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.

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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 K Friese + Associates, Inc. (KFA) ("ENGINEER") for providing professional engineering services related to the design and construction of the Willow Springs & Watercrest Road Reconstruction ("Projects") located in the City of Killeen, Texas.

OWNER and ENGINEER in consideration of their mutual covenants as set forth herein agree as follows:

Provide Engineering Services as described in Exhibit A of this contract in the amount of \$ 1,902,976.86

1.01 Scope

A. ENGINEER shall provide the Basic and Additional Servicesset 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.

Standard Form of Agreement Between Owner and Engineer for Professional Services Page 2 of 11 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 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 ExhibitH.

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 reuseat 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 solerisk.

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 thenotice.

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

1. 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

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

6.13 Severability

1. 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

1. 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

1. 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 Contract*--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-ofway, 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 the General bonds, appropriate certifications, 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 Lawsor 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.

*Project Representative--*The 34. *Resident* authorized representative of ENGINEER, if any, assigned to assist ENGINEER at the Site during the Resident Phase. Construction The 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," consisting of 20 pages.

B. Exhibit B, "OWNER's Responsibilities," consisting of 2 pages.

C. Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses," consisting of 1 page.

- D. Exhibit D, "Duties, Responsibilities and Limitations of Authority of Resident Project Representative," consisting of 4 pages
- E. Exhibit E, "Notice of Acceptability of Work," consisting of 2 pages
- F. Exhibit F, "Construction Cost Limit," consisting of 1 page.
- G. Exhibit G, "Insurance," consisting of 1 page.

H. Exhibit H, "Special Provisions," consisting of 1 page.

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: K Friese + Associates, Inc. (KFA)		
By: KentCagle	By:		
Title: City Manager	Title:		
Date Signed:	Date Signed:		
Address for giving notices:	Address for giving notices:		
P.O. Box 1329			
Killeen, TX 76540-1329			
Designated Representative (paragraph 6.02.A):	Designated Representative (paragraph 6.02.A):		
Danielle Singh, PE			
Title: Assistant City Manager	Title:		
Phone Number: 254-501-7712	Phone Number:		
Facsimile Number:	Facsimile Number:		
E-Mail Address: dsingh@killeentexas.gov	E-Mail Address:		

This is **EXHIBIT A**, consisting of 23 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 -- BASIC SERVICES

A. ENGINEER shall:

- 1. Provide the necessary engineering and technical services for the development of plans, specifications, and estimates (PS&E) for the reconstruction of Willow Springs Road from Trenton Avenue to Westwood Drive, a distance of approximately 4,600 feet. KFA will conduct a traffic study to determine the appropriate number of lanes for the roadway, proper lane assignments, and traffic controls at intersections. Upon approval of the traffic study, KFA will provide the necessary engineering and technical services for the development of the project. KFA will also provide construction phase services as described in the Phase III tasks. The plans will include reconstruction of the roadway within the existing right of way (ROW) wherever possible. A limited amount of ROW acquisition will be considered. The plans will incorporate intersection improvements at Watercrest Road. The design will include five-foot wide sidewalks on both sides of Willow Springs Road and pedestrian ramps at all intersections. Sidewalks will extend beyond the northern project limits to provide a continuous path to the existing sidewalks at the West Central Texas Expressway (IH 14).
- 2. In addition, provide the necessary engineering and technical services for the development of plans, specifications, and estimates (PS&E) for the reconstruction of Watercrest Road from Willow Springs Road to Clear Creek Road, a distance of approximately 11,290 feet. KFA will provide the necessary engineering and technical services for the development of the project as described in the Phase I and Phase II tasks. KFA will also provide construction phase services as described in the Phase III tasks. The plans will include reconstruction of the roadway within the existing right of way (ROW) wherever possible. A limited amount of ROW acquisition will be considered. The design will include five-foot wide sidewalks on the south side of Watercrest Road and pedestrian ramps at all intersections.
- KFA will perform design services related to the design and plan production for these projects in accordance with the latest available City of Killeen requirements, Standard Details and Specifications. Special details and specifications will be developed for the project when necessary.

PROJECT MANAGEMENT:

- 1. Overall Project Management KFA will conduct internal meetings, schedule work, and coordinate on an ongoing basis with the City and project team. This task includes coordinating with subconsultants on field work, work products, and deliverables. This task also includes monthly invoicing and progress reports, monthly meetings with the City, and monthly updates to the project schedule.
- City of Killeen Meetings Meetings will be conducted with the City as shown in the project schedule and after each submittal to discuss the City's comments. Four (4) virtual meetings have been assumed prior to the 30% submittal to review the Traffic Study and pavement recommendations and one in-person meeting following

1 of 23 Pages (Exhibit A - ENGINEER SERVICES) each of the 30%, 60%, and 90% PS&E submittals (seven (7) total meetings). Time is included in this task for meeting preparation and documentation of the meetings. Agendas will be distributed 24-hours in advance of each meeting and minutes will be distributed within 3 business days following each meeting.

3. City Council Updates – City staff will update City Council on the progress of the project. KFA will assist with the preparation of exhibits. Ten (10) exhibits are included for budgeting purposes.

PHASE I – PRELIMINARY PLANS:

Design Survey & ROW Mapping – Surveying and Mapping, LLC (SAM) will provide topographic and ROW Mapping services from IH 14 to Westwood Drive.

- Project Control SAM shall establish horizontal & vertical control including a minimum of 6 points within the survey project limits along the existing corridor. The survey control points (5/8" iron rods with aluminum caps set in concrete) will be set in locations that will likely be undisturbed by construction or maintenance. The project control will be placed on horizontal and vertical datums [NAD83/2011/NAVD88 values (Texas Coordinate System, Central Zone)]. All coordinates will be adjusted to surface by multiplying by a surface adjustment factor of 1.00011, or as provided by the Client. Elevations will be derived from GPS observations using Geoid 2012B model. SAM shall prepare 11"x17" survey control sheets, signed & sealed by an RPLS.
- 2. Right of Entry Coordination SAM shall attempt to obtain right of entry (ROE) for up to ten (10) affected properties including preparing a ROE spreadsheet with ownership information and mailing out ROE letters to the property owners for the purposes of completing the design survey. SAM anticipates that the City of Killeen will facilitate the resolution of any refusals to grant ROE and/or communication with landowners who are hostile with respect to the completion of this scope of services. The Surveyor will document any interactions with landowners while performing the work. Gaining ROE from all landowners in a timely manner will be critical to the success and efficiency in meeting deadlines for this project.
- 3. Topographic Survey SAM will obtain design survey data within the project limits at approximate 50' intervals and major grade breaks necessary to produce a one-foot interval contour DTM. This data will typically include as follows: edge of pavement/gutter & back of curb, crown (physical centerline), roadway striping, roadway signs including text/symbol, top and bottom of drainage ditches, storm sewer sizes and flowline (invert) elevations, sidewalk, fences (with types), guardrails, mailboxes, retaining walls, paved areas, buildings, driveways (with type noted), driveway pipes, visible utilities, and visible evidence of underground utilities only. Survey data will extend for 50' along all side streets. SAM will locate all pavement boring (estimated at ten (12)).
- 4. Cross Sections SAM shall collect cross section data for the concrete channels that run to the east of the roadway to an unnamed tributary to Nolan Creek. Four channels are included (225' south of Armadillo Dr., near Armadillo Dr., Cactus Dr., and Hemlock Dr.) The cross sections shall be collected at 50-foot intervals and will extend 15 feet past the top of bank. At least three cross sections will be taken per channel. Watercrest Project- SAM shall collect cross section data for three (3) natural channels adjacent to the project corridor. The cross sections shall be collected at each ROW line and one 200' up and downstream for a total of 4 sections at each crossing.
- Tree Survey SAM shall locate all trees greater than 4 inches in diameter and identify their species within the proposed project limits. Trees will be used for 2D location purposes only and will not be included in the overall 3D DTM.

