

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.

Copyright ©1996 National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314

American Consulting Engineers Council
1015 15th Street N.W., Washington, DC 20005

American Society of Civil Engineers
345 East 47th Street, New York, NY 10017

TABLE OF CONTENTS

Page

| | |
|--|----|
| ARTICLE 1 - SERVICES OF ENGINEER..... | 2 |
| 1.01 Scope | 2 |
| ARTICLE 2 - OWNER'S RESPONSIBILITIES | 2 |
| 2.01 General | 2 |
| ARTICLE 3 - TIMES FOR RENDERING SERVICES..... | 2 |
| 3.01 General | 2 |
| 3.02 Suspension..... | 2 |
| ARTICLE 4 - PAYMENTS TO ENGINEER..... | 2 |
| 4.01 Methods of Payment for Services and Reimbursable Expenses of ENGINEER | 2 |
| 4.02 Other Provisions Concerning Payments | 2 |
| ARTICLE 5 - OPINIONS OF COST | 3 |
| 5.01 Opinions of Probable Construction Cost | 3 |
| 5.02 Designing to Construction Cost Limit | 3 |
| 5.03 Opinions of Total Project Costs | 3 |
| ARTICLE 6 - GENERAL CONSIDERATIONS | 3 |
| 6.01 Standards of Performance | 3 |
| 6.02 Authorized Project Representatives | 4 |
| 6.03 Design without Construction Phase Services | 4 |
| 6.04 Use of Documents | 5 |
| 6.05 Insurance..... | 5 |
| 6.06 Termination | 6 |
| 6.07 Controlling Law | 6 |
| 6.08 Successors, Assigns, and Beneficiaries | 6 |
| 6.09 Hazardous Environmental Condition | 6 |
| 6.10 Allocation of Risks | 7 |
| 6.11 Notices | 7 |
| 6.12 Survival..... | 7 |
| 6.13 Severability..... | 7 |
| 6.14 Waiver | 8 |
| 6.15 Headings | 8 |
| ARTICLE 7 - DEFINITIONS | 8 |
| 7.01 Defined Terms..... | 8 |
| ARTICLE 8 - EXHIBITS AND SPECIAL PROVISIONS..... | 11 |
| 8.01 Exhibits Included..... | 11 |
| 8.02 Total Agreement..... | 11 |

STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND ENGINEER
FOR
PROFESSIONAL SERVICES

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

OWNER and ENGINEER in consideration of their mutual covenants as set forth herein agree as follows: To provide
engineering services for Mohawk Dr as described in Exhibit A of this contract in the amount of \$1,417,641.58

ARTICLE 1 - SERVICES OF ENGINEER

1.01 Scope

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

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

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

ARTICLE 2 - OWNER'S RESPONSIBILITIES

2.01 General

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

ARTICLE 3 - TIMES FOR RENDERING SERVICES

3.01 General

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

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

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

3.02 Suspension

A. If OWNER fails to give prompt written authorization to proceed with any phase of services after

completion of the immediately preceding phase, or if ENGINEER's services are delayed through no fault of ENGINEER, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement.

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

ARTICLE 4 - PAYMENTS TO ENGINEER

4.01 Methods of Payment for Services and Reimbursable Expenses of ENGINEER

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

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

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

4.02 Other Provisions Concerning Payments

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

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

charges. Payments will be credited first to interest and then to principal.

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

D. *Payments Upon Termination.*

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

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

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

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

ARTICLE 5 - OPINIONS OF COST

5.01 Opinions of Probable Construction Cost

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

5.02 Designing to Construction Cost Limit

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

5.03 Opinions of Total Project Costs

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

ARTICLE 6 - GENERAL CONSIDERATIONS

6.01 Standards of Performance

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

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

C. ENGINEER shall perform or furnish professional engineering and related services in all phases of the Project to which this Agreement applies. ENGINEER shall serve as OWNER's prime professional for the Project. ENGINEER may employ such ENGINEER's Consultants as ENGINEER deems necessary to assist in the

performance or furnishing of the services. ENGINEER shall not be required to employ any ENGINEER's Consultant unacceptable to ENGINEER.

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

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

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

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

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

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

applicable to Contractor's furnishing and performing the Work.

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

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

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

6.02 Authorized Project Representatives

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

6.03 Design without Construction Phase Services

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

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

6.04 Use of Documents

A. All Documents are instruments of service in respect to this Project, and ENGINEER shall retain an ownership and property interest therein (including the right of reuse at the discretion of the ENGINEER) whether or not the Project is completed.

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

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

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

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

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

ENGINEER's Consultants from all claims, damages, losses, and expenses, including attorneys' fees arising out of or resulting therefrom.

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

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

6.05 Insurance

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

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

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

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

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

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

6.06 Termination

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

1. *For cause,*

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

b. By ENGINEER:

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

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

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

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

2. *For convenience,*

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

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

uncompleted tasks, and to assemble Project materials in orderly files.

6.07 Controlling Law

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

6.08 Successors, Assigns, and Beneficiaries

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

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

C. Unless expressly provided otherwise in this Agreement:

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

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

6.09 Hazardous Environmental Condition

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

B. OWNER has disclosed to the best of its knowledge to ENGINEER the existence of all Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive

Material located at or near the Site, including type, quantity and location.

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

D. It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to a Hazardous Environmental Condition. In the event ENGINEER or any other party encounters a Hazardous Environmental Condition, ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Hazardous Environmental Condition; and (ii) warrants that the Site is in full compliance with applicable Laws and Regulations.

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

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

6.10 Allocation of Risks

A. Indemnification

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

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

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

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

6.11 Notices

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

6.12 Survival

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

6.13 Severability

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

6.14 Waiver

A. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

6.15 Headings

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

ARTICLE 7 - DEFINITIONS

7.01 Defined Terms

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

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

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

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

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

5. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels

established by the United States Occupational Safety and Health Administration.

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

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

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

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

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

11. *Construction 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-of-way, or compensation for damages to properties, or OWNER's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to OWNER pursuant to Exhibit B of this Agreement. Construction Cost is one of the items comprising Total Project Costs.

13. *Contract Documents*--Documents that establish the rights and obligations of the parties engaged in construction and include the Construction Agreement between OWNER and Contractor, Addenda (which pertain to the Contract Documents), Contractor's Bid (including documentation accompanying the Bid and any post-Bid documentation submitted prior to the notice of award) when attached as an exhibit to the Construction Agreement, the notice to proceed, the bonds, appropriate certifications, the General Conditions, the

Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Construction Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Construction Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

29. *PCB's*--Polychlorinated biphenyls.

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

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

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

33. *Reimbursable Expenses*--The expenses incurred directly by ENGINEER in connection with the performing or furnishing of Basic and Additional Services for the Project for which OWNER shall pay ENGINEER as indicated in Exhibit C.

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

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

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

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

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

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

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

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

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

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

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

construction-related aspects of the Contract Documents.

ARTICLE 8 - EXHIBITS AND SPECIAL PROVISIONS

8.01 Exhibits Included

- A. Exhibit A, "ENGINEER's Services"
- B. Exhibit B, "OWNER's Responsibilities"
- C. Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses"
- D. Exhibit D, "Duties, Responsibilities and Limitations of Authority of Resident Project Representative"

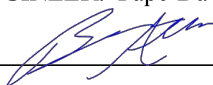
By signing this contract, Engineer hereby verifies that it does not boycott Israel and will not boycott Israel during the term of this contract. Boycotting Israel is defined in Texas Government Code section 808.001 to mean refusing to deal with, terminating business activities with, or taking any action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

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

OWNER: City of Killeen

ENGINEER: Pape-Dawson Engineers, ILLC

By: Kent Cagle

By: 

Title: City Manager

Title: Vice President

Date Signed: _____

Date Signed: 9/16/2025

Address for giving notices:

Address for giving notices:

P.O. Box 1329

10801 N MoPac Expy

Killeen, TX 76540-1329

Bldg 3, Suite 200

Austin, Tx 78759

Designated Representative (paragraph 6.02.A):

Designated Representative (paragraph 6.02.A):

Andrew Zagars, P.E.,

Title: City Engineer

Title: _____

Phone Number: 254-616-3179

Phone Number: _____

Facsimile Number: _____

Facsimile Number: _____

E-Mail Address: azagars@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 – Pape-Dawson Proposal Dated August 22, 2025 (See Next Page)

PAPE – DAWSON

August 22, 2025

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

Re: City of Killeen - Mohawk Drive

Dear Mr. Zagars:

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

Project Limits

The project limits are from Bunny Trail to Castle Gap Drive for approximately 0.65 miles.

Proposed Facility

The proposed roadway is a 3-lane roadway with design accounting for widening to 5 lanes in the future as needed. The road will include curb and gutter, turn lanes, 6' sidewalk, bike lanes, underground drainage, landscaping including street trees, and a bridge crossing the tributary to Reese Creek.

