under ENGINEER's supervision. As used herein, the term Resident Project Representative includes any assistants of Resident Project Representative agreed to by OWNER. The duties and responsibilities of the Resident Project Representative are as set forth in Exhibit D.

35. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

36. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to ENGINEER to illustrate some portion of the Work.

37. *Site*--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for use of Contractor.

38. *Specifications*--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

39. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

40. Supplementary Conditions--That part of the Contract Documents which amends or supplements the General Conditions.

41. Total Project Costs--The sum of the Construction Cost, allowances for contingencies, the total costs of services of ENGINEER or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or OWNER's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to OWNER pursuant to Exhibit B of this Agreement.

42. Work--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents with respect to this Project. Work includes and is the result of performing or furnishing labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and all equipment into such construction, all as required by the Contract Documents.

43. *Work Change Directive*--A written directive to Contractor issued on or after the Effective Date of the Construction Agreement and signed by OWNER upon recommendation of the ENGINEER, ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change directed or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

44. *Written Amendment*--A written amendment of the Contract Documents signed by OWNER and Contractor on or after the Effective Date of the Construction Agreement and normally dealing with the non-engineering or non-technical rather than strictly construction-related aspects of the Contract Documents.

ARTICLE 8 - EXHIBITS AND SPECIAL PROVISIONS

8.01 Exhibits Included

A. Exhibit A, "ENGINEER's Services."

B. Exhibit B, "OWNER's Responsibilities.

C. Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses."

D. Exhibit D, "Duties, Responsibilities and Limitations of Authority of Resident Project Representative."

E. Exhibit E, "Notice of Acceptability of Work."

F. Exhibit F, "Construction Cost Limit."

G. Exhibit G, "Insurance."

H. Exhibit H, "Special Provisions."

I. Exhibit I, "DBE Goal."

8.02 Total Agreement

A. This Agreement (consisting of pages 1 to 12 inclusive, together with the Exhibits identified above) constitutes the entire agreement between OWNER and ENGINEER and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

By signing this contract, Engineer hereby verifies that it does not boycott Israel and will not boycott Israel during the term of this contract. Boycotting Israel is defined in Texas Government Code section 808.001 to mean refusing to deal with, terminating business activities with, or taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

OWNER: City of Killeen	ENGINEER: Pape-Dawson Engineers, Inc.
By: Kent Cagle	By: Cara C. Tackett, P.E.
Title: City Manager	Title: Managing Principal, Water Resources
Date Signed:	Date Signed: 03/09/2023
Address for giving notices:	Address for giving notices:
P.O. Box 1329	2000 NW Loop 410
Killeen, TX 76540-1329	San Antonio, TX 78213
Designated Representative (paragraph 6.02.A):	Designated Representative (paragraph 6.02.A):
Edwin Revell	
Title: Executive Director of Development Services	Title:
Phone Number: 254-501-7628	Phone Number:
Facsimile Number: 254-501-7633	Facsimile Number:
E-Mail Address: erevell@killeentexas.gov	E-Mail Address:

This is **EXHIBIT A**, consisting of 21 pages, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____ _____, _____.

Initial:

OWNER ___ ___

ENGINEER ___ ___

ENGINEER's Services

Article 1 of the Agreement is amended and supplemented to include the following agreement of the parties. ENGINEER shall provide Basic and Additional Services as set forth below.

PART 1 – PAPE-DAWSON ENGINEERS, INC PROPOSAL – SCOPE OF SERVICES
(SEE NEXT PAGE)

PAPE-DAWSON ENGINEERS

March 7, 2023

Andrew Zagars, P.E.
City of Killeen
3201-A S.W.S. Young Drive
City of Killeen, Texas 76542

Re: City of Killeen Stagecoach Rd Reconstruction

Dear Mr. Zagars:

We are pleased to present this proposal for providing civil engineering and surveying services in connection with the above referenced project. Our proposed scope of services and associated fees are as follows:

Project Limits
The project limits are from Aquilla Dr to E Trimmier Rd for approximately 3.75 miles.

Proposed Facility
Proposed roadway is a 5-lane roadway with curb and gutter, turn lanes, and sidewalk.

Design Criteria
The proposed design criteria for the project will be developed from City of Killeen, Bell County and TxDOT design criteria. It is anticipated that in most cases the most stringent of the Design Criteria.

1. PROJECT MANAGEMENT AND COORDINATION (TASK 501) $75,000

a. Communication:

- Designate one Licensed Professional Engineer (Texas) to be responsible for the project management, and all communications with the City and its representatives.

b. Monthly Progress Report, Invoices, and Billings (12 months assumed):

- Submit monthly progress status reports to the City. Progress reports will include deliverable table, tasks completed, tasks/objectives that are planned for the upcoming periods, lists or descriptions of items or decisions needed from the City and its representatives. Subconsultant progress will be incorporated into the monthly progress report. A copy of the monthly progress report will be submitted to the City.
- Prepare correspondence, invoices, and progress reports on a monthly basis in accordance with current City requirements.

c. Quality Assurance and Quality Control (QA/QC) Plan:

- For each deliverable submittal, provide evidence of their internal review and mark-up of that deliverable as preparation for submittal and in accordance with submitted project specific QA/QC plan.
- Provide continuous QA/QC throughout the duration of the scheduled services included herein to appraise both technical and business performance and provide direction for project activities.

d. Project Coordination & Administration:

- Prepare and maintain routine project record keeping including records of meetings and minutes.
- Correspondence and coordination will be handled through & with the concurrence of the CITY.
- Manage project activities (including documenting emails, phone and conference calls, maintain project files for the length of the project, meeting agendas, meeting minutes, and schedule meetings), direct Engineer's team/staff, coordinate and review sub-consultant work, correspond with the City and its representatives, and assist the City and its representatives in preparing responses to project-related inquiries.

e. Progress/Coordination Meetings (**4** external meetings assumed):

- Attend a kickoff meeting and coordination/progress meeting with the City and its representatives and stakeholders, as necessary to communicate development of the project and design issues.
- Prepare agenda and sign-in sheets for external coordination/progress meetings.
- Prepare meeting minutes for review via email within three (3) business days of the external coordination/progress meeting.
- Conduct internal coordination meetings as required to advance the development of the project.