Survey Project Deliverables:

- 2D Planimetric & 3D DTM (MicroStation V8i)
- TIN file

- 1-Foot Contour map in MicroStation V8i DGN format
- PDF Field Book Copies
- ASCII file of points
- 11"x17" survey control sheets, signed & sealed by an RPLS (PDF format)
- 2D file depicting the results of the tree survey (MicroStation V8i)
- Tree List (Excel Format)
- 6 Right of Way Survey Records Research and Deed Study: Upon notice to proceed, SAM will conduct research in the Bell County Appraisal District offices to confirm property ownership for the properties along the project corridor. Concurrently, copies of the current deeds and any plats for all subject properties will be obtained from the County Clerks' records.

Field Surveys: SAM will recover monuments marking the existing ROW lines (if any) and the front corners of the properties and will tie to the project control.

Boundary Analysis: Utilizing the deed study and the data from the field survey, SAM will analyze the results of the survey and perform computations related to the analysis. Location of the existing ROW lines and the approximate side property lines of each of the subject properties will be determined by SAM.

The ROW survey shall delineate the limits of the existing ROW and depict approximate side property lines with current ownership according to the Bell County Appraisal District. The side property lines depicted will be approximate and will based solely upon front property corners and record information from existing subdivision plats.

SAM will develop a base file showing ownership of the subject properties. Properties adjacent to the existing right of way within the project limits will be labeled with the owner's name and deed recordation information.

ROW Survey Project Deliverables:

- 2D ROW Base Map (MicroStation V8i)
- Reference Deeds and Plats (PDF Format)
- PDF Field Book copies
- ASCII file of points
- 7 Supplemental ROW Mapping As Needed (Up to 10Parcels)

Records Research and Deed Study: Upon notice to proceed, SAM will conduct research in the Bell County Appraisal District offices to confirm property ownership for the up to 10 affected properties (subject properties). Concurrently, copies of the current deeds and any plats for all subject properties will be obtained from the County Clerks' records. No additional research shall be conducted as part of this scope of services.

Field Surveys: SAM will recover the corner or angle point monuments nearest to the proposed ROW on the sideline of each of the subject properties and these corners will be tied to the project control after ROE has been granted.

Boundary Analysis: Utilizing the deed study and the data from the field survey, SAM will analyze the results of the survey and perform computations related to the analysis. Location of the existing ROW lines and the side property lines of each of the subject properties will be determined by SAM.

<u>Preparation of Documents</u>: Documents will be submitted in two rounds (preliminary and final). Preliminary ROW documents shall be submitted based upon found monumentation within the existing ROW. Final ROW documents shall be submitted later once review comments have been received from the City.

3 of 23 Pages (Exhibit A - ENGINEER SERVICES)

- Utilizing the boundary surveys performed by SAM and the proposed ROW line location provided by the Client, SAM will compute the boundaries of the ROW parcels for each of the subject properties.
- SAM will draft plats for the 10 parcels for ROW acquisition. The plats will be prepared on 8 1/2" x 11" pages at a scale dependent upon parcel size. A closure computation will be prepared for each of the plats.
- SAM will prepare a field note (metes and bounds) description for each of the 10 parcels. A closure computation will be prepared for each of the descriptions.
- To assure the accuracy of the documents, SAM will read the descriptions while all details are compared to ROW plans and parcel plats (bearings, distances, stations and offsets, deed references, etc.). Final mark-ups will be made, and corrections completed.
- All of the above-described survey documents (plans, property descriptions parcel plats and closure computations) will be submitted to the City for a one-time review. Upon the completion of review of all ROW survey documents, SAM will make necessary corrections. The final ROW documents will then be delivered to the Client.

Monumentation: 5/8-inch iron rod with "SAM" plastic caps will be set at PCs, PTs, angle points and at no greater than 1,000 foot intervals along tangents on the proposed right-of-way line (up to 30 total).

8. Subsurface Utility Engineering (SUE) – Surveying and Mapping, LLC(SAM):

SUE services will include QL"D" through QL"B" SUE to support the design of Willow Springs Road in Killeen, Texas. The limits of the SUE investigation are from Trenton Avenue to Westwood Drive. SAM will attempt to designate the following utilities within this area: potable water, reclaimed water, natural gas and crude product pipelines, communication duct banks, fiber optic, cable television, telephone, electric, and wastewater. Additionally, SAM will complete an inventory of overhead utilities. Irrigation lines, utility service lines, and storm drain lines are excluded from this scope of work. Existing utility layouts will be prepared on 11"x17" sheets and CADD linework will be referenced into applicable design plans.

SAM Procedures:

Quality Service Level D (QL-D) – Collect existing utility records information

(as-builts) from utility providers, municipalities, counties, and other agency suppliers within the area of investigation. These utilities could include electrical, telephone, cable TV, fiber optic, gas, petroleum, water, wastewater, steam, and storm drain systems.

• SAM will attempt to contact utility providers, counties and other agency suppliers identified through the utility easement information, Texas One-Call systems, and via vehicle reconnaissance and inventory of utility marker posts along adjacent roadways. The sole purpose of this activity is to collect existing record information of utility systems that may have an impact on this project. Any utility that is found in the field, by use of designating geophysical equipment and is not evident on any collected record information, will be shown in the QL-B utility file as an "unknown" utility as required by ASCE CI 38- 02.

Quality Service Level C (QL-C) – SAM survey crew will provide this service consisting of field surveying to obtain accurate horizontal position of visible utility surface features associated with the underground utility systems located within the project limits.

Quality Level B (QL-B) Designating Service (Horizontal Location of Utilities) – Designating is to indicate, by marking with paint, the presence, and approximate horizontal location of subsurface utilities using geophysical prospecting techniques including, without limitations, electromagnetic, sonic, and acoustical techniques. SAM will provide the following designating services to aid the Client in the design of site, ROW, construction plans, or project development plans, or for other purposes as agreed to by the parties. SAM will:

- Provide QL-B within the project limits as previously stated.
- Provide all equipment, personnel, and supplies required for performing toning services. SAM shall determine which equipment, personnel, and supplies are required to perform these toning services.
- Designate the existing underground utilities, which may consist of water, wastewater, gas, petroleum pipelines, telephone, fiber optics, cable TV, and electrical utilities within the project area previously described.
- Conduct appropriate investigation of site conditions.
- Mark the utilities on the ground to be surveyed.
- Analyze and correlate all of the field-collected information with the collected record information for ensuring continuity of the information collected. Resolve conflicts with Level D, C, and B information.

ASSUMPTIONS:

The following assumptions were made for the preparation of this Scope of Services. If these assumptions do not prove correct, a modification to the scope and budget for this project may be required.