Design Criteria

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

I. MANAGING CONTRACTED/DONATED PE (FC 110) \$156,010.00

Project Management and Administration

- **Communication:**
 - Designate one Licensed Professional Engineer (Texas) to be responsible for the project management, and all communications with the City and its representatives.
- **Monthly Progress Report, Invoices, and Billings (10 months assumed):**
 - Submit monthly progress status reports to the City. Progress reports will include deliverable table, tasks completed, tasks/objectives that are planned for the upcoming periods, lists or descriptions of items or decisions needed from the City and its representatives. Subconsultant progress will be incorporated into the monthly progress report. A copy of the monthly progress report will be submitted to the City.

Mr. Andrew Zagars, P.E.
City of Killeen – Mohawk Drive
August 22, 2025
Page 2 of 20

- Prepare correspondence, invoices, and progress reports on a monthly basis in accordance with current City requirements.
- **Quality Assurance and Quality Control (QA/QC) Plan:**
 - For each deliverable submittal, provide evidence of their internal review and mark-up of that deliverable as preparation for submittal and in accordance with submitted project specific QA/QC plan.
 - Provide continuous QA/QC throughout the duration of the scheduled services included herein to appraise both technical and business performance and provide direction for project activities.
- **Project Coordination & Administration:**
 - Prepare and maintain routine project record keeping including records of meetings and minutes.
 - Correspondence and coordination will be handled through & with the concurrence of the CITY.
 - Manage project activities (including documenting emails, phone and conference calls, maintain project files for the length of the project, meeting agendas, meeting minutes, and schedule meetings), direct Engineer's team/staff, coordinate and review sub-consultant work, correspond with the City and its representatives, and assist the City and its representatives in preparing responses to project-related inquiries.
- **Progress/Coordination Meetings (3 external meetings assumed):**
 - Attend a kickoff meeting and coordination/progress meeting with the City and its representatives and stakeholders, as necessary to communicate development of the project and design issues.
 - Prepare agenda and sign-in sheets for external coordination/progress meetings.
 - Prepare meeting minutes for review via email within three (3) business days of the external coordination/progress meeting.
 - Conduct internal coordination meetings as required to advance the development of the project.
- **Project Schedule:**
 - Maintain a project schedule indicating tasks, subtasks, critical dates, milestones, and deliverables. Submit to City as requested.

Deliverables:

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

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 3 of 20

Bidding Phase Services

- **Bidding Phase Services:**

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

Deliverables:

- Letter of Recommendation for Award, with Bid Tabulation.

II. ENVIRONMENTAL COMPLIANCE (FC 120) \$29,540

Environmental Coordination

- **Environmental Project Management and Coordination**

This item represents an allowance for time not specifically required for deliverable preparation:

- Coordinate project team to meet schedule and deliverables.
- Environmental staff attendance at four (4) coordination meetings.

- **Endangered Species Act Compliance:**

- A US Fish and Wildlife Service (USFWS) permitted biologist familiar with the habitat requirements for species listed by the USFWS as having the potential to occur on the subject property will conduct a reconnaissance site visit. Based on the site visit and aerial photography, the likelihood of occurrence of species on the property is to be assessed.
- A report will be prepared describing endangered species assessment methodology and characteristics of the property that support the conclusions of habitat potential. The report will include a map delineating the area that may be suitable for the listed species.
- FEMA requires documentation of compliance with the minimum Endangered Species Act requirements before it will process a CLOMR.
 - An Endangered Species Act Compliance Letter / "Take" Assessment to be prepared describing endangered species assessment methodology and characteristics of the property that support the conclusions of habitat potential.
 - In collaboration with the civil engineering team, a US Fish and Wildlife (USFWS) permitted biologist familiar with the habitat requirements for the local endangered species to prepare the FEMA-required letter.

- **Section 404 Clean Water Act Compliance:**

- Conduct a jurisdictional waters delineation on the subject property, following guidelines from the US Army Corps of Engineers (USACE), including the 1987 Wetland Delineation Manual.
- Prepare a Jurisdictional Waters Delineation Report including a map of areas that would potentially be under the jurisdiction of the USACE according to the most recent guidance, data forms, soils, vegetation, and hydrology analysis. A summary of

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 4 of 20

jurisdictional waters as defined in the Federal Wetland Regulations 33 Code of Federal Regulations (CFR) Part 328 and the Clean Water Act as was done prior to the 2015 rule and incorporating the Sackett Case Supreme Court decision is also to be provided.

- If it is suspected that a a Pre-Construction Notification (PCN)_is required to the USACE; a supplemental work authorization would be required. The Jurisdictional Waters Delineation Report and Nationwide Permit with PCN are subject to the U.S. Army Corps of Engineers Forth Worth District review and issuance of a permit.
- **Cultural Resources Regulatory Compliance:**
 - For projects located on land owned by a political subdivision or agency of the state, compliance with the Antiquities Code of Texas (Texas Natural Resource Code, Title 9, Chapter 191) and accompanying Rules of Practice and Procedure (Texas Administrative Code, Title 13, Chapter 26) as implemented by the Texas Historical Commission is required.
 - For projects anticipating federal funding, permitting, and/or licensing, compliance with Section 106 of the National Historic Preservation Act (16 United States Code 470) and its implementing regulations (36 Code of Federal Regulations [CFR] 800) as overseen by the THC and lead federal agency is required. This includes coordination with the State Historic Preservation Officer (SHPO) and any affiliated or consulting Tribal Nations as part of the federal agency's responsibilities.
 - In addition, projects with the potential to impact human remains and/or graves, must comply with the Texas Health and Safety Code (Chapters 711 to 715) and Texas Code of Criminal Procedure ([TCCP] Chapter 49 Subchapter A Article 49).

As the proposed project area is to be utilized as public ROW and may require permitting through the USACE, the following scope of work is intended to provide compliance with the ACT and Section 106 of the NHPA.

- Agency Consultation Letter
 - As part of the project planning process prior to project construction, Pape-Dawson cultural resources staff to prepare a consultation letter for the lead regulatory agency summarizing the existing conditions OR verifying the project meets the requirements of Antiquities Code of Texas (Subchapter A, Sec. 191.0525[d]) and to provide concurrence with recommendations that no cultural resources survey is needed.

Notes:

- i. Additional services that may be required for potential USACE PCN (including Archaeological Permit Acquisition, Cultural Resource Survey, and Indirect Effects Analysis) would be conducted under a supplemental work authorization.*

Deliverables:

- Endangered Species Habitat Assessment
- FEMA Endangered Species Act Compliance Letter / “Take” Assessment

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 5 of 20

- Jurisdictional Waters Delineation Report
 - Agency Consultation Letter
- III. SUBSURFACE UTILITY ENGINEERING (FC 130) \$5,546.58**
- **See attached proposal in Exhibit A**
- IV. GEOTECHNICAL SERVICES (FC 140) \$11,500.00**
- **See attached proposal in Exhibit B**
- V. DESIGN SURVEY (FC 150) \$77,925.00**
- **Design Surveying**
 - Pape-Dawson will establish 4 primary control points, 12 aerial targets and 25 ground truthing points, with coordinates labeled, in the MicroStation 2D file, based on the North American Datum of 1983, (NA2011), epoch 2010, from the Texas State Plane Coordinate System established for the Central Zone and the North American Vertical Datum of 1988 (GEOID 12B).
 - Locate existing visible and above ground utilities along designated route.
 - Acquire invert elevations of Storm Sewer, Wastewater Manholes and inlet boxes where accessible.
 - Detail culvert crossing at Bunny Trail and South Clear Creek Road.
 - Supplement LIDAR topographic information where needed.
 - Locate visible improvements and utilities including driveways, water wells, storage tanks, drainage structures (size, material, flowline elevations), edge of pavement/shoulder, physical centerline, guardrail, fences, signs, mailboxes, locate property boundaries sufficient to re-establish apparent ROW.
 - **Right-of-Way Parcels (2 parcels assumed)**
 - From deed research and data from the field survey, Pape-Dawson will analyze the results of the survey and perform computations related to the analysis of existing Right-of-Way and property boundary sufficient to prepare Parcels for ROW acquisition purposes. Parcel plats will be submitted in two rounds (preliminary and final). Preliminary ROW documents shall be submitted based upon found monumentation within the existing ROW and proposed ROW. Final ROW documents shall be submitted at a later date once review comments have been received from the City.
 - 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.
 - Pape-Dawson will prepare a field note (metes and bounds) description for each of the 2 parcels. A closure computation will be prepared for each of the descriptions.
 - To assure the accuracy of the documents, Pape-Dawson will review the descriptions while all details are compared to ROW plans and parcel plats (bearings, distances, stations and offsets, deed references, etc.). Final mark-ups

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 6 of 20

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, Pape-Dawson will make necessary corrections. The final ROW documents will then be delivered to the City.
- **LiDAR Surveying:**
 Complete a control, improvement, topographic, and utility survey within approximately 6.8 miles of Mohawk Drive from the Bunny Trail Road to Castle Gap Drive in Killeen, TX. Also, complete a control and topographic survey within a corridor crossing Mohawk Drive approximately 6.8 miles long starting approximately 0.3 miles south of S Clear Creek Rd and ending approximately 0.2 miles north of Alamositos Drive.
 - Targets for aerial LiDAR will be set at approximately 1,700' intervals within the project limits. They will consist of chevron targets with a PK nail set on the inside corner of the chevron.
 - Ground truthing shots will be collected throughout the project area over a diversity of land cover types.
 - The acquired LiDAR data will be calibrated to control targets set on the project.
 - The calibrated LiDAR will be checked against the ground truthing shots to ensure the calibration is holding to control. At this point the data will be approved for production.
 - A ground truthing and calibration report will be produced as evidence of the calibration accuracy showing the expected accuracy of the LiDAR data within the project limits.
 - Topographic data will be extracted from the LiDAR point cloud and a MicroStation 3D DTM drawing and associated LandXML tin file will be generated.
 - The final DTM will be checked against the ground truthing points to ensure the extracted data is accurately representing the calibrated LiDAR data.
 - Conventional survey will be supplemented where lidar data cannot be completed.
 - Existing improvements will only be collected from the project data along Mohawk Drive.