f. Project Schedule:

- Maintain a project schedule indicating tasks, subtasks, critical dates, milestones, and deliverables. Submit to City as requested.

g. **Deliverables:**

- Monthly Invoices and Progress Reports including Deliverable Table
- Project Specific QA/QC Plan
- Meeting Minutes, Sign-In Sheets, and Agendas
- Project Schedule and Updates
- Project Files
- QA/QC Documentation with Deliverable

2. PRELIMINARY DESIGN (TASK 202) **$100,000**

a. Data Collection:

Perform record research and obtain existing information, including but not limited to: as-built plans, construction plans, right of way maps, traffic data, environmental reports, studies, future land use maps, floodplain data, official copies of FEMA floodplain and drainage models and analyses. Obtain construction plans for projects within the project limits and abutting roadways. Obtain drainage studies, reports, and mapping for the project area, including reports for developments affecting the drainage area. Obtain existing schematic from CITY.

- Conduct a field investigation of the proposed roadway alignment and the surrounding area to determine field conditions including photographic record of notable existing features.
- Review the data collected and organize the information.

b. Stakeholder Coordination (**2** meetings assumed):

- Schedule, coordinate logistics for and prepare agendas, sign in sheets, meeting minutes, discussion topics, presentations, overall exhibits, and maps of the project limits for stakeholder coordination.
- Coordinate with affected local agencies and City's consultants. Includes preparing/reviewing presentations and other communications materials for elected official briefings.
- Attend meeting with stakeholders (**2** meetings assumed).

c. Design Development:

- Analyze and identify project-specific design criteria (typical sections, design speed, functional classification, geometric criteria) in accordance with the latest versions of the TxDOT Roadway Design Manual.
- Develop preliminary construction phasing alternatives, including cost and duration for each phase considered.
- Develop schematic roll plots and/or exhibits to depict the preliminary design concept with the City and stakeholders.
- The Engineer will coordinate with the City to select a preferred alternative for construction phasing and details prior to beginning PS&E.

d. **Deliverables:**

- Meeting Minutes, Sign-In Sheets, Agendas, Presentations, Maps, and Exhibits for all Stakeholder Coordination Meetings.
- Draft and Final Constraints Map Refined Route Option and Technical Memorandum Recommendation (pdf and hardcopies)
- Draft and Final Design Summary Form (pdf and hardcopies).

3. ENVIRONMENTAL REVIEW REPORT (TASK 232) **$70,000**

a. Environmental Project Management and Coordination

This item represents an allowance for time not specifically required for design purposes:

- Preparation of exhibits for marketing, permitting, etc. as requested.
- Coordinate project team to meet schedule and deliverables.
- Attend project coordination meetings. Proposal allows twelve (12) hours of meetings.

b. Environmental Review Report

As part of the project planning process, a natural resource desktop review and limited field assessment to occur including:

- Desktop review of U.S. Fish and Wildlife Service (USFWS) and Texas Parks and Wildlife Department threatened and endangered species listed for the county
- Review of the likelihood of occurrence of endangered species to be found on the property using aerial photography
- Review of the National Wetland Inventory, National Hydrography Dataset, and Federal Emergency Management Agency stream data to determine for the potential of jurisdictional waters
- Hazardous materials database search for hazardous materials concerns
- Report to be prepared describing endangered species assessment methodology and characteristics of the property that support the conclusions of habitat potential, the potential for jurisdictional waters to occur on the subject property, and environmental concerns pertaining to hazardous materials.

c. County Due Diligence:

- The Environmental Services will include studies and documentation required, per the Williamson County Environmental Protocol, for the various regulating authorities, including the Texas Historical Commission (THC), U.S. Army Corp of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), and Williamson County Conservation Foundation (WCCF). The intention of the Environmental Services is to attain necessary clearance letters and approvals in order to proceed with the proposed project.

d. Data Collection & Field Reconnaissance:

- Obtain and update periodically publicly available information including but not limited to: locations of public buildings (schools, churches, parks), aerial photography, National Wetland Inventory Maps, County Soil Survey Maps, Texas Commission on Environmental Quality (TCEQ) & Environmental Protection Agency (EPA) Hazardous Materials Database Information, FEMA Floodplain Information, Vegetation Information, Environmental Information from the appropriate local, state, or federal agencies, including for state and federally-listed species, Edwards Aquifer Information.

- Conduct a regulatory records review to identify listed hazardous waste generators, treatment, storage and disposal facilities; solid waste landfills, unauthorized sites; documented spills; oil and gas exploration and production sites; and underground storage tank sites within the proposed site location. The review will also identify other environmental risks along the project corridor.

- Conduct field reconnaissance to visually inspect the project site for additional risks and field verify any environmental risks identified by the regulatory records review

e. Section 404 Clean Water Act Compliance:

- Conduct a site visit that will delineate wetland boundaries and ordinary high-water marks of jurisdictional waters within the project ROW. It is anticipated that this project will be covered under a Nationwide Permit (NWP 14) without a pre-construction notification (PCN).

- Prepare a Jurisdictional Waters Delineation Report identifying specific impacts of the project on the Waters of the U.S. (including special aquatic sites), measures to minimize the impacts will be identified, and discuss applicable Section 404 options in accordance with current permits and conditions based on data collection and field reconnaissance.

- *If it is determined, after the Jurisdictional Waters Delineation Report, that a PCN is required; a supplemental work authorization would be required. The Jurisdictional Waters Delineation Report and NWP with PCN are subject to the U.S. Army Corps of Engineers Forth Worth District review and issuance of a permit.*

f. Texas Antiquities Code (TAC) Compliance:

- Prepare an Agency Consultation Letter for the lead regulatory agency in order to determine if field reconnaissance is necessary, and the level of effort required.

- If necessary, prepare a Project Initiation Letter, Texas Antiquities Permit Application, and Associated Scope of Work based on data collection and field reconnaissance.

- Conduct a pedestrian survey and report of sufficient intensity to determine the nature, extent, and potential significance of any cultural resources located within the Area of Potential Effect in accordance with full report guidelines as outlined by the Texas Historical Commissions Rules of Practice and Procedures.