- In the event that access to or through adjoining property is required to complete this scope, The City of Killeen will coordinate and arrange access.
- The accuracy of subsurface data can be influenced by factors beyond our control such as conductivity of materials and their surroundings, soil moisture content, proximity of other underground utilities, rail lines or structures, depth of utility, etc. Therefore, only the accuracy of data obtained by actual physical verification (through vacuum excavation or otherwise) can be guaranteed to applicable engineering and/or surveying standards.
- Paint markings placed on the ground by SAM are to be used for design purposes only and not for construction purposes. The use of any information provided does not relieve any contractor or the Client from the duty to comply with applicable utility damage prevention laws and regulations, including, but not limited to, giving notification to utility owners or One-Call centers before excavation. SAM will not be responsible for any omission of utility information that is not obtainable via electromagnetic, sonic, or acoustical designating services.
- Non-metallic piping, inactive electric and/or communication lines may or may not be found by electromagnetic, sonic or acoustical designating practices. SAM does not warrant and/or guarantee that all existing utilities will be found.
- If able, the Client will provide a DGN or DWG electronic file of recent 2D planimetric mapping showing the existing right-of-way and/or easements, etc. and/or limits of the subsurface utility information to be collected. This file will be used as background information and as part of our deliverables to the Client for this project.
- If able, The Client will provide SAM with any available utility records and associated profile drawings as well as all available historic imagery and drawings associated with the sites to be investigated.
- Survey Feature Codes will be shown as per SAM current Feature Library and Line Styles.
- SAM will not be working in any hazardous or contaminated areas.
- All work will be performed during daytime hours. It is assumed that the project area will be accessible for a minimum of 10 hours per day, six days a week, with limited interruptions.
- SAM assumes that we will have access to all utility related structures within and immediately adjacent to the work area.
- SAM cannot guarantee that a utility will be found at Quality Level D test hole locations. Reliable EM and Radio signals cannot always be produced in the field on QL-D utility information.
- SAM will be notified, prior to coming to Project of any special requirements for access and the performance of the work.
- It is assumed that traffic control setups will be required during the QL-B portion of the work. Electronic

5 of 23 Pages (Exhibit A - ENGINEER SERVICES)

Files should be structured for immediate reproduction of the hard copy contents.

Any Additional Services require written authorization prior to the start of work. This proposal does not include any QL-A test hole work. However, if test holes are needed, SAM will submit a separate scope and fee for this portion of the work.

QL "A" - Locating:

SAM will utilize non-destructive vacuum excavation equipment to excavate test holes at the requested locations. To layout the test holes, SAM will follow the QL"B" – Designating procedures described above to layout each test hole location. Once each utility is located vertically, SAM 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. SAM 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.

SAM will establish any necessary routine traffic control measures at no additional cost. However, if non-routine traffic control measures (lane closures, traffic detours, flag persons, etc.) are required, this service will be invoiced as a direct expense. Due to the risk of damage, SAM 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 10 feet, is considered beyond the scope of this proposal.

Below are some general assumptions in regard to performance of QL-A test hole activities:

- All test holes will be accessible to truck-mounted vacuum excavation equipment.
- Right-Of-Way (ROW) permits from the City of Killeen will be required. SAM will obtain all required City of Killeen permits and ensure that coordination and compliance with the City of Killeen is provided. It is assumed any required permits will be provided at no cost to SAM.
- Designed traffic control plans will not be required. It is assumed that Texas Department of Transportation standard traffic control details will be utilized.
- Non-routine traffic control measures will be required. SAM 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 not be required.
- SUE will be provided from ROW to ROW on Willow Springs Road. Electronic Files should be structured for immediate reproduction of the hard copy report.
- 9. Develop preliminary design Upon approval from the City, KFA will prepare preliminary plans of sufficient detail to conform direction for the project footprint displaying the number of lanes, sidewalk locations and width, proposed ROW locations, and all necessary easements. KFA will produce the following documents representing a preliminary level of design:
 - a. Design Summary Report (DSR) KFA will prepare a Design Summary Report in TxDOT or other City preferred format documenting all design criteria for the project.
 - b. Roll Plots KFA will prepare two (2) roll plots reflecting a preliminary level of design. One roll plot will include:
 - Horizontal Alignment
 - Vertical Profile
 - Top of curb profiles
 - Sidewalks
 - Existing property lines and Proposed ROW
 - Locations of major drainage crossings and outfalls
 - Drainage trunk lines

• Roadway Typical Sections

The second roll plot will show a preliminary sequence of construction to determine the required number of phases.

- c. Drainage Technical Memorandum KFA will prepare a drainage memorandum to summarize the general drainage requirements for the project. KFA will use Atlas 14 rainfall data to prepare the drainage design. The memorandum will summarize:
 - Existing and proposed drainage flows
 - Required storm sewer trunk lines and sizes for the proposed condition
 - Required structures for drainage crossings
- 10. Geotechnical Services Raba Kistner, Inc. (RKI) will perform geotechnical services for the roadway that will require pavement design recommendations. This task includes drilling ten (10) pavement borings (approximately 500 ft spacing) to 15 ft below existing ground surface, except for the boring located near the intersection of Willow Springs Road and Watercrest Road which will extend to 25 ft below existing ground surface in the event new traffic signals are considered. Dynamic Cone Penetrometer (DCP) tests will be performed adjacent to each boring location and extend to a maximum depth of 24 in. below existing ground surface. Watercrest Project- Raba Kistner, Inc. (RKI) will perform geotechnical services for the roadway that will extend to a provide adjacent.

require pavement design recommendations. This task includes drilling twelve (12) pavement borings (approximately 1000 ft spacing) to 15 ft below existing ground surface, except for the boring located near the potential future pedestrian crossing which will extend to 25 ft below existing ground surface in the event new traffic signals are considered. Dynamic Cone Penetrometer (DCP) tests will be performed adjacent to each boring location and extend to a maximum depth of 24 in. below existing ground surface.

RKI will perform the following RKI will perform the following:

- Develop soil boring layout for approval from KFA prior to mobilization.
- Perform 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, plan of borings, subsurface exploration procedures, encountered subsurface conditions, field and laboratory test results, description of surface and subsurface conditions, groundwater conditions, general earthwork recommendations, swell potential evaluations, pavement thickness design alternatives with subgrade stabilization, and PVR calculations.
- Stake borings in the field utilizing tape and right-angle measurements from existing benchmarks (does not include surveying of boring locations and assumes surveyor will stake roadway alignment); perform laboratory testing to characterize soils and provide pavement design recommendations for the proposed realignment. Upon completion, the boreholes will survey and included in the project design topo.
- 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, sulfate testing, particle size analysis tests, visual classification, dry density, Triaxial Compression of Disturbed Soil (Tex-117-E), and Lime Series (Tex-121-E Part III).
- Prepare (3) pavement design options. All pavement design analyses will be performed with TxDOT software FPS-21, unless otherwise approved by the City.
- RKI will prepare a Draft Pavement Report and Final Pavement Report based on field testing, subsequent laboratory testing.
- RKI has also assumed that the borings can be drilled during the day, right-of-entry is provided, no site work is needed to access the boring locations, and that all boring locations will be accessible to a truck-mounted drill rig.
- 11. Environmental No environmental tasks are included in the Scope of Work.