Deliverables:

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

VI. ROADWAY DESIGN – ROADWAY (FC 160)

\$301,400.00

Roadway Sheet Development

- **The Engineer shall develop the following roadway sheets:**
 - Title Sheet
 - Index Sheet
 - General Notes
 - Quantity Summaries

Mr. Andrew Zagars, P.E.
 City of Killen – Mohawk Drive
 August 22, 2025
 Page 7 of 20

- Typical Sections
- Plan and Profile Sheets
- Intersection Grading Details
- Misc. Roadway Details
- Construction Standards

Roadway Model Development

The Engineer shall use the current versions of Bentley Openroads Designer at the time the task order is executed. However, the Owner may approve the use of other versions.

The Engineer shall provide roadway plan and profile drawings using CADD standards as required by TxDOT. The drawings must consist of a planimetric file of existing features and files of the proposed improvements. The roadway base map must contain line work that depicts existing surface features obtained from the schematic drawing. Existing major subsurface and surface utilities must be shown if requested by the Owner. Existing and proposed right-of-way lines must be shown. Plan and Profile must be shown on separate or same sheets (this depends upon width of pavement) for main lanes, frontage roads, and direct connectors.

- **The plan view must contain the following design elements:**
 - Calculated roadway centerlines for mainlanes, and cross streets. Horizontal control points must be shown. The alignments must be calculated using OpenRoads horizontal geometry tools.
 - Pavement edges for all improvements
 - Lane and pavement width dimensions.
 - The geometrics of ramps, auxiliary and managed lanes.
 - Proposed structure locations, lengths, and widths.
 - Direction of traffic flow on all roadways. Lane lines and arrows indicating the number of lanes must also be shown.
 - Drawing scale shall be 1" = 100'
 - Control of access line, ROW lines, and easements.
 - Begin and end superelevation transitions and cross slope changes.
 - Limits of riprap, block sod, and seeding.
 - Existing utilities and structures.
 - Benchmark information.
 - Metal beam guard fence locations
 - Radii call outs, curb location, Concrete Traffic Barrier (CTB), crash safety items and American with Disabilities Act Accessibility Guidelines (ADAAG) compliance items.
- **The profile view must contain the following design elements:**
 - Calculated profile grade for proposed mainlanes (cite direction), cross streets, and frontage roads, if applicable. Vertical curve data, including "K" values must be shown. The profiles must be calculated using OpenRoads vertical geometry tools.
 - Existing and proposed profiles along the proposed centerline of the mainlanes, the outside shoulder line of ramps, and the outside gutter line of the designated (north, south, east, or west) bound frontage roads.
 - Drawing vertical scale to be 1" = 10'.

Mr. Andrew Zagars, P.E.
City of Killen – Mohawk Drive
August 22, 2025
Page 8 of 20

- The Engineer shall prepare typical sections for all proposed and existing roadways and structures. Typical sections must include width of travel lanes, shoulders, outer separations, border widths, curb offsets, managed lanes, and ROW. The typical section must also include Proposed Profile Grade Line (PGL), centerline, pavement design, longitudinal joints, side slopes, sodding or seeding limits, concrete traffic barriers and sidewalks, if required, station limits, common proposed and existing structures including retaining walls, existing pavement removal, riprap, limits of embankment and excavation, etc.
- The Engineer shall provide an intersection layout detailing the pavement design and drainage design at the intersection of each cross street. The layout must include the horizontal and vertical alignments, curb returns, geometrics, transition length, stationing, pavement, drainage details, and Americans with Disabilities Act Accessibility Guidelines (ADAAG) compliance items. The Engineer shall design for full pavement width to the ROW and provide a transition to the existing roadway.
- The Engineer shall develop an earthwork analysis to determine cut and fill quantities and provide final design cross sections at 100 feet intervals. Cross sections must be created from the 3D corridor model and must be delivered in the standard TxDOT format on 11"x17" sheets or roll plots and electronic files. The Engineer shall provide all templates and corridors used to generate the design cross sections. Cross sections and quantities must include existing pavement removals. Annotation shall include at a minimum existing and proposed ROW, side slopes (front & back), profiles, etc.

Deliverables:

- The Engineer shall submit electronic files for each submittal at the 60%, 90%, and final. The Engineer shall also submit the current OpenRoads generated 3D corridor model for each submittal.

Plans

- The Engineer shall provide the following information at the following submittals:
 - 60% Plans Submittal
 - Electronic submittal
 - Estimate of construction cost.
 - Engineer's internal QA and QC markup set.
 - Design Exceptions with existing and proposed typical sections, location map and design exception exhibits.
 - A Preliminary 3D corridor model, in the most current format, created using Bentley's OpenRoads tools, and with detail to verify the design of the 30% plan sheets.
 - Electronic set-Bridge Class Culvert Plan and Profile sheets and Hydrology & Hydraulics sheets, include project title sheet and project layout sheet.
 - A preliminary 3D corridor model, in the most current format, created using Bentley's OpenRoads tools, and with detail to verify the design of the Bridge and Retaining Wall layouts.
 - Review Submittal (90%)

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 9 of 20

- Electronic set for review
- Estimate of construction cost.
- Marked up general notes
- Construction schedule.
- List of governing Specifications and Special Provisions in addition to those required.
- Triple Zero Special Provisions.
- Temporary road closure letters.
- Engineer’s internal QA and QC marked-up set.
- Other supporting documents.
- A detailed 3D corridor model, in the most current format, created using Bentley’s OpenRoads tools, and with detail to verify the design of the 60% plan sheets. The level of detail of the surface and subsurface features will be at the direction of the Owner.
- Final submittal (100%)
 - 1 paper set 11” x 17”
 - Revised supporting documents from 90% review comments.
 - A final 3D corridor model, in the most current format created using Bentley ’s OpenRoads tools. The level of detail of the surface and subsurface features will be at the direction of the Owner.
 - A final 3D earthwork model in either .XML or. ICM format (as directed by the Owner) created using Bentley’s OpenRoads tools. The level of detail of the surface and subsurface features will be at the direction of the Owner.
- Electronic Copies
 - The Engineer shall furnish the Owner with a flash drive or USB hard drive of the final plans in the format of current CADD system used by the Owner, and shall also provide as a .pdf format and upload to the file management system.
 - The Engineer shall also provide a separate flash drive or USB hard drive containing cross section information (in dgn, XLR, & ASCII formats) for the contractor to use.
 - The Engineer shall provide an electronic copy of MS Project, Primavera, or the latest scheduling program used by the Owner for construction time estimate.
 - With the approval of the Owner, and in lieu of the above, the Engineer may maintain the project files in the Owner’s file management system.

VII. ROADWAY DESIGN – Storm Drain (FC 161)

\$258,920.00

Data Collection

- The Engineer shall provide the following data collection services:
 - Conduct field inspections to observe current conditions and the outfall channels, the cross-drainage structures, drainage easements, the tributary channel, and land development projects that contribute flow to the tributary. Document field inspections with digital photos.
 - Collect available applicable data including GIS data and maps, site survey data, construction plans, previous reports and studies, and readily available rainfall

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 10 of 20

history for the area. Sources of data collected must include, but are not limited to, the City, State, County, and Federal Emergency Management Agency (FEMA).

- Review survey data and coordinate any additional surveying needs with Owner.
- Present existing drainage structures in a 3D corridor MicroStation model.
- Submit a letter report to the Owner Project Manager detailing completion of data collection.

