

EXHIBIT
"A"



**CITY OF ROUND ROCK
CONTRACT FOR ENGINEERING SERVICES**

FIRM: CP&Y DBA STV INFRASTRUCTURE (“Engineer”)
ADDRESS: 13809 Research Boulevard, Suite 300, Austin, TX 78750
PROJECT: Kenney Fort Blvd. Seg. 5 & 6

THE STATE OF TEXAS §
§
COUNTY OF WILLIAMSON §

THIS CONTRACT FOR ENGINEERING SERVICES (“Contract”) is made and entered into on this the ____ day of _____, 2023 by and between the CITY OF ROUND ROCK, a Texas home-rule municipal corporation, whose offices are located at 221 East Main Street, Round Rock, Texas 78664-5299, (hereinafter referred to as “City”), and Engineer, and such Contract is for the purpose of contracting for professional engineering services.

RECITALS:

WHEREAS, V.T.C.A., Government Code §2254.002(2)(A)(vii) under Subchapter A entitled “Professional Services Procurement Act” provides for the procurement by municipalities of services of professional engineers; and

WHEREAS, City and Engineer desire to contract for such professional engineering services; and

WHEREAS, City and Engineer wish to document their agreement concerning the requirements and respective obligations of the parties;

NOW, THEREFORE, WITNESSETH:

That for and in consideration of the mutual promises contained herein and other good and valuable considerations, and the covenants and agreements hereinafter contained to be kept and performed by the respective parties hereto, it is agreed as follows:

CONTRACT DOCUMENTS

The Contract Documents consist of this Contract and any exhibits attached hereto (which exhibits are hereby incorporated into and made a part of this Contract) and all Supplemental Contracts (as defined herein in Article 13) which are subsequently issued. These form the entire contract, and all are as fully a part of this Contract as if attached to this Contract or repeated herein.

ARTICLE 1 **CITY SERVICES**

City shall perform or provide services as identified in Exhibit A entitled "City Services."

ARTICLE 2 **ENGINEERING SERVICES**

Engineer shall perform Engineering Services as identified in Exhibit B entitled "Engineering Services."

Engineer shall perform the Engineering Services in accordance with the Work Schedule as identified in Exhibit C entitled "Work Schedule." Such Work Schedule shall contain a complete schedule so that the Engineering Services under this Contract may be accomplished within the specified time and at the specified cost. The Work Schedule shall provide specific work sequences and definite review times by City and Engineer of all Engineering Services. Should the review times or Engineering Services take longer than shown on the Work Schedule, through no fault of Engineer, Engineer may submit a timely written request for additional time, which shall be subject to the approval of the City Manager.

ARTICLE 3 **CONTRACT TERM**

(1) Term. The Engineer is expected to complete the Engineering Services described herein in accordance with the above described Work Schedule. If Engineer does not perform the Engineering Services in accordance with the Work Schedule, then City shall have the right to terminate this Contract as set forth below in Article 20. So long as the City elects not to terminate this Contract, it shall continue from day to day until such time as the Engineering Services are completed. Any Engineering Services performed or costs incurred after the date of termination shall not be eligible for reimbursement. Engineer shall notify City in writing as soon as possible if he/she/it determines, or reasonably anticipates, that the Engineering Services will not be completed in accordance with the Work Schedule.

(2) Work Schedule. Engineer acknowledges that the Work Schedule is of critical importance, and agrees to undertake all necessary efforts to expedite the performance of Engineering Services required herein so that construction of the project will be commenced and completed as scheduled. In this regard, and subject to adjustments in the Work Schedule as provided in Article 2 herein, Engineer shall proceed with sufficient qualified personnel and consultants necessary to fully and timely accomplish all Engineering Services required under this Contract in a professional manner.

(3) Notice to Proceed. After execution of this Contract, Engineer shall not proceed with Engineering Services until authorized in writing by City to proceed as provided in Article 7.

ARTICLE 4
COMPENSATION

City shall pay and Engineer agrees to accept the amount shown below as full compensation for the Engineering Services performed and to be performed under this Contract.

The amount payable under this Contract, without modification of the Contract as provided herein, is the sum of Two Million Three Hundred Seventy-One Thousand Two Hundred Thirty-Eight and 79/100 Dollars (\$2,371,238.79) as shown in Exhibit D. The lump sum amount payable shall be revised equitably only by written Supplemental Contract in the event of a change in Engineering Services as authorized by City.