12.. Existing Peak Hour Traffic Study – DKS Associates (DKS) will conduct a traffic study of the Willow Springs Road corridor to produce the following elements:

- a. Obtain existing traffic signal plans, lane configurations, and other roadway information as needed for input into the traffic study
- b. Traffic data collection DKS will obtain existing count data from the TxDOT Statewide Traffic Analysis and Reporting System (STARS II) and assess what additional traffic counts are needed
- c. The City will provide 15 minute turning movement data for the Willow Springs Road and Watercrest Road intersection.
- d. DKS will conduct an existing conditions peak hour traffic capacity analysis of the Willow Springs Road corridor from Trenton Ave. to Westwood Drive.
- e. DKS will prepare a forecast of at least 10 years using the KTMPO model and population/employment forecasts for the area.
- f. DKS will conduct a forecast conditions peak hour traffic capacity analysis of the Willow Springs Road corridor from Trenton Ave. to Westwood Drive.
- g. DKS will prepare a Traffic Analysis Memo detailing results of the Willow Springs Road traffic study, including:
 - i. Traffic count estimates and analysis
 - ii. Forecast traffic conditions and analysis
 - iii. Output worksheets and resulting performance data
 - iv. Turning movement diagrams
 - v. Recommended lane configurations and turn bay lengths

PHASE II – PS&E DESIGN & BID PHASE:

1. Construction Plans - KFA will produce the following sheets (11" x 17" Full-Size) as appropriate for the selected two-lane roadway design. QA/QC is included in each sheet task. KFA will submit PS&E progress submittals at the 30%, 60%, 90%, and Final phases of design. The anticipated plan sheets are summarized below. Each submittal will consist of the following:

30% Submittal:

- Two (2) paper copies and electronic (pdf) of the 30% plans
- Responses to Phase I review comments
- Opinion of Probable Construction Cost
- Updated Project Design Schedule
- Draft ROW parcel documents
- Design exception request documentation

60% Submittal:

- Two (2) paper copies and electronic (pdf) of the 60% plans
- Responses to 30% review comments
- Updated Opinion of Probable Construction Cost
- Updated Construction Schedule
- Updated Project Design Schedule
- Draft ROW parcel documents
- Design exception request documentation

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90% Submittal:

- Two (2) paper copies and electronic (pdf) of the 90% plans
- Responses to 60% review comments
- Updated Opinion of Probable Construction Cost
- Updated Construction Schedule
- Updated Project Design Schedule
- Draft Project Manual
- Draft SWPPP
- Updated design exception request documentation

Final Submittal:

- Two (2) original signed and sealed paper copies and electronic (pdf) of the Final Construction plans
- Two (2) original Project Manuals and Bid Documents and electronic (pdf) for advertisement and letting
- Responses to 90% review comments
- Final Opinion of Probable Construction Cost
- Final Construction Schedule
- Final Project Design Schedule
- Final SWPPP (2 originals)
- Final design exception request documentation

i. MISCELLANEOUS PLANS

- i. TITLE SHEET (1 Sheet)
- ii. INDEX OF SHEETS (1 Sheet)

iii. QUANTITY/SUMMARY SHEETS (6 Sheets) -

- Roadway Quantities
- Summary of Drainage and Erosion Controls
- Summary of Pavement Markings and Traffic Controls
- Summary of Small Signs
- Summary of Traffic Signals
- iv. GENERAL NOTES (4 Sheets)
- V. HORIZONTAL ALIGNMENT DATA (1 Sheet)
- vi. SURVEY CONTROL (1 Sheet)
- vii. UTILITY LAYOUT SHEETS (5 Sheets)

viii. TYPICAL SECTIONS (4 Sheets) – Existing and proposed typical sections containing:

- Width of travel lanes and directional arrows
- Curbs-and-gutters
- Curb offsets
- Border width
- ROW Width
- Centerline
- Profile Grade Line
- Pavement structure (detailed layers based on Geotechnical Report)
- Side slopes and front slopes as needed

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- Sodding/seeding limits
- Station limits
- Sidewalks
- ix. PROJECT LAYOUT SHEET (1 Sheet) 1"=500' to clearly indicate the limits of the entire project
- X. ROADWAY REMOVAL SHEETS (5 Sheets) At 1"=50' double stacked. The layouts will indicate pavement, roadway appurtenances, and other pertinent items to be removed with details and descriptions

Watercrest Project- MISC PLANS:

- i. TITLE SHEET (1 Sheet)
- ii. INDEX OF SHEETS (1 Sheet)
- iii. QUANTITY/SUMMARY SHEETS (6 Sheets) -
 - Roadway Quantities
 - Summary of Drainage and Erosion Controls
 - Summary of Pavement Markings and Traffic Controls
 - Summary of Small Signs
 - Summary of Traffic Signals
- iv. GENERAL NOTES (6 Sheets)
- V. HORIZONTAL ALIGNMENT DATA (1 Sheet)
- vi. SURVEY CONTROL (2 Sheets)
- vii. UTILITY LAYOUT SHEETS (10 Sheets)
- viii. TYPICAL SECTIONS (4 Sheets) Existing and proposed typical sections containing:
 - Width of travel lanes and directional arrows
 - Curbs-and-gutters
 - Curb offsets
 - Border width
 - ROW Width
 - Centerline
 - Profile Grade Line
 - Pavement structure (detailed layers based on Geotechnical Report)
 - Side slopes and front slopes as needed
 - Sodding/seeding limits
 - Station limits
 - Sidewalks
- ix. PROJECT LAYOUT SHEET (1 Sheet) 1"=500' to clearly indicate the limits of the entire project
- X. ROADWAY REMOVAL SHEETS (10 Sheets) At 1"=50' double stacked. The layouts will indicate pavement, roadway appurtenances, and other pertinent items to be removed with details and descriptions

ii. <u>ROADWAY PLANS & GEOMETRY</u>

- ROADWAY PLAN AND PROFILE SHEETS (10 Sheets) 1"=50' H and 1"=10' V. The sheets will include coordinates, superelevation data, stations, horizontal curve data, vertical profile data, elevations of key alignment features, drainage features, utilities, and any other items required for the complete construction of the project.
- 2. INTERSECTION LAYOUT SHEETS (11 Sheets) 1"=30' scale with spot elevations and proposed grading for the intersections.

The following intersections will be developed, one per sheet:

- Willow Springs Rd at Wheeler Ave
- Willow Springs Rd at Cascade Dr
- Willow Springs Rd at Corona Dr.
- Willow Springs Rd at Watercrest Rd
- Willow Springs Rd at Fieldstone Dr
- Willow Springs Rd at Westwood Dr
- Willow Springs Rd at Armadillo Dr

The following intersections will be combined, two per sheet:

- Willow Springs Rd at Trenton Ave and at Hinkle Ave
- Willow Springs Rd at Newton Dr and at Hemlock Dr
- Willow Springs Rd at Woodlands Dr and at Bluebonnet Dr
- Willow Springs Rd at Cactus Dr and at Windmill Dr
- iii. DRIVEWAY PLAN AND PROFILE SHEETS (26 Sheets)
 - Estimated fifty-one driveways at two per sheet.
 - c. GRADING AND DETAILS
 - CROSS-SECTIONS (48 Sheets) KFA will complete design cross-sections at 50-foot station intervals and other locations as necessary for the determination of cut and fill quantities and to further refine the design vertical geometry.
 - ROADWAY DETAILS (6 Sheets) KFA will include miscellaneous detail sheets for the project using applicable standard City of Killeen or TxDOT details. KFA will prepare any required revisions to applicable standards necessary for the project.
 - d. DRAINAGE PLANS KFA will obtain current hydrologic and hydraulic as- built drawings, models, 1-foot LiDAR data, and associated data from the responsible government agencies. The hydrologic and hydraulic analyses will be based on the City of Killeen's criteria including the use of the latest Atlas-14 rainfall data.
 - i. EXISTING & PROPOSED OFFSITE DRAINAGE AREA MAPS (2 Sheets)
 - ii. ONSITE DRAINAGE AREA MAPS (10 Sheets)
 - iii. DRAINAGE HYDROGLOGIC AND HYDRAULIC CALCULATIONS (4 Sheets)
 - STORM SEWER PLAN & PROFILE SHEETS (1"=50' H and 1"=10' V, 10 Sheets)(assumed from new Storm Sewer from Watercrest Rd to Westwood Dr)
 - V. STORM SEWER HYDRAULIC CALCULATIONS (6 Sheets)
 - vi. DRAINAGE DETAIL SHEETS (4 Sheets)
 - vii. DRAINAGE STANDARDS (10 Sheets)