- Coordination with Texas Historical Commission including submittals to Texas Historical Commission and project records to the appropriate curation facility per Texas Historical Commission requirements.

- *If U.S. Army Corps of Engineers (USACE) permitting for Waters of the U.S. under the Clean Water Act (Section 404/408) following jurisdictional delineations is necessary, additional cultural resources investigation may be required. If needed, investigations under Section 106 of the NHPA to be coordinated with the USACE regulatory archaeologist under a supplemental scope and fee.*

g. **Deliverables:**

- Draft & Final Environmental Due Diligence Report
- Draft & Final Jurisdictional Waters Delineation Report
- Draft & Final Texas Antiquities Permit Application Associated Scope of Work and Report

4. SUBSURFACE UTILITY ENGINEERING (TASK 390) **$82,000**

a. See attached proposal in Exhibit A

5. SURVEYING (TASK 105) **$80,000**

a. Right of Entry (**5** letters assumed):

- Prepare and mail right of entry letters per the City's standard for the project team including geotechnical and environmental. Send a second follow up letter to non-responsive property owners.

b. Field Surveying:

- Recover and verify existing horizontal and vertical control established for prior construction. Reestablish control where necessary.
- Locate existing visible and above ground utilities along designated route.
- Acquire invert elevations of Storm Sewer, Wastewater Manholes and inlet boxes where accessible. Determine elevation of water valves, where accessible.
- Locate underground utilities located, potholed and marked by Subsurface Utility Engineer.
- Detail culverts crossings on Stagecoach Road at Trimmier and Embers Creeks. Collect two cross sections, upstream and downstream from culvert on Trimmier Creek.
- Supplement LIDAR topographic information where needed.
- Survey the area at approximately **50**-foot sections **75**-feet on either side of the proposed roadway centerline including locate visible improvements and utilities including driveways, water wells, storage tanks, drainage structures (size, material, flowline elevations), edge of pavement/shoulder, physical centerline, guardrail, fences, signs, mailboxes, trees 8" inch diameter and greater, locate property boundaries sufficient to re-establish apparent ROW.

c. LiDAR Surveying:

Complete a control, improvement, topographic, and utility survey within approximately 3.8 miles of Stagecoach Road from the Aquila Dr to E. Trimmier Road in Killeen, TX

- Targets for mobile LiDAR will be set at approximately 700' intervals within the project limits. They will consist of chevrons painted on the pavement with a PK nail set on the inside corner of the chevron.

- Ground truthing cross section sections will be collected at the beginning and end of the project limits and half way between ground control targets to minimize calibration bias, and will consist of a minimum of 5 points (3 on pavement and 2 on natural ground).
- Mobile LiDAR data will be collected within the project limits, from apparent ROW to apparent ROW.
- The acquired mobile LiDAR data will be calibrated to control targets set on the project.
- The calibrated mobile LiDAR will be checked against the ground truthing cross sections to ensure the calibration is holding away from control. At this point the data will be approved for production
- A ground truthing and calibration report will be produced as evidence of the calibration accuracy showing the expected accuracy of the LiDAR data within the project limits.
- Topographic data will be extracted from the Mobile LiDAR point cloud and a MicroStation 3D DTM drawing and associated GEOPAK tin file will be generated.
- The final DTM will be checked against the ground truthing points to ensure the extracted data is accurately representing the calibrated LiDAR data
- Conventional survey will be supplemented where lidar data cannot be completed.
- As-builts of existing utilities will be provided by client. If no as-builts are available, additional features may be extracted from the lidar data for an additional fee.

d. **Deliverables:**

- Right of Entry Letters, Follow Up Letters, and Executed Right of Entry Documents.
- Mapping in 2-D and 3-D MicroStation Files
- PDF of each Surveyor Project Notebook

6. GEOTECHNICAL SERVICES (TASK 292) **$100,000**

a. Soil Borings:

- Perform twenty-five (25) pavement borings, spaced approximately at 0.15 miles (800 lineal feet apart) to a depth of fifteen (15) feet.
- Develop soil boring layout for approval from the County prior to mobilization.

b. Geotech Report:

- Provide a Geotechnical Investigation Report for the project evaluated by a professional geotechnical engineer Licensed in the State of Texas. The following items will be included in the geotechnical report: soil boring locations, boring logs (TxDOT Wincore output graphs/format), and plan of borings, subsurface exploration procedures, encountered subsurface conditions, field and laboratory test results, description of surface and subsurface conditions, and groundwater conditions. Swell potential evaluations, Pavement thickness design alternatives with subgrade stabilization and PVR calculations.

- Provide Soil Core Hole Drilling required for pavement borings. Follow the procedures in the City of Killeen Transportation Manual and contact the appropriate utility location services to have underground utilities located prior to drilling in an area.
- Perform appropriate laboratory tests on soil samples recovered from the borings. Laboratory testing will include but not limited to moisture content, liquid limit, plastic limit, unconfined compression, Texas Triaxial, resilient modulus, and free swell, sulfate testing, and particle size analysis tests, visual classification, dry density, Dynamic Cone Penetrometer (DCP), sulfate content tests, lime series analyses.
- Perform a pavement condition assessment consisting of field inspection on existing pavement conditions and all other pertinent features that could affect the pavement design including observations of subsurface water.
- Create a Preliminary Pavement Report and Final Pavement Report based on field testing, subsequent laboratory testing, following the format noted in the Williamson County Design Criteria Manual.
- Prepare and analyze three (3) pavement design options. The options will consist of a full-depth hot mix design with stabilized subgrade. Full depth reclamation (FRD) will also be considered as an option. All pavement design analyses should be performed with TxDOT software FPS-21.

7. PLAN PREPARATION (PS&E) SERVICES (TASK 504 $1,200,000

Prepare plans per the current City design criteria including applicable submittal requirements for cost estimate, checklists, hardcopies, CAD files, comment responses, design waivers/exceptions, general notes, quantities, updated design schedule, construction time determination. The engineer will develop and submit these Plans, Specifications & Estimates (PS&E) at 60%, 90%, and Final Design.