Engineer shall prepare and submit to City monthly progress reports in sufficient detail to support the progress of the Engineering Services and to support invoices requesting monthly payment. Any preferred format of City for such monthly progress reports shall be identified in Exhibit B. Satisfactory progress of Engineering Services shall be an absolute condition of payment.

The fee herein referenced may be adjusted for additional Engineering Services requested and performed only if approved by written Supplemental Contract.

ARTICLE 5
METHOD OF PAYMENT

Payments to Engineer shall be made while Engineering Services are in progress. Engineer shall prepare and submit to City, not more frequently than once per month, a progress report as referenced in Article 4 above. Such progress report shall state the percentage of completion of Engineering Services accomplished during that billing period and to date. Simultaneous with submission of such progress report, Engineer shall prepare and submit one (1) original and one (1) copy of a certified invoice in a form acceptable to City. This submittal shall also include a progress assessment report in a form acceptable to City.

Progress payments shall be made in proportion to the percentage of completion of Engineering Services identified in Exhibit D. Progress payments shall be made by City based upon Engineering Services actually provided and performed. Upon timely receipt and approval of each statement, City shall make a good faith effort to pay the amount which is due and payable within thirty (30) days. City reserves the right to withhold payment pending verification of satisfactory Engineering Services performed. Engineer has the responsibility to submit proof to City, adequate and sufficient in its determination, that tasks were completed.

The certified statements shall show the total amount earned to the date of submission and shall show the amount due and payable as of the date of the current statement. Final payment does not relieve Engineer of the responsibility of correcting any errors and/or omissions resulting from his/her/its negligence.

ARTICLE 6
PROMPT PAYMENT POLICY

In accordance with Chapter 2251, V.T.C.A., Texas Government Code, payment to Engineer will be made within thirty (30) days of the day on which the performance of services was complete, or within thirty (30) days of the day on which City receives a correct invoice for services, whichever is later. Engineer may charge a late fee (fee shall not be greater than that which is permitted by Texas law) for payments not made in accordance with this prompt payment policy; however, this policy does not apply in the event:

- A. There is a bona fide dispute between City and Engineer concerning the supplies, materials, or equipment delivered or the services performed that causes the payment to be late; or
- B. The terms of a federal contract, grant, regulation, or statute prevent City from making a timely payment with federal funds; or
- C. There is a bona fide dispute between Engineer and a subcontractor or between a subcontractor and its supplier concerning supplies, materials, or equipment delivered or the Engineering Services performed which causes the payment to be late; or
- D. The invoice is not mailed to City in strict accordance with instructions, if any, on the purchase order, or this Contract or other such contractual agreement.

City shall document to Engineer the issues related to disputed invoices within ten (10) calendar days of receipt of such invoice. Any non-disputed invoices shall be considered correct and payable per the terms of Chapter 2251, V.T.C.A., Texas Government Code.

ARTICLE 7
NOTICE TO PROCEED

The Engineer shall not proceed with any task listed on Exhibit B until the City has issued a written Notice to Proceed regarding such task. The City shall not be responsible for work performed or costs incurred by Engineer related to any task for which a Notice to Proceed has not been issued.

ARTICLE 8
PROJECT TEAM

City's Designated Representative for purposes of this Contract is as follows:

Greg Ciaccio
Project Manager
3400 Sunrise Road
Round Rock, TX 78665
Telephone Number (512) 218-7017
Mobile Number (737) 343-2431
Fax Number N/A
Email Address gciaccio@roundrocktexas.gov

City's Designated Representative shall be authorized to act on City's behalf with respect to this Contract. City or City's Designated Representative shall render decisions in a timely manner pertaining to documents submitted by Engineer in order to avoid unreasonable delay in the orderly and sequential progress of Engineering Services.

Engineer's Designated Representative for purposes of this Contract is as follows:

Anthony Serda, P.E.
Vice-President
13809 Research Boulevard, Suite 300
Austin, TX 78750
Telephone Number (512) 241-2228
Fax Number (512) 349-0727
Email Address Anthony.Serda@stvinc.com

ARTICLE 9

PROGRESS EVALUATION

Engineer shall, from time to time during the progress of the Engineering Services, confer with City at City's election. Engineer shall prepare and present such information as may be pertinent and necessary, or as may be requested by City, in order for City to evaluate features of the Engineering Services. At the request of City or Engineer, conferences shall be provided at Engineer's office, the offices of City, or at other locations designated by City. When requested by City, such conferences shall also include evaluation of the Engineering Services.