e. TRAFFIC CONTROL PLANS

- i. TRAFFIC CONTROL PLAN NARRATIVE SHEET (1 Sheet)
- ii. TRAFFIC CONTROL PLAN LAYOUT SHEETS (30 Sheets)
- iii. TRAFFIC CONTROL PLAN STANDARDS (15 Sheets)

f. SIGNING AND PAVEMENT MARKING

- i. SIGNING AND PAVEMENT MARKING LAYOUTS (10 Sheets)
- ii. SIGNING AND PAVEMENT MARKING STANDARD SHEETS (6 Sheets)

g. TRAFFIC SIGNAL PLANS –WILLOW SPRINGS ROAD AT WATERCREST ROAD

- i. GENERAL NOTES (Up to 5 Sheets)
- ii. SUMMARY OF QUANTITIES (1 Sheet)
- iii. CONDITION DIAGRAM SHEET (1 Sheet)
- iv. TEMPORARY SIGNAL PLAN
- V. SIGNAL REMOVAL PLAN (1 Sheet)
- vi. TRAFFIC SIGNAL PLAN SHEET WILLOW SPRINGS / WATERCREST (1 Sheet).
- vii. TRAFFIC SIGNAL DETECTION SHEET (1 Sheet)
- viii. TRAFFIC SIGNAL DETAIL SHEETS (19 Sheets)
- **ix.** SIGNAL CONTROLLER PROGRAMMING
- h. EROSION CONTROL SHEETS
 - i. STORMWATER POLLUTION PREVENTION PLAN (1 Sheet)
 - ii. EROSION CONTROL PLAN SHEETS (10 Sheets)
 - iii. EROSION CONTROL STANDARD SHEETS (6 Sheets)

Watercrest Roadway Plans and Geometry:

- i. ROADWAY PLAN AND PROFILE SHEETS (20 Sheets) 1"=50' H and 1"=10' V. The sheets will include coordinates, superelevation data, stations, horizontal curve data, vertical profile data, elevations of key alignment features, drainage features, utilities, and any other items required for the complete construction of the project.
- ii. INTERSECTION LAYOUT SHEETS (9 Sheets) 1"=30' scale with spot elevations and proposed grading for the intersections.

The following intersections will be developed, one per sheet:

- Watercrest Rd at Roadrunner Dr and at Windsor Circle (combined single layout due to proximity)
- Watercrest Rd at Robinett Rd

The following intersections will be combined, two per sheet:

- Watercrest Rd at Quail Circle and at Wales Dr
- Watercrest Rd at Westway Dr and at Prestige Loop (E)
- Watercrest Rd at Prestige Loop (W) and at Cody Poe Rd
- Watercrest Rd at Waterfall Dr and at Lakeridge Dr
- Watercrest Rd at Lakecrest Dr and at Roberts Rd
- Watercrest Rd at Windfield Dr and at Fox Glove Lane

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• Watercrest Rd at Bachelor Button Blvd and at Foley Dr

The intersections of Watercrest Rd at Willow Springs Rd and at S. Clear Creek Rd (SH 201) are outside the limits of this project.

iii. DRIVEWAY DETAIL SHEET (1 Sheet)

- An estimated thirteen (13) driveways will be dimensioned in a table.
- The table and associated detail layout will include the driveway material, width, length, radii, and slope(s).
- Driveways will be designed to accommodate sidewalks and be compliant with ADA requirements.

c. GRADING AND DETAILS

- CROSS-SECTIONS (96 Sheets) KFA will complete design cross-sections at 50-foot station intervals and other locations as necessary for the determination of cut and fill quantities and to further refine the design vertical geometry. Cross Sections will be developed at each driveway.
- ROADWAY DETAILS (6 Sheets) KFA will include miscellaneous detail sheets for the project using applicable standard City of Killeen or TxDOT details. KFA will prepare any required revisions to applicable standards necessary for the project.
- d. DRAINAGE PLANS KFA will obtain current hydrologic and hydraulic as-built drawings, models, 1-foot LiDAR data, and associated data from the responsible government agencies. The hydrologic and hydraulic analyses will be based on the City of Killeen's criteria including the use of the latest Atlas-14 rainfall data.
 - i. EXISTING & PROPOSED OFFSITE DRAINAGE AREA MAPS (4 Sheets)
 - ii. ONSITE DRAINAGE AREA MAPS (20 Sheets)
 - iii. DRAINAGE HYDROGLOGIC AND HYDRAULIC CALCULATIONS (8 Sheets)
 - iv. CULVERT LAYOUTS (2 Sheets)
 - V. STORM SEWER PLAN & PROFILE SHEETS (1"=50' H and 1"=10' V, 20 Sheets)(assumed from new Storm Sewer from Clear Creek Rd to Willow Springs Dr)
 - vi. STORM SEWER HYDRAULIC CALCULATIONS (8 Sheets)
 - vii. DRAINAGE DETAIL SHEETS (4 Sheets)
 - viii. DRAINAGE STANDARDS (10 Sheets)
- e. TRAFFIC CONTROL PLANS
 - i. TRAFFIC CONTROL PLAN NARRATIVE SHEET (1 Sheet)
 - ii. TRAFFIC CONTROL PLAN LAYOUT SHEETS (40 Sheets)
 - iii. TRAFFIC CONTROL PLAN STANDARDS (15 Sheets)
- f. SIGNING AND PAVEMENT MARKING
 - i. SIGNING AND PAVEMENT MARKING LAYOUTS (20 Sheets)
 - ii. SIGNING AND PAVEMENT MARKING STANDARD SHEETS (6 Sheets)
- g. EROSION CONTROL SHEETS
 - i. STORMWATER POLLUTION PREVENTION PLAN (1 Sheet)
 - ii. EROSION CONTROL PLAN SHEETS (10 Sheets)
 - iii. EROSION CONTROL STANDARD SHEETS (6 Sheets)