PS&E Design includes layouts and details required to establish the proposed roadway alignment and profile, provide positive drainage to existing storm drain structures, replace existing and/or construct new curb and sidewalk, traffic control and constructibility, replace existing pavement markings, and maintain storm water and pollution protection. Utility relocation design will be addressed as needed. Plansheets are anticipated to include:

a. Roadway/General:

- Title Sheet
  - Prepare a project title sheet as required for the construction plans, utilizing the template provided by the County.
- Index of Sheets
  - Prepare an index sheet(s) that shows each sheets location in the plan set.
- Project Layout
  - Prepare a project layout sheet(s) that clearly indicates the limits of the entire project.

- Typical Sections
  - Prepare typical section(s) for all proposed and existing roadways, cross streets with the shared use path.
  - Develop details for pavement transitions and end conditions, saw cuts at abutting roadways, cut and restore operations, and overlays as required.
- General Notes
  - Prepare general notes for applicable project-specific items, utilizing the master general notes provided by the County.
- Survey data
  - Prepare benchmark layout sheet(s) that clearly indicate the benchmark locations and associated control information.
- Horizontal Alignment Data
  - Prepare horizontal alignment data sheet(s) that depict the horizontal geometric information for the roadways to be included in the construction plan set.
- Summary Sheets
  - Prepare summary sheet(s) that tabulate, combine, and summarize quantities of the various construction items.
- Removal Plans
  - Prepare removal sheet(s) that clearly identify any items to be removed.
- Roadway Plan & Profiles
  - Prepare roadway plan and profile sheets that depict the proposed roadway improvements.
- Side Street/Intersection Plans
  - Prepare side street/intersection layout sheets.
  - Provide contours or details of drainage patterns for street intersections including slope or elevations along gutter to avoid ponding at intersections. Where applicable, provide details of volume of flow and velocity through intersections.
- Miscellaneous
  - Develop miscellaneous roadway detail sheets for the project that depict details required, which are not defined in standard detail sheets.
- Cross Sections
  - Develop cross sections at 50-foot stations and other locations as necessary for the determination of cut and fill quantities. These sections will also be used to further refine the design vertical geometry.

b. Traffic Control:

- Traffic Control Plans (TCP)
  - Prepare traffic control typical section(s) for each stage of the construction sequence to clearly delineate the position of the existing traffic with respect to the proposed construction.
  - Prepare a detailed narrative for the sequence of construction and traffic control general notes utilizing the sequence approved during the schematic phase. Any changes to the sequence of construction will be approved by the County prior to developing detailed TCP layouts.
  - Prepare detailed TCP layouts for each phase.
  - Develop traffic control detail(s) for items not covered by County or TxDOT standard details.
  - Compute an Engineer's opinion of construction schedule in order to determine an approximate duration for each of the phases of construction.
  - Consider the construction sequence and plan for temporary functioning of drainage systems.

c. Signing and Pavement Markings Layouts:

- Prepare signing and pavement marking layouts for limits of full depth reconstruction.
- Prepare pavement marking details for non-standard conditions.
- Prepare detail sheets for small signs for non-standard signs.

d. Stormwater Pollution Prevention Plan (SW3P):

- Prepare stormwater pollution prevention layout sheets for each phase of construction.

e. **Deliverables:**

- 60%, 90%, & Final Plansheet Submittals including applicable Williamson County Submittal Checklists.
- Engineer's Opinion of Probable Construction Cost
- Design Summary Form
- MicroStation OpenRoads Designer final design files
- Cross Sections
- Final Surface DTM
- Estimated Construction Schedule

8. DRAINAGE STUDY (TASK 390) **$250,000**

(2 Locations, approx. 300' east of Flanigan Drive and Stagecoach at Tyler Drive):

a. Data Collection and Coordination:

- Coordinate with City of Killeen on drainage analysis solution
- Review and collect data related to drainage issues at 2 locations (approx. 300' east of Flanigan Drive and Stagecoach at Tyler Drive)

b. Hydrologic and Hydraulic Analysis:

- Delineate drainage areas for structures at 2 locations
- Calculate existing and proposed conditions hydrologic parameters
- Calculate existing and proposed conditions flows
- Develop existing and proposed conditions hydrologic models using HEC-HMS
- Develop existing conditions 2-Dimensional model using HEC-RAS
- Develop proposed conditions 2-Dimensional model using HEC-RAS
- Develop proposed solution to drainage issues noted at 2 locations (approx. 300' east of Flanigan Drive and Stagecoach at Tyler Drive)
- Prepare preliminary design and layout for the cross-drainage structures necessary to solve drainage issues at 2 locations.

c. Documentation:

- Document analysis in the form of a letter report
- Create exhibits and tables of modeling results of the drainage analysis
- If detention is recommended or required prepare a routing analysis to determine preliminary size and ROW needs for proposed detention ponds.

Deliverables:

- Schematic Preliminary and Final Drainage Reports signed and sealed by a professional engineer in the State of Texas.
- Applicable GIS, Hydrologic and Hydraulic Models or CAD files referenced in the drainage study.

9. BIDDING PHASE SERVICES (TASK 401) **$25,000**

a. Bidding Phase Services:

- Prepare all applicable construction documents for bidding. Attend the pre-bid meeting. Respond to bidder's questions during the bid period. Prepare project addenda up to three (3) during bid period. Analyze contractor bids, prepare bid tabulation, and make recommendation for award to the apparent low bidder via a letter. Attend the pre-construction conference.

b. **Deliverables:**
- Letter of Recommendation for Award, with Bid Tabulation.

THIS PROPOSAL ASSUMES AND/OR EXCLUDES THE FOLLOWING:

- Construction Phase Services
- Public Involvement
- Driveway Profiles And Details
- Row Survey and Mapping.
- Existing Storm Drain Modifications and Analysis
- Traffic Evaluations and Projections.
- CLOMR or LOMR.
- Nationwide Permit (Nwp 14 With A Pre-Construction Notification (Pcn).
- Threatened And Endangered Species Environmental Services

SUMMARY OF SCOPE AND FEES

1.	Project Management and Coordination	Task 501	$75,000
2.	Preliminary Design	Task 202	$100,000
3.	Environmental Review Report	Task 232	$70,000
4.	Subsurface Utility Engineering	Task 390	$82,000
5.	Surveying	Task 105	$80,000
6.	Geotechnical Services	Task 292	$100,000
7.	Plan Preparation (PS&E) Services	Task 50	$1,200,000
8.	Drainage Study	Task 390	$250,000
9.	Bidding Phase Services	Task 401	$25,000
		Total:	**$1,982,000**

BASIS OF COMPENSATION

Pape-Dawson's compensation for the above services shown as lump sum fee and will be billed by percent complete.