Should City determine that the progress in Engineering Services does not satisfy the Work Schedule, then City shall review the Work Schedule with Engineer to determine corrective action required.

Engineer shall promptly advise City in writing of events which have or may have a significant impact upon the progress of the Engineering Services, including but not limited to the following:

- (1) Problems, delays, adverse conditions which may materially affect the ability to meet the objectives of the Work Schedule, or preclude the attainment of project Engineering Services units by established time periods; and such disclosure shall be accompanied by statement of actions taken or contemplated, and City assistance needed to resolve the situation, if any; and
- (2) Favorable developments or events which enable meeting the Work Schedule goals sooner than anticipated.

ARTICLE 10
SUSPENSION

Should City desire to suspend the Engineering Services, but not to terminate this Contract, then such suspension may be effected by City giving Engineer thirty (30) calendar days' verbal notification followed by written confirmation to that effect. Such thirty-day notice may be waived in writing by agreement and signature of both parties. The Engineering Services may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from City to resume the Engineering Services. Such sixty-day notice may be waived in writing by agreement and signature of both parties. If this Contract is suspended for more than thirty (30) days, Engineer shall have the option of terminating this Contract.

If City suspends the Engineering Services, the contract period as determined in Article 3, and the Work Schedule, shall be extended for a time period equal to the suspension period.

City assumes no liability for Engineering Services performed or costs incurred prior to the date authorized by City for Engineer to begin Engineering Services, and/or during periods when Engineering Services is suspended, and/or subsequent to the contract completion date.

ARTICLE 11
ADDITIONAL ENGINEERING SERVICES

If Engineer forms a reasonable opinion that any work he/she/it has been directed to perform is beyond the scope of this Contract and as such constitutes extra work, he/she/it shall promptly notify City in writing. In the event City finds that such work does constitute extra work and exceeds the maximum amount payable, City shall so advise Engineer and a written Supplemental Contract will be executed between the parties as provided in Article 13. Engineer shall not perform any proposed additional work nor incur any additional costs prior to the execution, by both parties, of a written Supplemental Contract. City shall not be responsible for actions by Engineer nor for any costs incurred by Engineer relating to additional work not directly associated with the performance of the Engineering Services authorized in this Contract or any amendments thereto.

ARTICLE 12
CHANGES IN ENGINEERING SERVICES

If City deems it necessary to request changes to previously satisfactorily completed Engineering Services or parts thereof which involve changes to the original Engineering Services or character of Engineering Services under this Contract, then Engineer shall make such revisions as requested and as directed by City. Such revisions shall be considered as additional Engineering Services and paid for as specified under Article 11.

Engineer shall make revisions to Engineering Services authorized hereunder as are necessary to correct errors appearing therein, when required to do so by City. No additional compensation shall be due for such Engineering Services.

ARTICLE 13
SUPPLEMENTAL CONTRACTS

The terms of this Contract may be modified by written Supplemental Contract if City determines that there has been a significant change in (1) the scope, complexity or character of the Engineering Services, or (2) the duration of the Engineering Services. Any such Supplemental Contract must be duly authorized by the City. Engineer shall not proceed until the Supplemental Contract has been executed. Additional compensation, if appropriate, shall be identified as provided in Article 4.

It is understood and agreed by and between both parties that Engineer shall make no claim for extra work done or materials furnished until the City authorizes full execution of the written Supplemental Contract and authorization to proceed. City reserves the right to withhold payment pending verification of satisfactory Engineering Services performed.

ARTICLE 14
USE OF DOCUMENTS

All documents, including but not limited to drawings, specifications and data or programs stored electronically, (hereinafter referred to as "Instruments of Service") prepared by Engineer and its subcontractors are related exclusively to the services described in this Contract and are intended to be used with respect to this Project. However, it is expressly understood and agreed by and between the parties hereto that all of Engineer's designs under this Contract (including but not limited to tracings, drawings, estimates, specifications, investigations, studies and other documents, completed or partially completed), shall be the property of City to be thereafter used in any lawful manner as City elects. Any such subsequent use made of documents by City shall be at City's sole risk and without liability to Engineer, and, to the extent permitted by law, City shall hold harmless Engineer from all claims, damages, losses and expenses, resulting therefrom. Any modification of the plans will be evidenced on the plans and be signed and sealed by a licensed professional prior to re-use of modified plans.