Additional Services

- a. HAWK SIGNAL PLANS (if requested by the City)
 - i. GENERAL NOTES (Up to 4 Sheets)
 - ii. SUMMARY OF QUANTITIES (1 Sheet)
 - iii. CONDITION DIAGRAM SHEET (1 Sheet)
 - iv. HAWK SIGNAL PLAN SHEET WATERCREST DR (1 Sheet)
 - V. HAWK SIGNAL DETAIL SHEETS (Up to 19 Sheets)
- 2. Opinion of Probable Construction Cost KFA will prepare and submit an engineer's opinion of probable construction cost utilizing calculated quantities, City of Killeen and TxDOT Waco District Average unit prices in Microsoft Excel and pdf format at the 30%, 60%, 90%, and Final submittals to the City.
- **3.** Construction Schedule KFA will prepare and submit a construction schedule utilizing the Critical Path Method (CPM) with appropriate software. The CPM schedule will identify the major items of work for construction of the project with durations based on available project rates for those items. The schedule will indicate tasks, subtasks, critical dates, milestones, will depict the interdependence of the various items, and will be in calendar days. Updated construction schedules will be submitted at the 30%, 60%, 90%, and Final submittals. Schedules will be submitted in Microsoft Project and PDF formats.
- 4. Contract Documents KFA will prepare a Project Manual including standard general provisions, instructions to bidders, bid forms, applicable prevailing wage rates, specifications, special provisions, and any other information required for complete construction of the Project. The CITY will provide the front-end documents for use by KFA. Documents will be provided in PDF format with the Table of contents linked to the document text and some forms will be made fillable.
- 5. Permitting For purposes of this proposal, it is assumed that the final roadway and utility design will require the following permits:
 - a. TCEQ NPDES A Contractor and Owner NOI will be prepared in conjunction with the SWPPP plans. The SWPPP will be provided to the Contractor awarded the project.
 - b. TDLR (TAS) Review KFA will prepare and submit the required documentation for a review and approval of the pedestrian facilities in accordance with TDLR/TAS regulations.
- 6. Utility Coordination RKI will perform limited UC services for this project to assist the City in facilitating the accommodation of existing utilities. RKI's coordination scope will be limited to the following activities on the project:
 - a. Schedule and hold a Utility Kick off meeting with all utility owners (UOs), the City and any other stakeholders with interest in the project. RKI, with the approval of the City, will provide the invite, agenda, exhibits, run the meeting, and submit meeting minutes with an attendance list. It is assumed that utility contact information will be provided by the City and/or the GEC.
 - b. Utility Conflict Matrix RKI will provide a Utility Tracking Report (matrix) at the 30%, 60%, 90%, and 100% submittals. The Utility Tracking Report will include the following information as applicable:
 - Owner of the facility, including the facility address and name and telephone number of the contact person at the facility.
 - Location of conflict, identified by station and offset.
 - Type of facility
 - Effect on construction.

- Type of adjustment required.
- Critical path item? Yes or no.
- Consideration of shared duct bank.
- 7. Bid & Award KFA will assist the City of Killeen with contract administration during the bid phase of the project.
 - a. Bid Solicitation KFA will coordinate with the City of Killeen to publish the Invitation for Bid and bidding documents on Civcast.
 - b. Pre-Bid Conference KFA will attend the pre-bid conference, document any questions and responses provided at the meeting, and issue a follow- up addendum if necessary.
 - c. Addenda Preparation KFA will interpret plans and specifications and draft addenda, as necessary, for issuance. One (1) addendum has been assumed for budgeting purposes.
 - d. Bid Opening and Review KFA will attend the public bid opening, tabulate the bids, and perform a review of the bid tabulation and Contractor's qualifications. KFA will issue a Recommendation for Award based on the lowest responsive bidder within five (5) businessdays.
 - e. Contract Award Following award of the Contract by the City, KFA will assemble the necessary Contract Documents and coordinate with the Contractor and City for execution.
 - f. Conforming Documents Addenda items will be incorporated into a set of "conformed" documents. We have included one (1) set of conformed documents to be issued for construction.

PHASE III – CONSTRUCTION PHASE SERVICES:

c. Construction Phase Services – KFA will assist the City of Killeen with contract administration during the

construction phase of the project. We understand the City of Killeen will provide required construction inspection services and have assumed that the construction duration will be approximately sixteen (16) months. KFA's services will include:

- a. Pre-Construction Conference KFA will attend a pre-construction conference with the City, Contractor, and other parties as appropriate, and prepare the meeting minutes.
- b. Progress Meetings and Site Visits KFA will attend monthly construction meetings with the City, Contractor, and other parties as appropriate, including preparing the meeting minutes. KFA will visit the site and conduct construction meetings approximately once a month and as needed when construction is in progress to verify that the work is generally in conformance with the plans and specifications. For budgeting purposes, we have assumed twenty-six (26) meetings/site visits.
- c. Submittal Review KFA will maintain a log of all Contractor submittals, track review progress, review and approve submittals, and distribute submittals to the appropriate parties. For budgeting purposes, we have assumed twenty (20) submittal reviews.
- d. Requests for Information (RFIs) KFA will provide answers to requests for information (RFI's) from Contractor as related to possible conflicts and clarifications needed between plans and specifications. Ten (10) RFI's have been assumed.
- e. Preparation of Change Orders. KFA will provide answers, sheet revisions, and revisions to anticipated construction costs for Change Order requests from the City. Four (4) change orders (not due to errors & omissions) have been assumed.
- f. Contract Close-out. KFA will attend a final project walk-thru, document "punch list items", and issue an Engineer's Concurrence for Project Acceptance letter. KFA will also notify TCEQ and other jurisdictional agencies of project completion.

g. Record Drawings. KFA will use the Contractor's redline as-built drawings to document as-built conditions in the final record drawings. KFA will supply the City of Killeen with one set of reproducible record drawings and provide one set of record drawings in .pdf format.

ASSUMPTIONS MADE FOR THIS PROPOSAL

- 1. <u>Environmental Services are not included in this scope</u>.
- 2. Traffic Signal Warrants are not included in this scope.
- 3. Utility relocation design and construction are not included with this proposal.
- 4. Permit review fees, including TDLR, are not included in this proposal.
- 5. Illumination, except luminaires included on the traffic signal poles, is not included with this proposal.
- 6. It is assumed that the project will not require retaining walls.
- 7. This scope of work assumes local funding only. Any studies, field visits, or other activities requested by CLIENT or other parties that are not included in this proposal are excluded from this scope of work.
- 8. Construction Materials Testing and inspection is not included in this scope.

In the event that the Work designed or specified by ENGINEER is to be performed or furnished under more than one prime contract, or if ENGINEER's services are to be separately sequenced with the work of one or more prime Contractors (such as in the case of fast-tracking), OWNER and ENGINEER shall, prior to commencement of the Final Design Phase, develop a schedule for performance of ENGINEER's services during the Final Design, Bidding or Negotiating, Construction, and Post-Construction Phases in order to sequence and coordinate properly such services as are applicable to the work under such separate prime contracts. This schedule is to be prepared and included in or become an amendment to Exhibit A whether or not the work under such contracts is to proceed concurrently.

Bidding or Negotiating Phase

A. After acceptance by OWNER of the Bid Documents and the most recent opinion of probable Construction Cost as determined in the Final Design Phase and upon written authorization by OWNER to proceed, ENGINEER shall:

- 1. Assist OWNER in advertising for and obtaining bids or negotiating proposals for the Work and, where applicable, maintain a record of prospective bidders to whom Bid Documents have been issued, conduct the pre-Bid conferences, if any, and receive and process Contractor deposits or charges for the Bidding Documents.
- 2. Issue Addenda as appropriate to clarify, correct, or change the Bid Documents.
- 3. Consult with OWNER as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by Contractor for those portions of the Work as to which such acceptability is required by the Bid Documents.
- 4. Conduct the Bid opening, prepare Bid tabulation sheets, and assist OWNER in evaluating Bids or proposals and in assembling and awarding contracts for the Work.

B. The Bidding or Negotiating Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective Contractors (except as may be required if Exhibit F is a part of this Agreement).

A1.05 Construction Phase

A. Upon successful completion of the Bidding and Negotiating Phase, and upon written authorization from OWNER, ENGINEER shall:

- General Administration of Construction Contract. Consult with OWNER and act as OWNER's representative as provided in the General Conditions. The extent and limitations of the duties, responsibilities and authority of ENGINEER as assigned in said General Conditions shall not be modified, except as ENGINEER may otherwise agree in writing. All of OWNER's instructions to Contractor will be issued through ENGINEER, who shall have authority to act on behalf of OWNER in dealings with Contractor to the extent provided in this Agreement and said General Conditions except as otherwise provided in writing.
- 2. *Resident Project Representative (RPR)*. Provide the services of an RPR at the Site to assist the ENGINEER and to provide more extensive observation of Contractor's work. Duties, responsibilities, and authority of the RPR are as set forth in Exhibit D. The furnishing of such RPR's services will not extend ENGINEER's responsibilities or authority beyond the specific limits set forth elsewhere in this Agreement.