Storm Drain Sheet Development

- The Engineer shall provide the following services:
 - Prepare the PS&E package in accordance with the applicable requirements of the Owner's specifications, standards, and manuals, including the TxDOT PS&E Preparation Manual. Include the following sheets and documents, as appropriate:
 - Hydrologic Data Sheets
 - Hydraulic Data Sheets
 - Scour Data Sheets (if applicable)
 - Culvert Layout Sheets
 - Storm Drain Plan/Profile Sheets
 - Storm Drain Lateral Sheets at the 90% and Final Submittals
 - Detention Pond Layouts
 - Detention Pond Details
 - Roadway Plan & Profile Sheets if applicable.
 - Main Culvert Crossing Plan and Profile Sheet
 - All other relevant sheets
 - Prepare culvert cross sections and identify each cross-section's station location.
 - Identify areas requiring trench protection, excavation, shoring and de-watering.
 - Prepare drainage area maps.
 - If applicable, prepare plan and profile sheets for storm drain systems and outfall ditches.
 - Select any necessary standard details from the TxDOT or City of Killeen lists of standards for items such as inlets, manholes, junction boxes and end treatments.
 - Prepare details for non-standard inlets, manholes and junction boxes.
 - Prepare drainage details for outlet protection, outlet structures and utility accommodation structures.
 - Identify pipe strength requirements.
 - Prepare drainage facility quantity summaries.
 - Identify potential utility conflicts and, if feasible, design to mitigate or avoid those identified conflicts.
 - Consider pedestrian facilities, utility impacts, driveway grades, retaining wall and concrete traffic barrier drainage impacts.
 - Identify existing ground elevation profiles at the ROW lines on storm sewer plan and profile sheets.
 - Locate soil borings every 500 feet along the storm sewer alignment and take piezometric readings at 2000 feet intervals.

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 11 of 20

- Prepare Hydraulic Data Sheets for any bridge or cross drainage structures at the outfall channel and indicate site location (e.g., station and name of creek or bayou), if applicable.
- Develop a 3D model of the proposed drainage structures using the SUDA capabilities of the GeoPak/OpenRoads Product.
- Develop layouts for the following:
 - Subsurface drainage at retaining walls.
 - Outfall channels within existing ROW.
 - Bridge deck drainage systems, including internal drainage piping within the bents where required on structures.
 - Detention ponds associated outlet structures, and details, if applicable. If information is not available at the time of initial scoping, this work shall be considered as additional work.

Storm Drain Modelling

- The Engineer shall provide the following services:
 - Design and analyze storm drains using software as approved by the Owner.
 - Size inlets, laterals, trunk line and outfall. Develop designs that minimize the interference with the passage of traffic or incur damage to the highway and local property in accordance with local drainage ordinances, the TxDOT Hydraulic Design Manual, and any specific guidance provided by the Owner. Storm drain design software shall be selected as directed by the task order.
 - Determine hydraulic grade line starting at the outfall channel for each storm drain design. Use the design water surface elevation of the outfall as the starting basis (tailwater) for the design of the proposed storm sewer system.
 - Calculate manhole head-losses. Compute manhole head losses as per FHWA’s HEC-22.
 - Limit discharge into existing storm drains and existing outfalls to the capacity of the existing system, which will be determined by the Engineer. Evaluate alternate flow routes or detention, if necessary, to relieve system overload. Determine the amount of the total detention storage to control storm drain runoff for the design frequency based on hydrograph routing for the full range of frequencies (50%, 20% 10%, 4%, and 1%, and AEP), as well as a rough estimate of the available on-site volume. When oversized storm drains are used for detention, the Engineer shall evaluate the hydraulic grade-line throughout the whole system, within project limits, for the design frequency or frequencies. The Engineer shall coordinate with the Owner any proposed changes to the detention systems.
 - Identify areas requiring trench protection, excavation, shoring, and de-watering.

VIII. FUNCTION CODE 160(162) - ROADWAY DESIGN – \$40,160.00

SIGNING, PAVEMENT MARKINGS AND SIGNALIZATION

Mr. Andrew Zagars, P.E.
City of Killeen – Mohawk Drive
August 22, 2025
Page 12 of 20

Signing and Pavement Marking Design

- The Engineer shall prepare drawings, specifications, and details for all signs. The Engineer shall coordinate with the Owner (and other Engineers as required) for overall temporary, interim and final signing strategies and placement of signs outside contract limits. The Engineer shall:
 - Prepare sign detail sheets for large guide signs showing dimensions, lettering, shields, borders, corner radii, etc., and shall provide a summary of large and small signs to be removed, relocated, or replaced.
 - Designate the shields to be attached to guide signs.
 - Illustrate and number the proposed signs on plan sheets.
 - Select each sign foundation from State Standards.

- The Engineer shall detail both permanent and temporary pavement markings and channelization devices on plan sheets. The Engineer shall coordinate with the Owner (and other Engineers as required) for overall temporary, interim, and final pavement marking strategies. The Engineer shall select Pavement markings from the latest City and Owner standards.

- The Engineer shall provide a 3D corridor model with the proposed pavement marking stenciled onto the model.

- The Engineer shall provide the following information on sign and pavement marking layouts:
 - Roadway layout.
 - Center line with station numbering.
 - Designation of arrow used on exit direction signs
 - Culverts and other structures that present a hazard to traffic.
 - Location of utilities.
 - Existing signs to remain, to be removed, to be relocated or replaced.
 - Proposed signs (illustrated, numbered and size).
 - Proposed overhead sign bridges to remain, to be revised, removed, relocated, or replaced.
 - Proposed overhead sign bridges, indicating location by plan.
 - Proposed markings (illustrated and quantified) which include pavement markings, object markings and delineation.
 - Quantities of existing pavement markings to be removed.
 - Proposed delineators, object markers, and mailboxes.
 - The location of interchanges, mainlanes, grade separations, frontage roads and ramps.
 - The number of lanes in each section of proposed highway and the location of changes in numbers of lanes.
 - Right-of-way limits.
 - Direction of traffic flow on all roadways.

IX. ROADWAY DESIGN – MISCELLANEOUS ROADWAY (FC 163)

\$224,080.00

Traffic Control Plan

- The Engineer shall prepare Traffic Control Plans (TCP) including TCP typical sections, for the project. A detailed TCP must be developed in accordance with the latest edition of the TMUTCD. The Engineer shall implement the current Barricade and Construction (BC) standards and TCP standards as applicable. The Engineer shall interface and coordinate phases of work, including the TCP, with adjacent Engineers. The Engineer shall:
 - Provide a written narrative of the construction sequencing and work activities per phase and determine the existing and proposed traffic control devices (regulatory signs, warning signs, guide signs, route markers, construction pavement markings, barricades, flag personnel, temporary traffic signals, etc.) to be used to handle traffic during each construction sequence. The Engineer shall show proposed traffic control devices at grade intersections during each construction phase (stop signs, flag person, signals, etc.). The Engineer shall show temporary roadways, ramps, structures (including railroad shoo-fly) and detours required to maintain lane continuity throughout the construction phasing. If temporary shoring is required, prepare layouts, and show the limits on the applicable TCP.
 - Coordinate with the Owner in scheduling a Traffic Control Workshop and submittal of the TCP for approval by the Traffic Control Approval Team (TCAT). The Engineer shall assist the Owner in coordinating mitigation of impacts to adjacent schools, emergency vehicles, pedestrians, bicyclists, and neighborhoods.
 - Develop each TCP to provide continuous, safe access to each adjacent property during all phases of construction and to preserve existing access. The Engineer shall notify the Owner in the event existing access must be eliminated and must receive approval from the Owner prior to any elimination of existing access.
 - Design temporary drainage to replace existing drainage disturbed by construction activities or to drain detour pavement. The Engineer shall show horizontal and vertical location of culverts and required cross sectional area of culverts.
 - Prepare each TCP in coordination with the Owner. The TCP must include interim signing for every phase of construction. Interim signing must include regulatory, warning, construction, route, and guide signs. The Engineer shall interface and coordinate phases of work, including the TCP, with adjacent Engineers, which are responsible for the preparation of the PS&E for adjacent projects.
 - Maintain continuous access to abutting properties during all phases of the TCP. The Engineer shall develop a list of each abutting property along its alignment. The Engineer shall prepare exhibits for and attend meetings with the public, as requested by the Owner.
 - Make every effort to prevent detours and utility relocations from extending beyond the proposed Right-of-way lines. If it is necessary to obtain additional permanent or temporary easements and Right-of- Entry, the Engineer shall notify the Owner in writing of the need and justification for such action. The Engineer shall identify and coordinate with all utility companies for relocations required.
 - Describe the type of work to be performed for each phase of sequence of construction and any special instructions (e.g., storm drain, culverts, bridges, railing,

illumination, signals, retaining walls, signing, paving surface sequencing or concrete placement, ROW restrictions, utilities, etc.) that the contractor should be made aware to include limits of construction, obliteration, and shifting or detouring of traffic prior to the proceeding phase.

- Include the work limits, the location of channelizing devices, positive barrier, location and direction of traffic, work area, stations, pavement markings, and other information deemed necessary for each phase of construction.
- Identify and delineate any outstanding ROW parcels.
- Delineate areas of wetlands on traffic control plans.
- Design the TCP phasing by creating a phased 3D corridor model.
- Road closures should be avoided. If a road closure is determined to be necessary a Detour Layout and estimated closure duration shall be provided to the Owner for approval.