By execution of this Contract and in confirmation of the fee for services to be paid under this Contract, Engineer hereby conveys, transfers and assigns to City all rights under the Federal Copyright Act of 1976 (or any successor copyright statute), as amended, all common law copyrights and all other intellectual property rights acknowledged by law in the Project designs and work product developed under this Contract. Copies may be retained by Engineer. Engineer shall be liable to City for any loss or damage to any such documents while they are in the possession of or while being worked upon by Engineer or anyone connected with Engineer, including agents, employees, Engineers or subcontractors. All documents so lost or damaged shall be replaced or restored by Engineer without cost to City.

Upon execution of this Contract, Engineer grants to City permission to reproduce Engineer's work and documents for purposes of constructing, using and maintaining the Project, provided that City shall comply with its obligations, including prompt payment of all sums when due, under this Contract. Engineer shall obtain similar permission from Engineer's subcontractors consistent with this Contract. If and upon the date Engineer is adjudged in default of this Contract, City is permitted to authorize other similarly credentialed design professionals to reproduce and, where permitted by law, to make changes, corrections or additions to the work and documents for the purposes of completing, using and maintaining the Project.

City shall not assign, delegate, sublicense, pledge or otherwise transfer any permission granted herein to another party without the prior written contract of Engineer. However, City shall be permitted to authorize the contractor, subcontractors and material or equipment suppliers to reproduce applicable portions of the Instruments of Service appropriate to and for use in their execution of the Work. Submission or distribution of Instruments of Service to meet official regulatory requirements or for similar purposes in connection with the Project is permitted. Any unauthorized use of the Instruments of Service shall be at City's sole risk and without liability to Engineer and its Engineers.

Prior to Engineer providing to City any Instruments of Service in electronic form or City providing to Engineer any electronic data for incorporation into the Instruments of Service, City and Engineer shall by separate written contract set forth the specific conditions governing the format of such Instruments of Service or electronic data, including any special limitations not otherwise provided in this Contract. Any electronic files are provided by Engineer for the convenience of City, and use of them is at City's sole risk. In the case of any defects in electronic files or any discrepancies between them and any hardcopy of the same documents prepared by Engineer, the hardcopy shall prevail. Only printed copies of documents conveyed by Engineer shall be relied upon.

Engineer shall have no liability for changes made to the drawings by other engineers subsequent to the completion of the Project. Any such change shall be sealed by the engineer making that change and shall be appropriately marked to reflect what was changed or modified.

ARTICLE 15
PERSONNEL, EQUIPMENT AND MATERIAL

Engineer shall furnish and maintain, at its own expense, quarters for the performance of all Engineering Services, and adequate and sufficient personnel and equipment to perform the Engineering Services as required. All employees of Engineer shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Engineer who, in the opinion of City, is incompetent or whose conduct becomes detrimental to the Engineering Services shall immediately be removed from association with the project when so instructed by City. Engineer certifies that it presently has adequate qualified personnel in its employment for performance of the Engineering Services required under this Contract, or will obtain such personnel from sources other than City. Engineer may not change the Project Manager without prior written consent of City.

ARTICLE 16
SUBCONTRACTING

Engineer shall not assign, subcontract or transfer any portion of the Engineering Services under this Contract without prior written approval from City. All subcontracts shall include the provisions required in this Contract and shall be approved as to form, in writing, by City prior to Engineering Services being performed under the subcontract. No subcontract shall relieve Engineer of any responsibilities under this Contract.

ARTICLE 17
EVALUATION OF ENGINEERING SERVICES

City, or any authorized representatives of it, shall have the right at all reasonable times to review or otherwise evaluate the Engineering Services performed or being performed hereunder and the premises on which it is being performed. If any review or evaluation is made on the premises of Engineer or a subcontractor, then Engineer shall provide and require its subcontractors to provide all reasonable facilities and assistance for the safety and convenience of City or other representatives in the performance of their duties.

ARTICLE 18
SUBMISSION OF REPORTS

All applicable study reports shall be submitted in preliminary form for approval by City before any final report is issued. City's comments on Engineer's preliminary reports shall be addressed in any final report.