- 3. *Selecting Independent Testing Laboratory*. Assist OWNER in the selection of an independent testing laboratory to perform the services identified in paragraph B2.01.0.
- 4. *Pre-Construction Conference*. Participate in a Pre-Construction Conference prior to commencement of Work at the Site.
- 5. *Baselines and Benchmarks*. As appropriate, establish baselines and benchmarks for locating the Work in which in ENGINEER's judgment are necessary to enable Contractor to proceed.
- 6. *Visits to Site and Observation of Construction*. In connection with observations of Contractor's work in progress while it is in progress:
 - a. Make visits to the Site at intervals appropriate to the various stages of construction, as ENGINEER deems necessary, in order to observe as an experienced and qualified design professional the progress and quality of the Work. Such visits and observations by ENGINEER, and the Resident Project Representative, if any, are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress or to involve detailed inspections of Contractor's work in progress beyond the responsibilities specifically assigned to ENGINEER in this Agreement and the Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on ENGINEER's exercise of professional judgment as assisted by the Resident Project Representative, if any. Based on information obtained during such visits and such observations, ENGINEER will determine in general if Contractor's work is proceeding in accordance with the Contract Documents, and ENGINEER shall keep OWNER informed of the progress of the Work.
 - The purpose of ENGINEER's visits to, and representation by the Resident Project Representative, if b. any, at the Site, will be to enable ENGINEER to better carry out the duties and responsibilities assigned to and undertaken by ENGINEER during the Construction Phase, and, in addition, by the exercise of ENGINEER's efforts as an experienced and qualified design professional, to provide for OWNER a greater degree of confidence that the completed Work will conform in general to the Contract Documents and that the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents has been implemented and preserved by Contractor. ENGINEER shall not, during such visits or as a result of such observations of Contractor's work in progress, 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 Contractor's work, or for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work. Accordingly, ENGINEER neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the Contract Documents.
- 7. *Defective Work*. Recommend to OWNER that Contractor's work be disapproved and rejected while it is in progress if, on the basis of such observations, ENGINEER believes that such work will not produce a completed Project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.
- 8. *Clarifications and Interpretations; Field Orders.* Issue necessary clarifications and interpretations of the Contract Documents as appropriate for the orderly completion of Contractor's work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract

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Documents. ENGINEER may issue Engineer's Supplemental Instructions (ESI) authorizing minor variations from the requirements of the Contract Documents

- 9. *Change Orders and Work Change Directives*. Recommend Change Orders and Work Change Directives to OWNER, as appropriate, and prepare Change Orders and Work Change Directives as required.
- 10. Shop Drawings and Samples. Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto. ENGINEER has an obligation to meet any Contractor's submittal schedule that has earlier been acceptable to ENGINEER.
- 11. *Substitutes and "or-equal."* Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor, but subject to the provisions of paragraph A2.02.A.2 of this Exhibit A.
- 12. Inspections and Tests. Require such special inspections or tests of Contractor's work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Contract Documents. ENGINEER's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. ENGINEER shall be entitled to rely on the results of such tests.
- 13. *Disagreements between OWNER and Contractor*. Render formal written decisions on all claims of OWNER and Contractor relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of Contractor's work. In rendering such decisions, ENGINEER shall be fair and not show partiality to OWNER or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.
- 14. *Applications for Payment*. Based on ENGINEER's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:
 - a. Determine the amounts that ENGINEER recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute ENGINEER's representation to OWNER, based on such observations and review, that, to the best of ENGINEER's knowledge, information and belief, Contractor's work has progressed to the point indicated, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe Contractor's work. In the case of unit price work, ENGINEER's recommendations of payment will include final determinations of quantities and classifications of Contractor's work (subject to any subsequent adjustments allowed by the Contract Documents). The responsibilities of ENGINEER contained in paragraph A1.05.A.6.b and other express or general limitations in this Agreement and elsewhere

- b. By recommending any payment, ENGINEER shall not thereby be deemed to have represented that observations made by ENGINEER to check the quality or quantity of Contractor's work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in this Agreement and the Contract Documents. Neither ENGINEER's review of Contractor's work for the purposes of recommending payments nor ENGINEER's recommendation of any payment including final payment will impose on ENGINEER responsibility to supervise, direct, or control Contractor's work in progress or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any portion of the work in progress, materials, or equipment has passed to OWNER free and clear of any liens, claims, security interests, or encumbrances, or that there may not be other matters at issue between OWNER and Contractor that might affect the amount that should be paid.
- 15. Contractor's Completion Documents.
 - a. Receive and review maintenance and operating instructions, schedules, and guarantees.
 - b. Receive bonds, certificates, or other evidence of insurance not previously submitted and required by the Contract Documents, certificates of inspection, tests and approvals, Shop Drawings, Samples and other data approved as provided under paragraph A1.05.A.10, and the annotated record documents which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment. The extent of such ENGINEER's review will be limited as provided in paragraph A1.05.A.10
 - c. ENGINEER shall transmit these documents to OWNER.
- 16. *Substantial Completion.* Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with OWNER and Contractor, conduct an inspection to determine if the Work is Substantially Complete. If after considering any objections of OWNER, ENGINEER considers the Work Substantially Complete, ENGINEER shall deliver a certificate of Substantial Completion to OWNER and Contractor.
- 17. Additional Tasks. Perform or provide the following additional Construction Phase tasks or deliverables:
- 18. *Final Notice of Acceptability of the Work*. Conduct a final inspection to determine if the completed Work of Contractor is acceptable so that ENGINEER may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, ENGINEER shall also provide a notice in the form attached hereto as Exhibit E (the "Notice of Acceptability of Work") that the Work is acceptable (subject to the provisions of paragraph A1.05.A.14.b) to the best of ENGINEER's knowledge, information, and belief and based on the extent of the services provided by ENGINEER under this Agreement.

B. *Duration of Construction Phase*. The Construction Phase will commence with the execution of the first Construction Agreement for the Project or any part thereof and will terminate upon written recommendation by ENGINEER for final payment to Contractors. If the Project involves more than one prime contract as indicated in paragraph A1.03.C, Construction Phase services may be rendered at different times in respect to the separate contracts.

C. *Limitation of Responsibilities*. ENGINEER shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing any of the Work. ENGINEER shall not be responsible for failure of any Contractor to perform or furnish the Work in accordance with the Contract Documents.

A1.06 Post-Construction Phase

- A. Upon written authorization from OWNER, ENGINEER, during the Post-Construction Phase, shall:
 - 1. Provide assistance in connection with the testing and adjusting of Project equipment or systems.
 - 2. Assist OWNER in training OWNER's staff to operate and maintain Project, equipment, and systems.
 - 3. Assist OWNER in developing procedures for control of the operation and maintenance of, and record keeping for Project equipment and systems.
 - 4. Together with OWNER, visit the Project to observe any apparent defects in the Work, assist OWNER in consultations and discussions with Contractor concerning correction of any such defects, and make recommendations as to replacement or correction of Defective Work, if present.
 - 5. Perform or provide the following additional Post-Construction Phase tasks or deliverables:
 - 6. In company with OWNER or OWNER's representative, provide an inspection of the Project within one month before the end of the Correction Period to ascertain whether any portion of the Work is subject to correction.
- B. The Post-Construction Phase services may commence during the Construction Phase and, if not otherwise modified in this Exhibit A, will terminate at the end of the Correction Period.