A budget of **$1,982,000** is the estimated cost of Pape-Dawson's current understanding of the services above. This budget figure does not include any Direct Expenses (defined below) or applicable sales tax on services. If this budget figure is exceeded, Pape-Dawson may request modification of this Agreement.

AGREEMENT

The attached Terms and Conditions are incorporated into this Proposal by reference and become part of the agreement between the Client and Pape-Dawson by execution of this Proposal. If the terms of this Proposal are acceptable, please acknowledge such by signing below and returning the executed Proposal to us via e-mail or US Mail for our records. Receipt of the executed Proposal serves as authorization for us to proceed with the work.

The costs, fees, budget, and scope of work set out herein are valid for ninety (90) days from the date of this Proposal. If Pape-Dawson does not receive an executed Proposal from the Client within ninety (90) days from the date of this Proposal, the costs, fees, budget, and scope of work are subject to revision at Pape-Dawson's sole discretion. Pape-Dawson will provide a revised Proposal with the modified costs, budget, and scope of work should revisions be made.

We appreciate the opportunity to work with you on this project.

Sincerely,
Pape-Dawson Engineers, Inc.

Brian Allen, P.E., CFM
Senior Project Manager

Steven Dean, P.E., CFM
Vice President, Water Resources

CITY OF KILLEEN

Signature:_____

Name:_____

Title:_____

Date:_____

CITY OF KILLEEN
ACCOUNTS PAYABLE CONTACT INFO

Name:_____

Address:_____

Phone:_____

Email:_____

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THE RIOS GROUP

March 3, 2023

Brian Allen, P.E., CFM
Pape-Dawson Engineers, Inc.
10801 North Mopac Expressway
Building 3 - Suite 200,
Austin, TX 78759
512-454-8711
BAllen@pape-dawson.com

RE: Subsurface Utility Engineering
City of Killeen Stagecoach Road

Dear Mr. Allen:

The Rios Group, Inc. (TRG) is pleased to submit a cost proposal for Subsurface Utility Engineering (SUE) for the above referenced project. This proposal is based on information provided via email on February 28, 2023.

Introduction

TRG will perform SUE services for this project in general accordance with the recommended practices and procedures described in ASCE publication CI/ASCE 38-02 "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data." As described in the publication, four levels have been established to describe and depict the quality of subsurface utility information. The four quality levels are as follows:

Quality Level D (QL"D") – Information obtained from existing utility records.

- Quality Level C (QL"C") – Surveyed data depicting visible above-ground features supplemented with QL"D" information.
- Quality Level B (QL"B") – Two-dimensional horizontal information obtained through the application and interpretation of non-destructive surface geophysical methods. Also known as "designating," this level incorporates QL"C" information and provides horizontal positioning of subsurface utilities to within approximately 1.0 foot.
- Quality Level A (QL"A") – Three-dimensional horizontal and vertical information obtained through non-destructive vacuum excavation equipment to expose utilities at critical points. Also known as "locating," this level incorporates QL"B" information and provides horizontal and vertical positioning of subsurface utilities to within approximately 0.05 feet.

Scope of Work

Based on information provided by Pape-Dawson Engineers, Inc. (Client), TRG has developed a proposed scope for SUE services on this project. This scope may be modified, with Client and TRG concurrence, during the performance of work if warranted by changing or unexpected field conditions.

The scope of this proposal includes QL"C"/"D" SUE services to support the design of the subject project. The limits of the SUE investigation are highlighted in yellow on Exhibit B and will include the full width of the existing ROW of Stagecoach Road. TRG will attempt to depict the following utilities within this area: potable water, reclaimed water, chilled water, natural gas/crude oil/refined product pipelines, communication duct banks, fiber optic, cable television, telephone, electric, wastewater and storm drain facilities. Additionally, TRG will attempt to depict utility service lines, however, because these lines are often non-conductive and not shown on records TRG cannot guarantee all service lines will be included in the final deliverables. Irrigation lines and an inventory of overhead utilities are excluded from this scope of work.

Additionally, the scope of this proposal includes 50 hours (5 days) of QL"B" field work at key locations to be identified by the Client following a review of the QL"C"/"D" deliverables. TRG can attempt to designate the following utilities within the areas identified by the Client: potable water, reclaimed water, chilled water, natural gas/crude oil/refined product pipelines, communication duct banks, fiber optic, cable television, telephone, and electric. Wastewater and storm drain facilities will be inverted at manholes, and will be depicted as QL"C" information. Additionally, TRG will attempt to designate utility service lines, however, because these lines are often non-conductive and not shown on records TRG cannot guarantee all service lines will be included in the final deliverables. Irrigation lines and an inventory of overhead utilities are excluded from this scope of work.

In addition to providing QL"B" SUE services, TRG will attempt to provide Electronic Depth readings calculated by TRG's geophysical equipment. If Electronic Depth readings can be obtained, they will be provided every 25 feet. However, due to the inconsistency with Electronic Depth readings, TRG cannot guarantee the accuracy of the information. Data will be provided for informational purposes only.

This proposal also includes up to twenty (20) QL"A" SUE test holes at locations that will be provided by the Client following a review of the QL"B"/"C"/"D" information.

The survey of SUE field markings and utility appurtenances is excluded from this scope of work. It is assumed that the Client's surveyor will provide survey data of SUE field marks, test holes, and utility appurtenances at no cost to TRG.

Any necessary Right-Of-Entry (ROE) permits will be provided by the Client prior to the start of field work.

TRG Procedures

QL"D" and "C" – Records Research and Surface Feature Survey

It is the responsibility of the SUE provider to perform due-diligence with regard to records research and the acquisition of available utility records. The due-diligence provided for this project will consist of contacting the applicable One Call agency and associated utility owners/municipalities, visually inspecting the work area for evidence of utilities, and reviewing available utility record information. Additional utilities not identified through these efforts will be referred to as Unknown utilities.