ARTICLE 19
VIOLATION OF CONTRACT TERMS/BREACH OF CONTRACT

Violation of contract terms or breach of contract by Engineer shall be grounds for termination of this Contract, and any increased costs arising from Engineer's default, breach of contract, or violation of contract terms shall be paid by Engineer.

ARTICLE 20
TERMINATION

This Contract may be terminated as set forth below.

- (1) By mutual agreement and consent, in writing, of both parties.
- (2) By City, by notice in writing to Engineer, as a consequence of failure by Engineer to perform the Engineering Services set forth herein in a satisfactory manner.
- (3) By either party, upon the failure of the other party to fulfill its obligations as set forth herein.
- (4) By City, for reasons of its own and not subject to the mutual consent of Engineer, upon not less than thirty (30) days' written notice to Engineer.
- (5) By satisfactory completion of all Engineering Services and obligations described herein.

Should City terminate this Contract as herein provided, no fees other than fees due and payable at the time of termination shall thereafter be paid to Engineer. In determining the value of the Engineering Services performed by Engineer prior to termination, City shall be the sole judge. Compensation for Engineering Services at termination will be based on a percentage of the Engineering Services completed

at that time. Should City terminate this Contract under Subsection (4) immediately above, then the amount charged during the thirty-day notice period shall not exceed the amount charged during the preceding thirty (30) days.

If Engineer defaults in the performance of this Contract or if City terminates this Contract for fault on the part of Engineer, then City shall give consideration to the actual costs incurred by Engineer in performing the Engineering Services to the date of default, the amount of Engineering Services required which was satisfactorily completed to date of default, the value of the Engineering Services which are usable to City, the reasonable and necessary cost to City of employing another firm to complete the Engineering Services required and the time required to do so, and other factors which affect the value to City of the Engineering Services performed at the time of default.

The termination of this Contract and payment of an amount in settlement as prescribed above shall extinguish all rights, duties, and obligations of City and Engineer under this Contract, except the obligations set forth herein in Article 21 entitled "Compliance with Laws." If the termination of this Contract is due to the failure of Engineer to fulfill his/her/its contractual obligations, then City may take over the project and prosecute the Engineering Services to completion. In such case, Engineer shall be liable to City for any additional and reasonable costs incurred by City.

Engineer shall be responsible for the settlement of all contractual and administrative issues arising out of any procurements made by Engineer in support of the Engineering Services under this Contract.

ARTICLE 21

COMPLIANCE WITH LAWS

(1) Compliance. Engineer shall comply with all applicable state, federal and local laws, statutes, codes, ordinances, rules and regulations, and the orders and decrees of any court, or administrative bodies or tribunals in any manner affecting the performance of this Contract, including without limitation, minimum/maximum salary and wage statutes and regulations, and licensing laws and regulations. Engineer shall furnish City with satisfactory proof of his/her/its compliance.

Engineer shall further obtain all permits and licenses required in the performance of the Engineering Services contracted for herein.

(2) As required by Chapter 2271, Government Code, Engineer hereby verifies that it does not boycott Israel and will not boycott Israel through the term of this Agreement. For purposes of this verification, "boycott Israel" means refusing to deal with, terminating business activities with, or otherwise 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.

(3) In accordance with 2274, Texas Government Code, a governmental entity may not enter into a contract with a company with at least ten (10) full-time employees for value of at least One Hundred Thousand and No/100 Dollars (\$100,000.00) unless the contract has a provision in the contract verifying that it: (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) will not discriminate during the term of the contract against a

firearm entity or firearm trade association. The signatory executing this Contract on behalf of the Engineer verifies Engineer does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association, and it will not discriminate during the term of this Contract against any firearm entity or firearm trade association.

(4) In accordance with 2274, Texas Government Code, a governmental entity may not enter into a contract with a company with at least ten (10) full-time employees for a value of at least One Hundred Thousand and No/100 Dollars (\$100,000.00) unless the contract has a provision in the contract verifying that it: (1) does not boycott energy companies; and (2) will not boycott energy companies during the term of this Contract. The signatory executing this Contract on behalf of Engineer verifies Engineer does not boycott energy companies, and it will not boycott energy companies during the term of this Contract.

(5) **Taxes.** Engineer will pay all taxes, if any, required by law arising by virtue of the Engineering Services performed hereunder. City is qualified for exemption pursuant to the provisions of Section 151.309 of the Texas Limited Sales, Excise, and Use Tax Act.