Illumination

- The Engineer shall refer to TxDOT's Highway Illumination Manual and other deemed necessary Owner approved manuals for design of continuous lighting and safety lighting for all conventional, high-mast, and underpass lighting. The Engineer shall include safety lighting as part of each design on each flashing beacon and traffic signal. The Engineer shall provide a preliminary layout for initial review and approval by the Owner. The Engineer shall prepare circuit wiring diagrams showing the number of luminaries on each circuit, electrical conductors, length of runs, service pole assemblies. Underpass lighting must be used on all structures within each project. The Engineer shall integrate existing illumination within the project limits into the proposed design. The Engineer shall coordinate with the Owner to determine the location of proposed high-mast, conventional, and underpass lighting.
- Routes selected by Owner will install City approved, Dark Sky-compliant lighting with aesthetically pleasing poles per City code.

Storm Water Pollution Prevention Plans (SWP3)

- The Engineer shall develop SWP3, on separate sheets from (but in conformance with) the TCP, to minimize potential impact to receiving waterways. The SWP3 must include text describing the plan, quantities, type, phase and locations of erosion control devices and any required permanent erosion control. The SW3P sheets must also include blanks to indicate placement and removal dates of all BMPs within the plan.

Specifications and General Notes

- The Engineer shall identify necessary standard specifications, special specifications, special provisions, and the appropriate reference items. The Engineer shall prepare General Notes from the TxDOT Waco District's Master List of General Notes, Special Specifications and Special Provisions for inclusion in the plans and bidding documents. In addition, the Engineer shall include applicable Owner general notes. The Engineer shall provide General Notes, Special Specifications and Special Provisions in the required format.

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 15 of 20

Constructability Review

- The Engineer shall provide Independent Quality Review of the constructability of the PS&E sets.
- The Engineer shall perform constructability reviews at major project design milestones (e.g. 60%, 90%, and final plan) to identify potential constructability issues and options that would provide substantial time savings during construction. The constructability review must be performed for all roadway and structural elements such as Sequence of Work and Traffic Control, Drainage (Temporary and Permanent), Storm Water Pollution Prevention Plan (SWP3), Environmental Permits, Issues and Commitments (EPIC) addressed, identify Utility conflicts; ensuring accuracy and appropriate use of Items, Quantities, General Notes, Standard and Special Specifications, Special Provisions, Contract Time/Schedule, Standards; and providing detailed comments in an approved format. Reviews must be captured in a Constructability Log identifying areas of concern and potential conflict. The Engineer shall provide the results of all Constructability reviews and recommendations to the Owner at major project design milestone submittals.

Deliverables:

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

X. DRAINAGE STUDY (FC 170) \$140,910.00

Bridge Hydrologic & Hydraulic (H&H) Modeling – Flood Study

- **Data Collection and Coordination:**
 - Perform one (1) site visit to observe field conditions.
 - Coordinate with City of Killeen floodplain administrator on drainage analysis solution
 - Review and collect data related to drainage issues at 2 locations (approx. 300' east of Flanigan Drive and Stagecoach at Tyler Drive)
 - Collect latest FEMA model, Flood Insurance Rate Map (FIRM), Flood Insurance Study (FIS) data, Atlas 14 precipitation data, pertinent land use and soils data, publicly available topographic data, and other best available models.
- **Hydrologic and Hydraulic Analysis:**
 - Obtain and run best available hydrologic model using the latest applicable version of HEC-HMS. Update model with Atlas 14 precipitation data and latest existing and future land use data. Rerun HMS model to analyze proposed bridge or bridge class culvert (BCC).

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 16 of 20

- Obtain and run best available hydraulic model using the latest applicable version of HEC-RAS. Update model with latest topographic data beginning just upstream of the Alamocitos Creek Drive crossing and continuing approximately 4000 LF of channel downstream of Alamocitos Creek Drive. Incorporate update hydrologic model data, and run the RAS model to establish an existing and future conditions hydraulic model.
- Use HEC-RAS to analyze and design the proposed Mohawk Drive floodplain crossing (likely a Bridge Class Culvert, or BCC) to convey the 100-year storm event. Assumes maximum 2 options.
- Perform no-rise analysis including assessment of compensatory storage requirements for the 100-year storm event.
- Perform scour analysis or energy dissipation calculations for the preferred crossing alternative.
- Prepare a H&H/drainage summary report, including exhibits, calculations, and narratives.
- Submit report and models to the City and review based on review comments.
- **Conditional Letter of Map Revision (CLOMR)**
 - **CLOMR Modeling and Documentation:**
 - Use the effective FEMA model for NRC Trib 1 and develop duplicate effective, corrective effective, and proposed conditions models using HEC-HMS and HEC-RAS.
 - Prepare hydrologic information concerning storm water runoff rates in NRC Trib 1 in this area for the 2/5/10/25/50/100/500-year storm events.
 - Use HEC-RAS to perform hydraulic calculations for the various runoff rates for existing and proposed conditions.
 - Prepare forms required by FEMA.
 - Prepare the documents consisting of calculations, forms, and drawings, and submit to City of Killeen and FEMA for review.
 - Provide official notification of proposed floodplain changes in local newspaper or through individual notification letter.
 - FEMA CLOMR submittal fees and newspaper publication fees will be billed as a direct expense to the City.
- **CLOMR Review Coordination:**
 - Monitor the CLOMR review by the City and FEMA, including response to comments.
 - Assumes two (2) comment letters for each of the City and FEMA.
- **Plans, Specifications, & Estimates (PS&E)**
 - **Bridge Class Culvert (BCC) H&H Plans**
 - Prepare hydraulic data sheet (1 sheet, Bridge/BCC only)
 -
 - Prepare BCC plan and profile sheet. Develop energy dissipator detail sheet (1 sheet)
 - Prepare channel grading sheets (1-2 sheets).

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 17 of 20

- Prepare grading/channel non-standard detail sheet (1 sheet)
- Develop ORD model for channel grading.
- Includes 60/90/100% submittal preparation and QA/QC of bridge/BCC design.

Deliverables:

- H&H/drainage summary report (Flood Study).
- Conditional Letter of Map Revision (CLOMR)
- Bridge/BCC Hydraulic Plans, Specifications, & Estimates (PS&E)
- Applicable GIS, Hydrologic and Hydraulic Models or CAD files referenced in the drainage study.

Exclusions:

- A LOMR is not included in the scope for this project. This is anticipated to be required after construction is completed, and this can be provided with an additional service request (ASR).

XI. UTILITY DESIGN (FC 180) \$119,810.00

The proposed project improvements and detailed design consist of:

- The design of approximately 3,400 linear feet of 12” waterline. Preparation of engineering drawings and specifications for the improvements to submit for public bid as part of the overall roadway design.
- Collect and review existing data and record drawings for existing waterlines on Bunny Trail, Castle Gap Drive, Angle Drive, Brushy Creek Drive, and Guadalupe Drive for connection of the proposed waterline to the existing infrastructure.
- Design under the floodway to be installed via bore.
- Proposed 12” waterline to include fire hydrants spaced approximately 1,000 feet apart.
- Design to include coordination with City Staff to identify proposed locations for connection to future development.
- Preparations of quantity estimates and engineer’s cost estimation.
- Permitting with the Texas Commission on Environmental Quality (TCEQ) and the City of Killeen.

XII. TRAFFIC STUDY (FC 190) \$26,540.00

Traffic Study

- **Traffic Operational Analysis and Report:**
 - Conduct traffic study for the proposed Mohawk Drive roadway between Bunny Trail and Castle Gap Drive. Traffic counts will be collected as documented below:
 - 24-hour tube counts will be collected at the following locations to determine the daily volumes:
 - a. Bunny Trail between Privet Dr and Rockwall Dr
 - b. Bunny Creek Drive, north of Monague County Drive

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 18 of 20

- 12-hour turning movement volumes will be gathered (7:00 AM – 7:00 PM) at the following intersections:
 - a. Bunny Trail at Breeder Ln/Alamocitos Creek Dr
 - b. Bunny Trail at Privet Drive
 - c. Bunny Trail at Rockwall Drive

Notes:

- i. The collection of the traffic data will be subcontracted and will be billed as a Direct Expense, and as such, is not included in the fee. An estimated budget amount of \$3,800.00 is anticipated for the traffic data collection listed above.*
- Traffic Operational Analysis will be performed for existing and future build conditions. Traffic volumes for existing conditions will be based on collected traffic counts and traffic volume projections will be developed for future conditions based on expected growth rate and future developments (if any).
 - The traffic study analysis, findings and recommendations and the traffic counts and field data, along with our recommendations, will be summarized in a study report. If desired, a draft report will be submitted to the client for review and comment. Upon receipt of client comments, the report will be revised as appropriate and submitted to TxDOT and the City of Killeen. One (1) meeting with the City of Killeen is included in this scope to discuss our findings and to potentially speed the review process.