QL "B" – Designating

Following a review of the project scope and available utility records with the project manager, TRG field personnel will begin designating the approximate horizontal position of known subsurface utilities within the project area. A suite of geophysical equipment that includes magnetic and electromagnetic induction will be used to designate conductive utilities. Where access is available, a sonde will be inserted into non-conductive utilities to provide a medium for transmission which can then be designated using geophysical equipment. Non-conductive utilities can also be designated using other proven methods, such as rodding and probing. TRG will make a reasonable attempt to designate Unknown utilities identified during field work; however, no guarantee is made that all Unknown utilities will be designated. Utilities will be marked and labeled to distinguish type and ownership. Field data depicting the designated utilities, as well as relevant surface features, will be produced to ensure accuracy and completeness of subsequent survey data. The TRG project manager will review the collected survey data, field data, and utility records for accuracy and completeness.

QL "A" – Locating

TRG will utilize non-destructive vacuum excavation equipment to excavate test holes at the requested locations. To layout the test holes, TRG will follow the *QL "B" – Designating* procedures described above. Once each utility is located, TRG will record the size, type, material, and depth. Test holes will be uniquely marked. Excavations will be backfilled by mechanical means with the appropriate material, and the original surface will be restored. If necessary, TRG can core pavement up to a depth of 12 inches. Asphalt surfaces will be repaired with an asphalt cold patch, and concrete cores will be epoxied in place, flush with the surrounding surface. TRG assumes that flowable fill will not be required when backfilling test holes and that full-section pavement repair (including sidewalks) will not be required to restore the original pavement surface. If requested, these services can be provided at an additional cost.

TRG will establish any necessary routine traffic control measures at no additional cost. However, if non-routine traffic control measures (lane closures, traffic detours, flagpersons, etc.) are required, this service will be invoiced as a direct expense. Due to the risk of damage, TRG will not attempt to probe or excavate test holes on AC water lines unless approval is obtained from the owner in advance. Additionally, excavation in rock, or to a depth greater than 18 feet, is considered beyond the scope of this proposal.

TRG has made the following assumptions with regard to the test holes on this project:

- All test holes will be accessible to truck-mounted vacuum excavation equipment.
- Right-Of-Way (ROW) permits from the City of Killeen (COK), Texas Department of Transportation (TxDOT) and/or Bell County will be required. TRG will obtain all required permits and ensure that coordination and compliance with the appropriate entity is provided.
- Designed traffic control plans will not be required. It is assumed that TxDOT typical TCP details will be utilized for any required lane closures.

Non-routine traffic control measures will be required. TRG will acquire the services of a qualified Maintenance-Of-Traffic (MOT) Subcontractor and ensure that adequate traffic control is provided.

- The coring of pavement will be required at up to five (5) locations.

Deliverables

TRG will provide the following as a final deliverable to the Client:

A utility file in CAD format depicting all designated and located utilities. The Client will provide TRG with any necessary background files for use in completing the final deliverables.

- A summary sheet of all test hole coordinate data and depth information.
- 8.5" x 11" Test Hole Data Forms for all test hole locations completed. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.
- 11" x 17" SUE Plan Sheets depicting all designated and located utilities. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.

Schedule

TRG can mobilize within three (3) weeks of receiving Notice-To-Proceed (NTP). TRG estimates that the QL"C"/"D" SUE work can be completed in thirty (30) working days, broken down as follows:

Records Research – 20 days

- QL"C"/"D" deliverable preparation – 10 days (following receipt of planimetric survey from Client)

TRG estimates that the QL"B" SUE work can be completed in twenty (20) working days, broken down as follows:

QL"B" field work – 5 days

- QL"B" deliverable preparation – 15 days (following receipt of survey data from Client)

TRG estimates that the QL"A" SUE work can be completed in twenty-seven (27) working days following approval of the any required ROW permits, broken down as follows:

Layout test holes and QL"A" field work– 12 days

- QL"A" deliverable preparation – 15 days (following receipt of survey data from Client)

Estimated Fee

The total estimated cost to complete the work described herein is **Seventy-Four Thousand Four Hundred Forty-Eight Dollars and 21/100 ($74,448.21)**. An itemized breakdown of cost is provided in Exhibit A. Please note that these pricings are based on an assumption of quantities, and that only actual quantities will be invoiced – up to the total Contract amount.

We look forward to working with you on this project. If there are any questions, please do not hesitate to call at 512.580.5440.

Respectfully,

The Rios Group, Inc.

Charlie Phipps
Project Manager

Hourly Office Labor		Rate	Assumed Quantity	Unit of Measure		Sub-Total
Supervisory Engineer	$	190.86	8	HR	$	1,526.88
SUE Project Manager	$	169.71	15	HR	$	2,545.65
Professional Engineer	$	165.19	9	HR	$	1,486.71
Assistant Project Manager	$	118.30	8	HR	$	946.40
Engineer in Training	$	110.49	5	HR	$	552.45
CADD Technician	$	74.84	150	HR	$	11,226.00
Engineering Technician	$	74.67	20	HR	$	1,493.40
Field Manager	$	127.23	20	HR	$	2,544.60
Administrative Specialist	$	81.39	8	HR	$	651.12
Sub-Total					**$**	**22,973.21**

Direct Expenses		Rate	Assumed Quantity	Unit of Measure		Sub-Total
ROW Permit	$	500.00	1	EA	$	500.00
Traffic Control (Standard)	$	1,000.00	5	DAY	$	5,000.00
Sub-Total					**$**	**5,500.00**

QL"B" SUE Designating		Rate	Assumed Quantity	Unit of Measure		Sub-Total
One Designating Person - TH Layou	$	160.00	20	HR	$	3,200.00
One Designating Person	$	160.00	30	HR	$	4,800.00
Two Person Designating Crew	$	250.00	20	HR	$	5,000.00
Sub-Total					**$**	**13,000.00**