ARTICLE 22
INDEMNIFICATION

Engineer shall save and hold City harmless from all liability for damage to the extent that the damage is caused by or results from an act of negligence, intentional tort, intellectual property infringement, or failure to pay a subcontractor or supplier committed by Engineer, Engineer's agent, or another entity over which Engineer exercises control. Engineer shall also save and hold City harmless from any and all expenses, including but not limited to reasonable attorneys' fees which may be incurred by City in litigation or otherwise defending claims or liabilities which may be imposed on City to the extent resulting from such negligent activities by Engineer, its agents, or employees.

ARTICLE 23
ENGINEER'S RESPONSIBILITIES

Engineer shall be responsible for the accuracy of his/her/its Engineering Services and shall promptly make necessary revisions or corrections to its work product resulting from errors, omissions, or negligent acts, and same shall be done without compensation. City shall determine Engineer's responsibilities for all questions arising from design errors and/or omissions. Engineer shall not be relieved of responsibility for subsequent correction of any such errors or omissions in its work product, or for clarification of any ambiguities until after the construction phase of the project has been completed.

ARTICLE 24
ENGINEER'S SEAL

The responsible engineer shall sign, seal and date all appropriate engineering submissions to City in accordance with the Texas Engineering Practice Act and the rules of the State Board of Registration for Professional Engineers.

ARTICLE 25
NON-COLLUSION, FINANCIAL INTEREST PROHIBITED

(1) **Non-collusion.** Engineer warrants that he/she/it has not employed or retained any company or persons, other than a bona fide employee working solely for Engineer, to solicit or secure this Contract, and that he/she/it has not paid or agreed to pay any company or engineer any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, City reserves and shall have the right to annul this Contract without liability or, in its discretion and at its sole election, to deduct from the contract price or compensation, or to otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

(2) **Financial Interest Prohibited.** Engineer covenants and represents that Engineer, his/her/its officers, employees, agents, consultants and subcontractors will have no financial interest, direct or indirect, in the purchase or sale of any product, materials or equipment that will be recommended or required for the construction of the project.

ARTICLE 26
INSURANCE

(1) **Insurance.** Engineer, at Engineer's sole cost, shall purchase and maintain during the entire term while this Contract is in effect professional liability insurance coverage in the minimum amount of One Million Dollars per claim from a company authorized to do insurance business in Texas and otherwise acceptable to City. Engineer shall also notify City, within twenty-four (24) hours of receipt, of any notices of expiration, cancellation, non-renewal, or material change in coverage it receives from its insurer.

(2) **Subconsultant Insurance.** Without limiting any of the other obligations or liabilities of Engineer, Engineer shall require each subconsultant performing work under this Contract to maintain during the term of this Contract, at the subconsultant's own expense, the same stipulated minimum insurance required in Article 26, Section (1) above, including the required provisions and additional policy conditions as shown below in Article 26, Section (3).

Engineer shall obtain and monitor the certificates of insurance from each subconsultant in order to assure compliance with the insurance requirements. Engineer must retain the certificates of insurance for the duration of this Contract, and shall have the responsibility of enforcing these insurance requirements among its subconsultants. City shall be entitled, upon request and without expense, to receive copies of these certificates of insurance.

(3) **Insurance Policy Endorsements.** Each insurance policy shall include the following conditions by endorsement to the policy:

- (a) Engineer shall notify City thirty (30) days prior to the expiration, cancellation, non-renewal in coverage, and such notice thereof shall be given to City by certified mail to:

City Manager, City of Round Rock
221 East Main Street
Round Rock, Texas 78664

- (b) The policy clause “Other Insurance” shall not apply to any insurance coverage currently held by City, to any such future coverage, or to City’s Self-Insured Retentions of whatever nature.

(4) Cost of Insurance. The cost of all insurance required herein to be secured and maintained by Engineer shall be borne solely by Engineer, with certificates of insurance evidencing such minimum coverage in force to be filed with City. Such Certificates of Insurance are evidenced as Exhibit E herein entitled “Certificates of Insurance.”

ARTICLE 27
COPYRIGHTS

City shall have the royalty-free, nonexclusive and irrevocable right to reproduce, publish or otherwise use, and to authorize others to use, any reports developed by Engineer for governmental purposes.