Notes:

- i. Traffic data collection to be billed as a direct expense, estimated at \$3,800*
- ii. Traffic data will be gathered at the discretion of the engineer.*
- iii. Traffic design services, or detailed pre-design analysis services, if needed, will be provided at an additional cost.*
- iv. It is presumed that no revisions to the study due to comments received by the client and/or reviewing agency will require additional data collection or analysis. If such is the case, an Additional Services Request (ASR) will be prepared outlining the additional tasks and associated fee.*
- v. The scope of work assumes one (1) 2-hour meeting with the City. If additional meetings are required, then that time will be billed on a time and materials basis.*

Deliverables:

- Traffic Operational Analysis Report

Mr. Andrew Zagars, P.E.
 City of Killeen – Mohawk Drive
 August 22, 2025
 Page 19 of 20

THIS PROPOSAL ASSUMES AND/OR EXCLUDES THE FOLLOWING:

- ◆ *Any professional opinions or recommendations related to our scope of work shall be provided in written format on Pape-Dawson letterhead and not solely expressed verbally in meetings or as part of any demonstrative presentation or email discussions.*
- ◆ *Proposal assumes creek crossing requires multiple box culverts and not a bridge. An ASR for structural services will be required if H&H studies indicate that a bridge is required.*

SUMMARY OF SCOPE AND FEES

| | | | |
|-------|---|--------------|------------------------------|
| I. | Managing Contracted/Donated PE | FC 110 (110) | \$156,010.00 |
| II. | Environmental Compliance | FC 120 (120) | \$29,540.00 |
| III. | Subsurface Utility Engineering | FC 130 (130) | \$5,546.58 |
| IV. | Geotechnical Services | FC 140 (140) | \$11,500.00 |
| V. | Design Survey | FC 150 (150) | \$77,925.00 |
| VI. | Roadway Design - Roadway | FC 160 (160) | \$301,400.00 |
| VII. | Roadway Design – Storm Drain | FC 160 (161) | \$258,920.00 |
| VIII. | Roadway Design – Signing, Pavement Markings and Signalization | FC 160 (162) | \$40,160.00 |
| IX. | Roadway Design – Miscellaneous (Roadway) | FC 160 (163) | \$224,080.00 |
| X. | Drainage Study | FC 170 (170) | \$140,910.00 |
| XI. | Utility Design | FC 180 (180) | \$119,810.00 |
| XII. | Traffic Study | FC 190 (190) | \$ 26,540.00 |
| XIII. | Direct Expenses and Unit Cost Expenses | | \$25,300.00 |
| | | | Total: \$1,417,641.58 |

BASIS OF COMPENSATION

Pape-Dawson's compensation for the above services shown as hourly, allowance or Time and Materials (T&M) will be a charge on an as needed basis for personnel services plus an hourly charge for specialized equipment. Pape-Dawson's compensation for the other above services will be a lump sum fee. A budget of **\$1,417,641.58** is the estimated cost of Pape-Dawson's current understanding of the services identified above. This budget figure does include any Direct Expenses (defined below) or applicable sales tax on services. If this budget figure is exceeded, PapeDawson may request modification of this Agreement.

Mr. Andrew Zagars, P.E.
City of Killeen – Mohawk Drive
August 22, 2025
Page 20 of 20