QL"A" SUE Test Holes						
Unit Rate - Depth		Outside Pavement Rate	Assumed Quantity	Unit Of Measure		Sub-Total
0 - 5 feet	$	1,315.00	10	EA	$	13,150.00
5 - 8 feet	$	1,600.00	5	EA	$	8,000.00
8 - 13 feet	$	1,995.00	5	EA	$	9,975.00
13 - 20 feet	$	2,575.00	0	EA	$	-
Over 20 feet	$	3,025.00	0	EA	$	-
Pavement Coring	$	370.00	5	EA	$	1,850.00
Test Hole Total			20			
Sub-Total					**$**	**32,975.00**
Total Estimated Cost					**$**	**74,448.21**

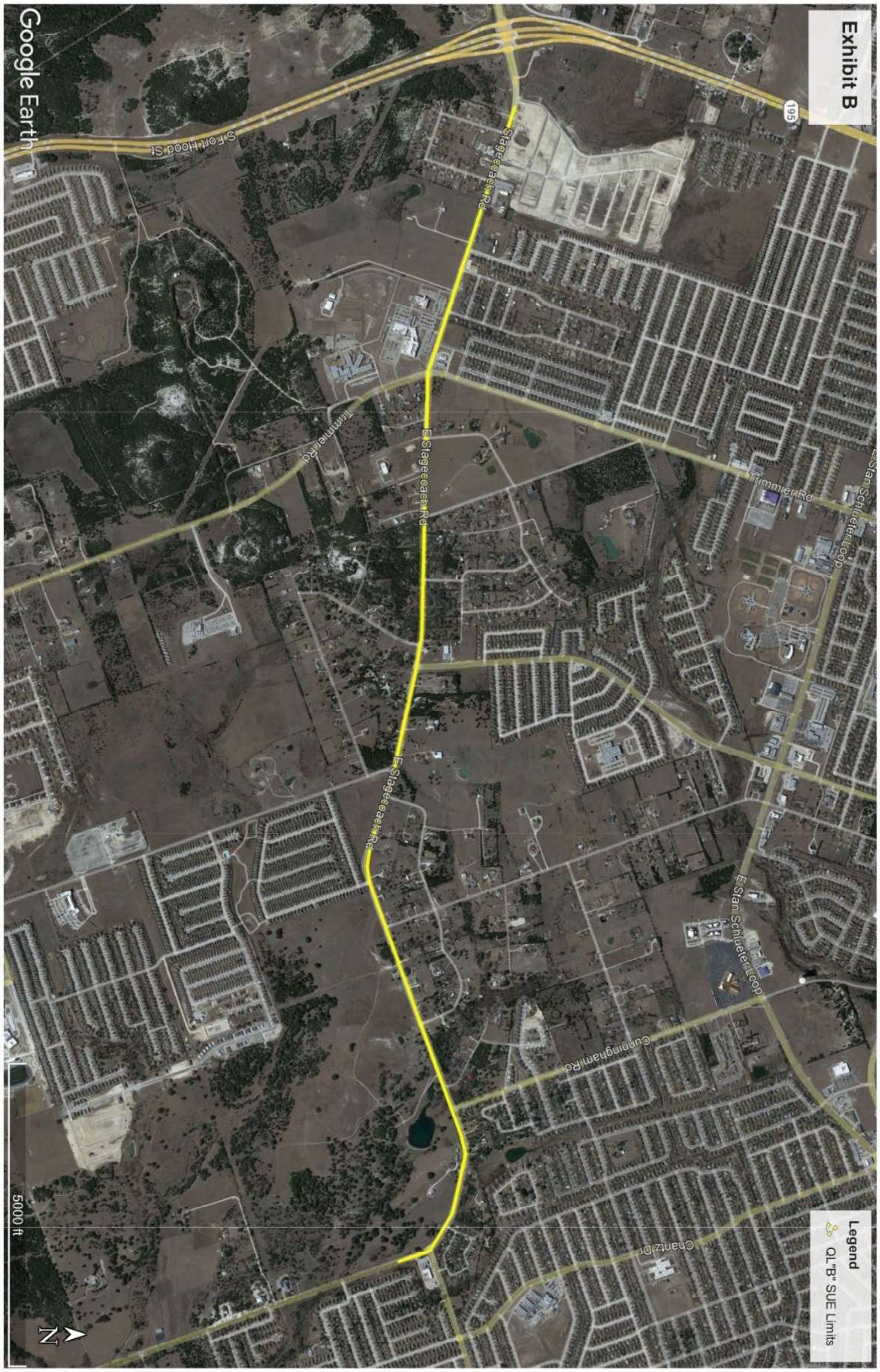
Exhibit B
Google Earth
S Fort Hood St
195
E Stagecoach Rd
Trimmier Rd
E Stan Schlueter Loop
Cunningham Rd
Chantz Dr
Legend
QL"B" SUE Limits
5000 ft
N

This is **EXHIBIT B**, consisting of 2 pages, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:
OWNER ____
ENGINEER____

OWNER's Responsibilities

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties.

B2.01 In addition to other responsibilities of OWNER as set forth in this Agreement, OWNER shall:

A. Provide ENGINEER with all criteria and full information as to OWNER's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which OWNER will require to be included in the Drawings and Specifications; and furnish copies of OWNER's standard forms, conditions, and related documents for ENGINEER to include in the Bidding Documents, when applicable.

B. Furnish to ENGINEER any other available information pertinent to the Project including reports and data relative to previous designs, or investigation at or adjacent to the Site.

C. Following ENGINEER's assessment of initially-available Project information and data and upon ENGINEER's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable ENGINEER to complete its Basic and Additional Services. Such additional information or data would generally include the following:

1. Property descriptions.

2. Zoning, deed, and other land use restrictions.

3. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.

4. Explorations and tests of subsurface conditions at or contiguous to the Site, drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site, or hydrographic surveys, with appropriate professional interpretation thereof.

5. Environmental assessments, audits, investigations and impact statements, and other relevant environmental or cultural studies as to the Project, the Site, and adjacent areas.

6. Data or consultations as required for the Project but not otherwise identified in the Agreement or the Exhibits thereto.

D. Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of a Hazardous Environmental Condition or of any other development that affects the scope or time of performance of ENGINEER's services, or any defect or nonconformance in ENGINEER's services or in the work of any Contractor.