ARTICLE 28
SUCCESSORS AND ASSIGNS

This Contract shall be binding upon and inure to the benefit of the parties hereto, their successors, lawful assigns, and legal representatives. Engineer may not assign, sublet or transfer any interest in this Contract, in whole or in part, by operation of law or otherwise, without obtaining the prior written consent of City.

ARTICLE 29
SEVERABILITY

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

ARTICLE 30
PRIOR AGREEMENTS SUPERSEDED

This Contract constitutes the sole agreement of the parties hereto, and supersedes any prior understandings or written or oral contracts between the parties respecting the subject matter defined herein. This Contract may only be amended or supplemented by mutual agreement of the parties hereto in writing.

ARTICLE 31
ENGINEER'S ACCOUNTING RECORDS

Records pertaining to the project, and records of accounts between City and Engineer, shall be kept on a generally recognized accounting basis and shall be available to City or its authorized representatives at mutually convenient times. The City reserves the right to review all records it deems relevant which are related to this Contract.

ARTICLE 32
NOTICES

All notices to either party by the other required under this Contract shall be personally delivered or mailed to such party at the following respective addresses:

City:

City of Round Rock
Attention: City Manager
221 East Main Street
Round Rock, TX 78664

and to:

Stephanie L. Sandre
City Attorney
309 East Main Street
Round Rock, TX 78664

Engineer:

Anthony Serda, P.E.
Vice-President
13809 Research Boulevard, Suite 300
Austin, TX 78750

ARTICLE 33
GENERAL PROVISIONS

(1) Time is of the Essence. The Services shall be performed expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer. Engineer understands and agrees that time is of the essence and that any failure of Engineer to complete the Engineering Services for each phase of this Contract within the agreed Work Schedule may constitute a material breach of this Contract. Engineer shall be fully responsible for his/her/its delays or for failures to use his/her/its reasonable efforts in accordance with the terms of this Contract and the Engineer's standard of performance as defined herein. Where damage is caused to City due to Engineer's negligent failure to

perform City may accordingly withhold, to the extent of such damage, Engineer's payments hereunder without waiver of any of City's additional legal rights or remedies. Any determination to withhold or set off shall be made in good faith and with written notice to Engineer provided, however, Engineer shall have fourteen (14) calendar days from receipt of the notice to submit a plan for cure reasonably acceptable to City.

(2) Force Majeure. Neither City nor Engineer shall be deemed in violation of this Contract if prevented from performing any of their obligations hereunder by reasons for which they are not responsible or circumstances beyond their control. However, notice of such impediment or delay in performance must be timely given, and all reasonable efforts undertaken to mitigate its effects.

(3) Enforcement and Venue. This Contract shall be enforceable in Round Rock, Williamson County, Texas, and if legal action is necessary by either party with respect to the enforcement of any or all of the terms or conditions herein, exclusive venue for same shall lie in Williamson County, Texas. This Contract shall be governed by and construed in accordance with the laws and court decisions of the State of Texas.

(4) Standard of Performance. The standard of care for all professional engineering, consulting and related services performed or furnished by Engineer and its employees under this Contract will be the care and skill ordinarily used by members of Engineer's profession practicing under the same or similar circumstances at the same time and in the same locality. Excepting Articles 25 and 34 herein, Engineer makes no warranties, express or implied, under this Contract or otherwise, in connection with the Engineering Services.

(5) Opinion of Probable Cost. Any opinions of probable project cost or probable construction cost provided by Engineer are made on the basis of information available to Engineer and on the basis of Engineer's experience and qualifications and represents its judgment as an experienced and qualified professional engineer. 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 does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost Engineer prepares.

(6) Opinions and Determinations. Where the terms of this Contract provide for action to be based upon opinion, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.

ARTICLE 34 **SIGNATORY WARRANTY**

The undersigned signatory for Engineer hereby represents and warrants that the signatory is an officer of the organization for which he/she has executed this Contract and that he/she has full and complete authority to enter into this Contract on behalf of the firm. The above-stated representations and warranties are made for the purpose of inducing City to enter into this Contract.

IN WITNESS WHEREOF, the City of Round Rock has caused this Contract to be signed in its corporate name by its duly authorized City Manager or Mayor, as has Engineer, signing by and through its duly authorized representative(s), thereby binding the parties hereto, their successors, assigns and representatives for the faithful and full performance of the terms and provisions hereof.