AGREEMENT

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

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

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

Sincerely,
Pape-Dawson Consulting Engineers, ILLC



Brian Allen, P.E., CFM
Associate Vice President

CITY OF KILLEEN

Signature: _____

Name: _____

Title: _____

Date: _____



Kevin Young, P.E.
Managing Principal, Central Texas

**CITY OF KILLEEN
ACCOUNTS PAYABLE CONTACT INFO**

Name: _____

Address: _____

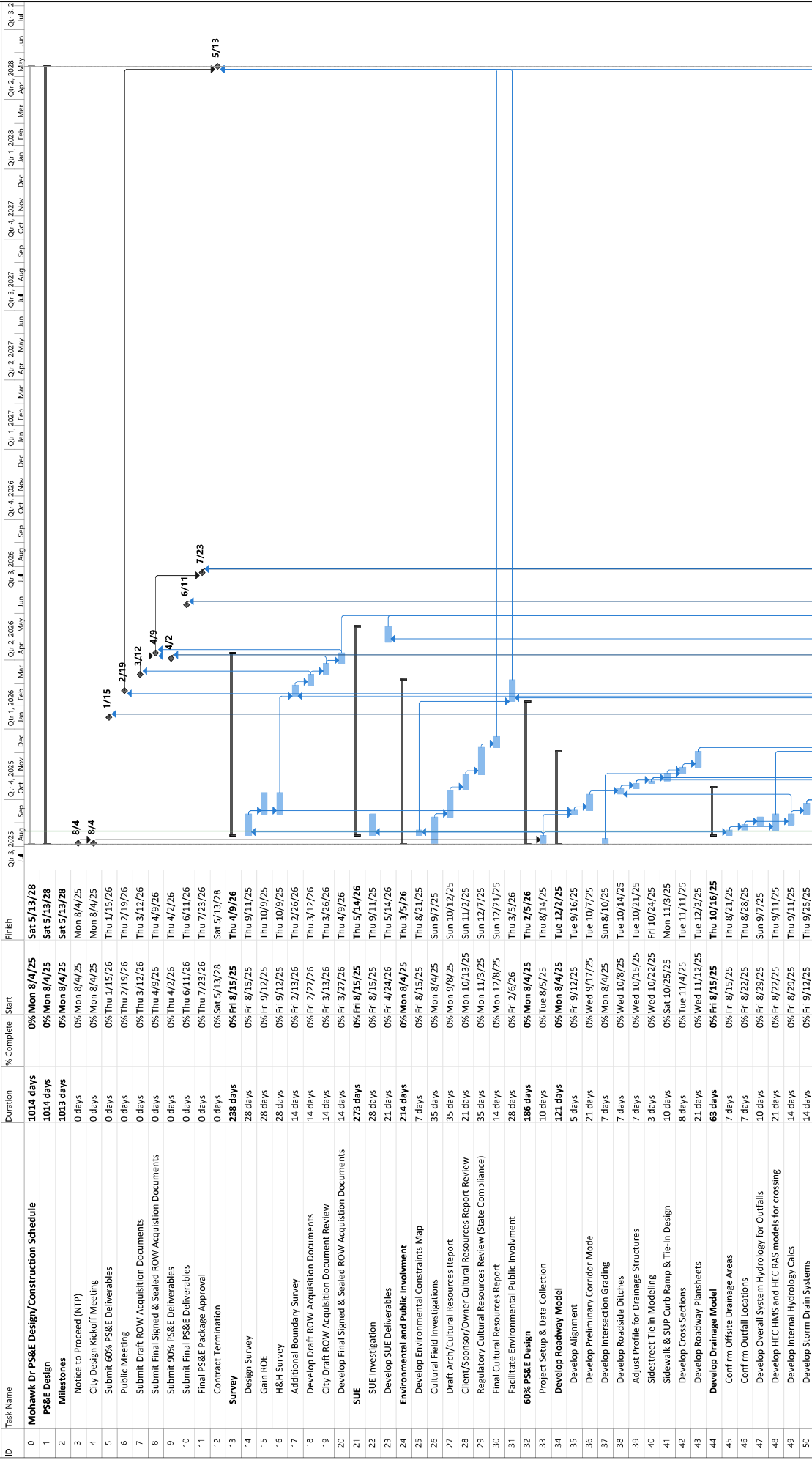
Phone: _____

Email: _____

- Attachments:
- Attachment A
 - Attachment B
 - Attachment C
 - Attachment D

Exhibit A

Attachment C - Work Schedule

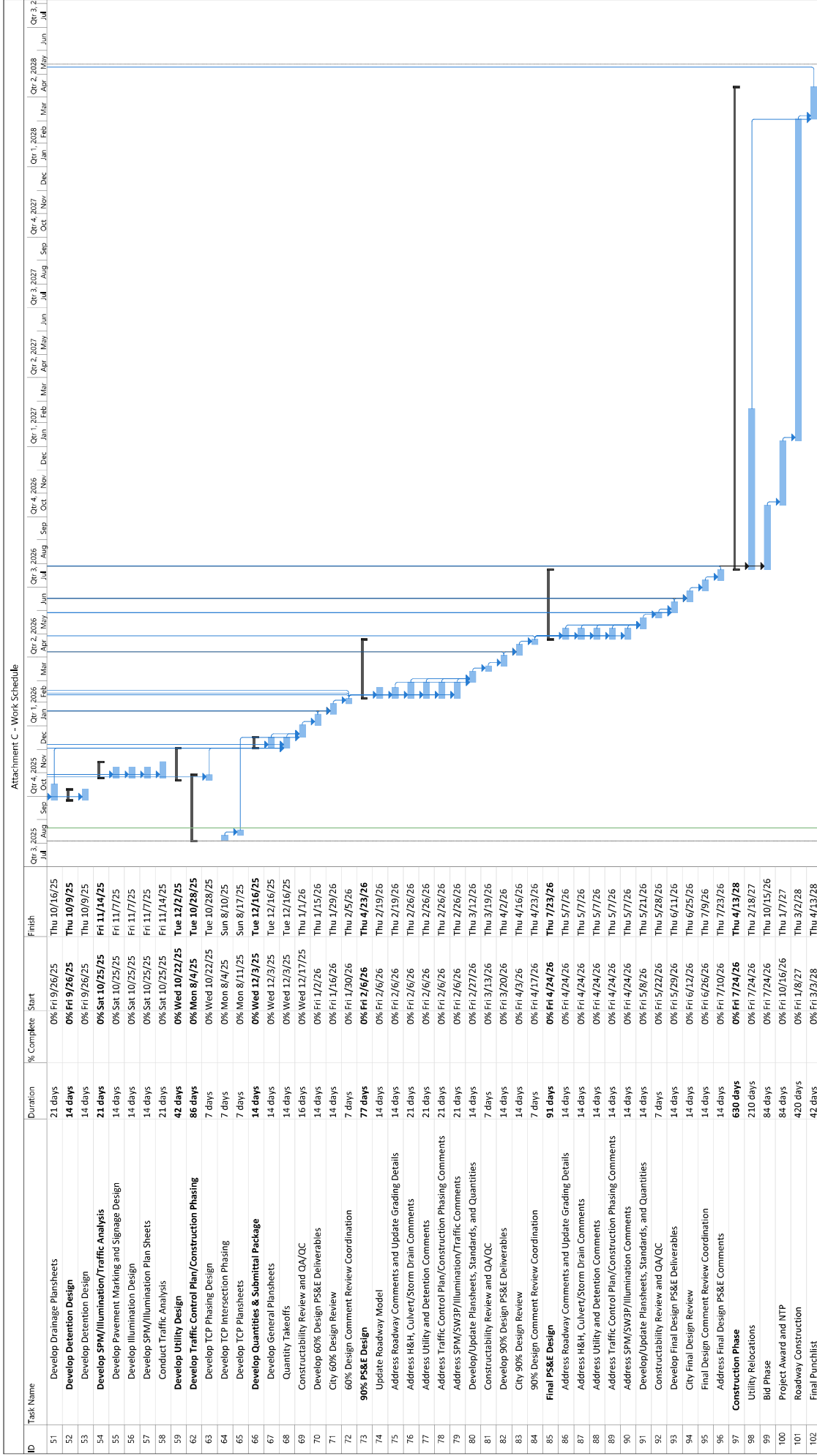


| ID | Task Name | Duration | % Complete | Start | Finish |
|----|---|-----------|------------|--------------|--------------|
| 0 | Mohawk Dr PS&E Design/Construction Schedule | 1014 days | 0% | Mon 8/4/25 | Sat 5/13/28 |
| 1 | PS&E Design | 1014 days | 0% | Mon 8/4/25 | Sat 5/13/28 |
| 2 | Milestones | 1013 days | 0% | Mon 8/4/25 | Sat 5/13/28 |
| 3 | Notice to Proceed (NTP) | 0 days | 0% | Mon 8/4/25 | Mon 8/4/25 |
| 4 | City Design Kickoff Meeting | 0 days | 0% | Mon 8/4/25 | Mon 8/4/25 |
| 5 | Submit 60% PS&E Deliverables | 0 days | 0% | Thu 1/15/26 | Thu 1/15/26 |
| 6 | Public Meeting | 0 days | 0% | Thu 2/19/26 | Thu 2/19/26 |
| 7 | Submit Draft ROW Acquisition Documents | 0 days | 0% | Thu 3/12/26 | Thu 3/12/26 |
| 8 | Submit Final Signed & Sealed ROW Acquisition Documents | 0 days | 0% | Thu 4/9/26 | Thu 4/9/26 |
| 9 | Submit 90% PS&E Deliverables | 0 days | 0% | Thu 4/2/26 | Thu 4/2/26 |
| 10 | Submit Final PS&E Deliverables | 0 days | 0% | Thu 6/11/26 | Thu 6/11/26 |
| 11 | Final PS&E Package Approval | 0 days | 0% | Thu 7/23/26 | Thu 7/23/26 |
| 12 | Contract Termination | 0 days | 0% | Sat 5/13/28 | Sat 5/13/28 |
| 13 | Survey | 238 days | 0% | Fri 8/15/25 | Thu 4/9/26 |
| 14 | Design Survey | 28 days | 0% | Fri 8/15/25 | Thu 9/11/25 |
| 15 | Gain ROE | 28 days | 0% | Fri 9/12/25 | Thu 10/9/25 |
| 16 | H&H Survey | 28 days | 0% | Fri 9/12/25 | Thu 10/9/25 |
| 17 | Additional Boundary Survey | 14 days | 0% | Fri 2/13/26 | Thu 2/26/26 |
| 18 | Develop Draft ROW Acquisition Documents | 14 days | 0% | Fri 2/27/26 | Thu 3/12/26 |
| 19 | City Draft ROW Acquisition Document Review | 14 days | 0% | Fri 3/13/26 | Thu 3/26/26 |
| 20 | Develop Final Signed & Sealed ROW Acquisition Documents | 14 days | 0% | Fri 3/27/26 | Thu 4/9/26 |
| 21 | SUE | 273 days | 0% | Fri 8/15/25 | Thu 5/14/26 |
| 22 | SUE Investigation | 27 days | 0% | Fri 8/15/25 | Thu 9/11/25 |
| 23 | Develop SUE Deliverables | 21 days | 0% | Fri 4/24/26 | Thu 5/14/26 |
| 24 | Environmental and Public Involvement | 214 days | 0% | Mon 8/4/25 | Thu 3/5/26 |
| 25 | Develop Environmental Constraints Map | 7 days | 0% | Fri 8/15/25 | Thu 8/21/25 |
| 26 | Cultural Field Investigations | 35 days | 0% | Mon 8/4/25 | Sun 9/7/25 |
| 27 | Draft Arch/Cultural Resources Report | 35 days | 0% | Mon 9/8/25 | Sun 10/12/25 |
| 28 | Client/Sponsor/Owner Cultural Resources Report Review | 21 days | 0% | Mon 10/13/25 | Sun 11/2/25 |
| 29 | Regulatory Cultural Resources Review (State Compliance) | 35 days | 0% | Mon 11/3/25 | Sun 12/7/25 |
| 30 | Final Cultural Resources Report | 14 days | 0% | Mon 12/8/25 | Sun 12/21/25 |
| 31 | Facilitate Environmental Public Involvement | 28 days | 0% | Fri 2/6/26 | Thu 3/5/26 |
| 32 | 60% PS&E Design | 186 days | 0% | Mon 8/4/25 | Thu 2/5/26 |
| 33 | Project Setup & Data Collection | 10 days | 0% | Tue 8/5/25 | Thu 8/14/25 |
| 34 | Develop Roadway Model | 121 days | 0% | Mon 8/4/25 | Tue 12/2/25 |
| 35 | Develop Alignment | 5 days | 0% | Fri 9/12/25 | Tue 9/16/25 |
| 36 | Develop Preliminary Corridor Model | 21 days | 0% | Wed 9/17/25 | Tue 10/7/25 |
| 37 | Develop Intersection Grading | 7 days | 0% | Mon 8/4/25 | Sun 8/10/25 |
| 38 | Develop Roadside Ditches | 7 days | 0% | Wed 10/8/25 | Tue 10/14/25 |
| 39 | Adjust Profile for Drainage Structures | 7 days | 0% | Wed 10/15/25 | Tue 10/21/25 |
| 40 | Sidestreet Tie in Modeling | 3 days | 0% | Wed 10/22/25 | Fri 10/24/25 |
| 41 | Sidewalk & SUP Curb Ramp & Tie-in Design | 10 days | 0% | Sat 10/25/25 | Mon 11/3/25 |
| 42 | Develop Cross Sections | 8 days | 0% | Tue 11/4/25 | Tue 11/11/25 |
| 43 | Develop Roadway Plansheets | 21 days | 0% | Wed 11/12/25 | Tue 12/2/25 |
| 44 | Develop Drainage Model | 63 days | 0% | Fri 8/15/25 | Thu 10/16/25 |
| 45 | Confirm Offsite Drainage Areas | 7 days | 0% | Fri 8/15/25 | Thu 8/21/25 |
| 46 | Confirm Outfall Locations | 7 days | 0% | Fri 8/22/25 | Thu 8/28/25 |
| 47 | Develop Overall System Hydrology for Outfalls | 10 days | 0% | Fri 8/29/25 | Sun 9/7/25 |
| 48 | Develop HEC HMS and HEC RAS models for crossing | 21 days | 0% | Fri 8/22/25 | Thu 9/11/25 |
| 49 | Develop Internal Hydrology Calcs | 14 days | 0% | Fri 8/29/25 | Thu 9/14/25 |
| 50 | Develop Storm Drain Systems | 14 days | 0% | Fri 9/12/25 | Thu 9/25/25 |