PART 2 -- ADDITIONAL SERVICES

A2.01 Additional Services Requiring OWNER's Authorization in Advance

A. If authorized in writing by OWNER, ENGINEER shall furnish or obtain from others Additional Services of the types listed below. These services will be paid for by OWNER as indicated in Article 4 of the Agreement.

- 1. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.
- 2. Services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by OWNER.
- 3. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by ENGINEER or its design requirements including, but not limited to, changes in size, complexity, OWNER's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date of this Agreement or are due to any other causes beyond ENGINEER's control.
- 4. Services resulting from OWNER's request to evaluate additional Study and Report Phase alternative solutions beyond those identified in paragraph A1.01.A.4.
- 5. Services required as a result of OWNER's providing incomplete or incorrect Project information with

respect to Exhibit B.

- 6. Providing renderings or models for OWNER's use.
- 7. Undertaking investigations and studies including, but not limited to, detailed consideration of operations, maintenance, and overhead expenses; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules, and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing, and assisting OWNER in obtaining process licensing; detailed quantity surveys of materials, equipment, and labor; and audits or inventories required in connection with construction performed by OWNER.
- 8. Furnishing services of ENGINEER's Consultants for other than Basic Services.
- 9. Services attributable to more prime construction contracts than specified in paragraph A1.03.C.
- 10. Services during out-of-town travel required of ENGINEER other than for visits to the Site or OWNER's office.
- 11. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructability review requested by OWNER; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other Bidding Documents as a result of such review processes.
- 12. Preparing additional Bidding Documents or Contract Documents for alternate bids or prices requested by OWNER for the Work or a portion thereof.
- 13. Determining the acceptability of substitute materials and equipment proposed during the Bidding or Negotiating Phase when substitution prior to the award of contracts is allowed by the Bidding Documents. Assistance in connection with Bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services, except when such assistance is required by Exhibit F.
- 14. Providing construction surveys and staking to enable Contractor to perform its work other than as required under paragraph A1.05.A.5, and any type of property surveys or related engineering services needed for the transfer of interests in real property; and providing other special field surveys.
- 15. Providing Construction Phase services beyond the Contract Times set forth in Exhibit C.
- 16. Providing assistance in resolving any Hazardous Environmental Condition in compliance with current Laws and Regulations.
- 17. Preparing and furnishing to OWNER Record Drawings showing appropriate record information based on Project annotated record documents received from Contractor.
- 18. Preparation of operation and maintenance manuals.
- 19. Preparing to serve or serving as a consultant or witness for OWNER in any litigation, arbitration or other dispute resolution process related to the Project.
- 20. Providing more extensive services required to enable ENGINEER to issue notices or certifications requested by OWNER under paragraph 6.01.G of the Agreement.
- 21. Other services performed or furnished by ENGINEER not otherwise provided for in this Agreement.

A2.02 Required Additional Services

A. ENGINEER shall perform or furnish, without requesting or receiving specific advance authorization from OWNER, the Additional Services of the types listed below. ENGINEER shall advise OWNER in writing promptly after starting any such Additional Services.

- 1. Services in connection with Work Change Directives and Change Orders to reflect changes requested by OWNER so as to make the compensation commensurate with the extent of the Additional Services rendered.
- 2. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or-equal" items; and services after the award of the Construction Agreement in evaluating and determining the acceptability of a substitution which is found to be inappropriate for the Project or an excessive number of substitutions.
- 3. Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.
- 4. Additional or extended services during construction made necessary by (1) emergencies or acts of God endangering the Work, (2) an occurrence of a Hazardous Environmental Condition, (3) Work damaged by fire or other cause during construction, (4) a significant amount of defective, neglected, or delayed work by Contractor, (5) acceleration of the progress schedule involving services beyond normal working hours, or (6) default by Contractor.
- 5. Services (other than Basic Services during the Post-Construction Phase) in connection with any partial utilization of any part of the Work by OWNER prior to Substantial Completion.
- 6. Evaluating an unreasonable claim or an excessive number of claims submitted by Contractor or others in connection with the Work.

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 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER** for Professional Services dated______,

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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 shall be based upon monthly percentage completion of the amounts of the following services below:

Willow Springs Road Project:

a.	Phase 1-Preliminary Design	<u>\$188,998.06</u>
b.	PS&E Design Phase	<u>\$448,218.94</u>
c.	Construction Phase	<u>\$59,280.00</u>
d.	Project Management	\$ <u>37,025.16</u>
e.	Expenses	<u>\$58,246.52</u>
f.	Additional Services	\$46,265.00
Total 1 st Project Amt.		\$838,033.68

Watercrest Road Project:

a.	Phase 1-Preliminary Design	\$65,730.00
b.	PS&E Design Phase	<u>\$548,352.50</u>
c.	Construction Phase	<u>\$54,720.00</u>
d.	Project Management	\$ <u>32,385.16</u>
e.	Expenses	\$ <u>83,933.30</u>
f.	Additional Services	\$68,606.32
Total 2 nd Project Amt.		\$1,064,943.18

Total Contract Amt. \$1,902,976.86

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. Page 1 of 1

This is **EXHIBIT D**, consisting of 4 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 2 pages, referred to in and part of the **Agreement between OWNER and ENGINEER** for Professional Services dated

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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:	Statute	ory
	b.	 Employer's Liability 1) Each Accident: 2) Disease, Policy Limit: 3) Disease, Each Employee: 	\$ \$ \$	500,000 500,000 500,000
	c.	 General Liability 1) Each Occurrence (Bodily Injury and Property Damage): 2) General Aggregate: 	\$ \$	1,000,000 2,000,000
	d.	Excess or Umbrella Liability1) Each Occurrence:2) General Aggregate:	\$ \$	4,000,000 4,000,000
	e.	Automobile Liability 1) Bodily Injury: a) Each Accident	\$	
		 2) Property Damage: a) Each Accident 	\$	
		[<i>or</i>]		
		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	

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No Further Agreements



Contract Verification

Texas law provides that a governmental entity may not enter into certain contracts for goods and services with a company unless the company provides written verification regarding aspects of the company's business dealings.

- o Texas Government Code, Chapter 2271 the company must verify that it does not boycott Israel and will not boycott Israel during the term of the contract. Boycott Israel is defined in Government Code Chapter 808.
- Texas Government Code, Chapter 2274 the company must verify that it does not boycott energy companies and will not boycott energy companies during the term of the contract. Boycott energy company is defined in Government Code Chapter 809.
- Texas Government Code, Chapter 2274 the company must verify that it does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of the contract against a firearm entity or firearm trade association. Verification is not required from a sole source provider. Discriminate, firearm entity and firearm trade association are defined in Government Code Chapter 2274.

Affected by the above statutes are contracts 1) with a company with ten (10) or more full-time employees, and 2) valued at \$100,000 or more to be paid wholly or partly from public funds. A contract with a sole proprietorship is not included.

By signing below, I verify that the company listed below does not boycott Israel, does not boycott energy companies and does not discriminate against firearms entities or firearm trade associations and will not do so during the term of the contract entered into with the City of Killeen. I further certify that I am authorized by the company listed below to make this verification.

Signature

THOMAS M. OWENS, P.E. Printed Name

29 OCT ZI

K FRESE & ASSOCIATES LAC. Company Name EXECUTIVE VICE PRESIDENT

Date