E. Authorize ENGINEER to provide Additional Services as set forth in Part 2 of Exhibit A of the Agreement as required.

F. Arrange for safe access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under the Agreement.

G. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by ENGINEER (including obtaining advice of an attorney, insurance counselor, and other advisors

or consultants as OWNER deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.

H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by ENGINEER and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.

I. Provide, as required for the Project:

1. Accounting, bond and financial advisory, independent cost estimating, and insurance counseling services.

2. Legal services with regard to issues pertaining to the Project as OWNER requires, Contractor raises, or ENGINEER reasonably requests.

3. Such auditing services as OWNER requires to ascertain how or for what purpose Contractor has used the moneys paid.

4. Placement and payment for advertisement for Bids in appropriate publications.

J. Advise ENGINEER of the identity and scope of services of any independent consultants employed by OWNER to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructability review.

K. Furnish to ENGINEER data as to OWNER's anticipated costs for services to be provided by others for OWNER so that ENGINEER may make the necessary calculations to develop and periodically adjust ENGINEER's opinion of Total Project Costs.

L. If OWNER designates a construction manager or an individual or entity other than, or in addition to, ENGINEER to represent OWNER at the Site, define and set forth as an attachment to this Exhibit B the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of ENGINEER.

M. If more than one prime contract is to be awarded for the Work designed or specified by ENGINEER, designate a person or entity to have authority and responsibility for coordinating the activities among the various prime Contractors, and define and set forth the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of ENGINEER as an attachment to this Exhibit B that is to be mutually agreed upon and made a part of this Agreement before such services begin.

N. Attend the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings, and Substantial Completion and final payment inspections.

O. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of Samples, materials, and equipment required by the Contract Documents, or to evaluate the performance of materials, equipment, and facilities of OWNER, prior to their incorporation into the Work with appropriate professional interpretation thereof.

P. Provide inspection or monitoring services by an individual or entity other than ENGINEER (and disclose the identity of such individual or entity to ENGINEER) as OWNER determines necessary to verify:

1. That Contractor is complying with any Laws and Regulations applicable to Contractor's performing and furnishing the Work.

2. That Contractor is taking all necessary precautions for safety of persons or property and complying with any special provisions of the Contract Documents applicable to safety.

Q. Provide ENGINEER with the findings and reports generated by the entities providing services pursuant to paragraphs B2.01.O and P.

This is **EXHIBIT C**, consisting of 2 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____

Initial:
OWNER _____
ENGINEER_____

Payments to ENGINEER for Services and Reimbursable Expenses

Article 4 of the Agreement is amended and supplemented to include the following agreement of the parties:

ARTICLE 4 -- PAYMENTS TO THE ENGINEER

C4.01 *For Basic Services Having A Determined Scope*

A. OWNER shall pay ENGINEER for Basic Services set forth in Exhibit A, except for services of ENGINEER's Resident Project Representative and Post-Construction Phase, services, if any, as follows:

1. Progress payments in the amount of $1,982,000 based on the following assumed distribution of compensation:

a.	Project Mgmt. and Coord.	$75,000.00
b.	Preliminary Design	$100,000.00
c.	Environmental Review Report	$70,000.00
d.	Subsurface Utility Eng.	$82,000.00
e.	Surveying	$80,000.00
f.	Geotechnical Services	$100,000.00
g.	Plan Prep. (PS&E) Serv.	$1,200,000.00
h.	Drainage Study	$250,000.00
i.	Bidding Phase Services	$25,000.00
	Total	$1,982,000.00

2. ENGINEER may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total amount unless approved in writing by the OWNER.

3. The amount includes compensation for ENGINEER's services and services of ENGINEER's Consultants, if any. Appropriate amounts have been incorporated to account for labor, overhead, profit, and Reimbursable Expenses.

4. The portion of the amount billed for ENGINEER's services will be based upon ENGINEER's estimate of the proportion of the total services actually completed during the billing period.

5. If more prime contracts are awarded for work designed or specified by ENGINEER for this Project than identified in Exhibit A, the ENGINEER shall be compensated an additional amount to be negotiated; however, in no case shall the amount of compensation exceed eighteen percent (18%) of the Project's estimated construction costs for all Basic Services for each prime contract added.

This is **EXHIBIT D**, consisting of 1 pages, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:
OWNER ____ ____
ENGINEER ____ ____

Duties, Responsibilities, and Limitations of Authority of Resident Project Representative

.

"NOT APPLICABLE"

This is **EXHIBIT E**, consisting of 1 pages, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:
OWNER ____ ____
ENGINEER____ ____

NOTICE OF ACCEPTABILITY OF WORK

"NOT APPLICABLE"

This is **EXHIBIT F**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:
OWNER _____
ENGINEER_____

Construction Cost Limit

"NOT APPLICABLE"

This is **EXHIBIT G**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:
OWNER ____
ENGINEER__

Insurance

Paragraph 6.05 of the Agreement is amended and supplemented to include the following agreement of the parties.

G6.05 *Insurance*

A. The limits of liability for the insurance required by paragraph 6.05.A and 6.05.B of the Agreement are as follows:

1. By ENGINEER:

a. Workers' Compensation:	Statutory	
b. Employer's Liability --		
1) Each Accident:	$	500,000
2) Disease, Policy Limit:	$	500,000
3) Disease, Each Employee:	$	500,000
c. General Liability --		
1) Each Occurrence (Bodily Injury and Property Damage):	$	1,000,000
2) General Aggregate:	$	2,000,000
d. Excess or Umbrella Liability --		
1) Each Occurrence:	$	4,000,000
2) General Aggregate:	$	4,000,000
e. Automobile Liability --		
1) Bodily Injury:		
a) Each Accident	$	_____
2) Property Damage:		
a) Each Accident	$	_____
[or]		
1) Combined Single Limit (Bodily Injury and Property Damage): Each Accident	$	500,000

f. Other (specify): On all policies except Workers Compensation and Professional Liability - "City of Killeen is named as Additional Insured on the General Liability and Auto Liability policies."

This is **EXHIBIT H**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:
OWNER _____
ENGINEER_____

Special Provisions

"NOT APPLICABLE"

This is **EXHIBIT I**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services dated** _____, _____.

Initial:
OWNER_____
ENGINEER_____

DBE Goal

"NOT APPLICABLE"