Project: Six Creeks Blvd
 PS&E Design and Construction
 Date: Thu 8/2/25

Exhibit A

Attachment C - Work Schedule



| ID | Task Name | Duration | % Complete | Start | Finish |
|-----|--|-----------------|------------|---------------------|---------------------|
| 51 | Develop Drainage Plansheets | 21 days | 0% | Fri 9/26/25 | Thu 10/16/25 |
| 52 | Develop Detention Design | 14 days | 0% | Fri 9/26/25 | Thu 10/9/25 |
| 53 | Develop Detention Design | 14 days | 0% | Fri 9/26/25 | Thu 10/9/25 |
| 54 | Develop SPM/Illumination/Traffic Analysis | 21 days | 0% | Sat 10/25/25 | Fri 11/14/25 |
| 55 | Develop Pavement Marking and Signage Design | 14 days | 0% | Sat 10/25/25 | Fri 11/7/25 |
| 56 | Develop Illumination Design | 14 days | 0% | Sat 10/25/25 | Fri 11/7/25 |
| 57 | Develop SPM/Illumination Plan Sheets | 14 days | 0% | Sat 10/25/25 | Fri 11/7/25 |
| 58 | Conduct Traffic Analysis | 21 days | 0% | Sat 10/25/25 | Fri 11/14/25 |
| 59 | Develop Utility Design | 42 days | 0% | Wed 10/22/25 | Tue 12/2/25 |
| 62 | Develop Traffic Control Plan/Construction Phasing | 86 days | 0% | Mon 8/4/25 | Tue 10/28/25 |
| 63 | Develop TCP Phasing Design | 7 days | 0% | Wed 10/22/25 | Tue 10/28/25 |
| 64 | Develop TCP Intersection Phasing | 7 days | 0% | Mon 8/4/25 | Sun 8/10/25 |
| 65 | Develop TCP Plansheets | 7 days | 0% | Mon 8/11/25 | Sun 8/17/25 |
| 66 | Develop Quantities & Submittal Package | 14 days | 0% | Wed 12/3/25 | Tue 12/16/25 |
| 67 | Develop General Plansheets | 14 days | 0% | Wed 12/3/25 | Tue 12/16/25 |
| 68 | Quantity Takeoffs | 14 days | 0% | Wed 12/3/25 | Tue 12/16/25 |
| 69 | Constructability Review and QA/QC | 16 days | 0% | Wed 12/17/25 | Thu 1/1/26 |
| 70 | Develop 60% Design PS&E Deliverables | 14 days | 0% | Fri 1/2/26 | Thu 1/15/26 |
| 71 | City 60% Design Review | 14 days | 0% | Fri 1/16/26 | Thu 1/29/26 |
| 72 | 60% Design Comment Review Coordination | 7 days | 0% | Fri 1/30/26 | Thu 2/5/26 |
| 73 | 90% PS&E Design | 77 days | 0% | Fri 2/6/26 | Thu 4/23/26 |
| 74 | Update Roadway Model | 14 days | 0% | Fri 2/6/26 | Thu 2/19/26 |
| 75 | Address Roadway Comments and Update Grading Details | 14 days | 0% | Fri 2/6/26 | Thu 2/19/26 |
| 76 | Address H&H, Culvert/Storm Drain Comments | 21 days | 0% | Fri 2/6/26 | Thu 2/26/26 |
| 77 | Address Utility and Detention Comments | 21 days | 0% | Fri 2/6/26 | Thu 2/26/26 |
| 78 | Address Traffic Control Plan/Construction Phasing Comments | 21 days | 0% | Fri 2/6/26 | Thu 2/26/26 |
| 79 | Address SPM/SW3P/Illumination/Traffic Comments | 21 days | 0% | Fri 2/6/26 | Thu 2/26/26 |
| 80 | Develop/Update Plansheets, Standards, and Quantities | 14 days | 0% | Fri 2/27/26 | Thu 3/2/26 |
| 81 | Constructability Review and QA/QC | 7 days | 0% | Fri 3/13/26 | Thu 3/19/26 |
| 82 | Develop 90% Design PS&E Deliverables | 14 days | 0% | Fri 3/20/26 | Thu 4/2/26 |
| 83 | City 90% Design Review | 14 days | 0% | Fri 4/3/26 | Thu 4/23/26 |
| 84 | 90% Design Comment Review Coordination | 7 days | 0% | Fri 4/17/26 | Thu 4/23/26 |
| 85 | Final PS&E Design | 91 days | 0% | Fri 4/24/26 | Thu 7/23/26 |
| 86 | Address Roadway Comments and Update Grading Details | 14 days | 0% | Fri 4/24/26 | Thu 5/7/26 |
| 87 | Address H&H, Culvert/Storm Drain Comments | 14 days | 0% | Fri 4/24/26 | Thu 5/7/26 |
| 88 | Address Utility and Detention Comments | 14 days | 0% | Fri 4/24/26 | Thu 5/7/26 |
| 89 | Address Traffic Control Plan/Construction Phasing Comments | 14 days | 0% | Fri 4/24/26 | Thu 5/7/26 |
| 90 | Address SPM/SW3P/Illumination Comments | 14 days | 0% | Fri 4/24/26 | Thu 5/7/26 |
| 91 | Develop/Update Plansheets, Standards, and Quantities | 14 days | 0% | Fri 5/8/26 | Thu 5/21/26 |
| 92 | Constructability Review and QA/QC | 7 days | 0% | Fri 5/22/26 | Thu 5/28/26 |
| 93 | Develop Final Design PS&E Deliverables | 14 days | 0% | Fri 5/29/26 | Thu 6/11/26 |
| 94 | City Final Design Review | 14 days | 0% | Fri 6/12/26 | Thu 6/25/26 |
| 95 | Final Design Comment Review Coordination | 14 days | 0% | Fri 6/26/26 | Thu 7/9/26 |
| 96 | Address Final Design PS&E Comments | 14 days | 0% | Fri 7/10/26 | Thu 7/23/26 |
| 97 | Construction Phase | 630 days | 0% | Fri 7/24/26 | Thu 4/13/28 |
| 98 | Utility Relocations | 210 days | 0% | Fri 7/24/26 | Thu 2/18/27 |
| 99 | Bid Phase | 84 days | 0% | Fri 7/24/26 | Thu 10/15/26 |
| 100 | Project Award and NTP | 84 days | 0% | Fri 10/16/26 | Thu 1/7/27 |
| 101 | Roadway Construction | 420 days | 0% | Fri 1/8/27 | Thu 3/2/28 |
| 102 | Final Punchlist | 42 days | 0% | Fri 3/2/28 | Thu 4/13/28 |

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 _____, _____

Initial:

OWNER _____
ENGINEER _____

Payments to ENGINEER for Services and Reimbursable Expenses

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

ARTICLE 4 -- PAYMENTS TO THE ENGINEER

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

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

1. Progress payments in the amount of \$1,417,641.58 based on the following assumed distribution of compensation:

| | |
|--|-----------------------|
| I. Managing Contracted/Donated PE | <u>\$156,010.00</u> |
| II. Environmental Compliance | <u>\$ 29,540.00</u> |
| III. Subsurface Utility Engineering | <u>\$ 5,546.58</u> |
| IV. Geotechnical Services | <u>\$ 11,500.00</u> |
| V. Design Survey | <u>\$ 77,925.00</u> |
| VI. Roadway Design – Roadway | <u>\$301,400.00</u> |
| VII. Roadway Design - Storm Drain | <u>\$258,920.00</u> |
| VIII. Roadway Design – Signing, Pavement Markings and Signalization | <u>\$ 40,160.00</u> |
| IX. Roadway Design – Miscellaneous | <u>\$224,080.00</u> |
| X. Drainage Study | <u>\$140,910.00</u> |
| XI. Utility Design | <u>\$119,810.00</u> |
| XII. Traffic Study | <u>\$ 26,540.00</u> |
| XIII. Direct Expenses and Unit Cost Expenses | <u>\$ 25,300.00</u> |
| Total | \$1,417,641.58 |

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

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

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

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

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

Initial:

OWNER _____
ENGINEER _____

NOTICE OF ACCEPTABILITY OF WORK

“NOT APPLICABLE”

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

Initial:

OWNER _____
ENGINEER _____

Construction Cost Limit

“NOT APPLICABLE”

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

Initial:
OWNER _____
ENGINEER _____

Insurance

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

G6.05 *Insurance*

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

1. By ENGINEER:

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

[or]

- 1) Combined Single Limit (Bodily Injury and Property Damage):
Each Accident \$ 500,000

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

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

Initial:

OWNER _____
ENGINEER _____

Special Provisions

“NOT APPLICABLE”

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

Initial:

OWNER _____
ENGINEER _____

DBE Goal

“NOT APPLICABLE”