[signature page follows]

CP&Y DBA STV INFRASTRUCTURE

By: 

Signature of Principal

Printed Name: Robin Handel, PE

CITY OF ROUND ROCK, TEXAS

APPROVED AS TO FORM:

By: _____
Craig Morgan, Mayor

Stephanie L. Sandre, City Attorney

ATTEST:

By: _____
Meagan Spinks, City Clerk

LIST OF EXHIBITS ATTACHED

- | | |
|---------------|---------------------------|
| (1) Exhibit A | City Services |
| (2) Exhibit B | Engineering Services |
| (3) Exhibit C | Work Schedule |
| (4) Exhibit D | Fee Schedule |
| (5) Exhibit E | Certificates of Insurance |

EXHIBIT A

City Services

Kenney Fort Boulevard Segments 5 & 6 Old Settlers Blvd to University PS&E Phase

The City will furnish to the Engineer the following information and/or perform the following tasks:

1. Provide any existing data the Owner has on file concerning the project, if available.
2. Assist with the coordination of any required public involvement, attend one-on-one meetings with officials, neighborhood groups, and local businesses and attend an open house, if necessary. For public meetings or hearings, schedule and reserve the meeting location and place the required advertisements.
3. Assist the Engineer, as necessary, in obtaining any required data and information from the State, County, Upper Brushy Creek Water Control & Improvement District, neighboring Cities and/or other franchise utility companies.
4. Give prompt written notice to Engineer whenever the Owner observes or otherwise becomes aware of any development that affects the scope or timing of Engineer's services.
5. Meet on an as needed basis to answer questions, provide guidance and offer comment.
6. Provide construction inspection and construction testing services including coordination and scope of services.
7. In conjunction with the Texas Department of Transportation (TxDOT), provide the following:
 - a) Federal Highway Administration (FHWA) coordination
 - b) Environmental document review
 - c) Relevant prior and/or adjacent plan sets, studies, and planning documents
 - d) Ground Penetrating Radar (GPR) testing that may exist
 - e) Review and approval of traffic volume projections
 - f) Equivalent Single Axle Load (ESAL) calculations
8. Provide existing signal timing information for study intersections.

EXHIBIT B

Engineering Services

Kenney Fort Boulevard Segments 5 & 6 Old Settlers Blvd to University Blvd.

The Kenney Fort Boulevard (Segments 5 & 6) Project will extend Kenney Fort Boulevard as a 6-lane divided urban arterial with curb and gutter, storm sewer, signals, and illumination from the current terminus at Old Settlers Blvd towards the north to University Blvd and remove the section of CR 117 from CR 112 to approximately north of Linda Herrington Elementary School. The total length of the Kenney Fort Blvd. extension is approximately 2.7 miles.

The Engineer shall provide the necessary engineering and technical services for the completion of schematic development, environmental studies, public involvement, surveying and mapping, and final PS&E design for the project for a buildable set of construction documents.

Services related to the design and plan production for this project will be performed in accordance with the latest available City of Round Rock and TxDOT manuals, guidelines and standards, as applicable.

The development of the project will be consistent with applicable City of Round Rock and TxDOT design procedures and practices. This project will be developed utilizing Microstation V8i, Bentley Geopak V8i and AutoCAD Civil 3D

Agency abbreviations are as follows:

City of Round Rock (City) , Texas Department of Transportation (TxDOT), Texas Department of Transportation Environmental Division (TxDOT-ENV), Federal Highway Administration (FHWA), Capital Area Metropolitan Planning Organization (CAMPO), Environmental Protection Agency (EPA), Texas Historical Commission (THC), National Register of Historic Places (NRHP), Federal Emergency Management Agency (FEMA), Texas Commission on Environmental Quality (TCEQ), Upper Brushy Creek Water Control and Improvement District (UBWCID).

The tasks and products are more fully described in the following TASK OUTLINE.

TASK OUTLINE

I. ROUTE AND DESIGN STUDIES

A. DATA COLLECTION

1. Perform field investigations of the project. These investigations will include site visits to the project site and adjacent area to gather pertinent information relating to the corridor. Field investigations will also be performed to review individual property locations and the impacts of the alignment to that property.
2. Develop a photo inventory of the project site for reference in project meetings, discussions with stakeholders and discussions with developers, etc. during the project development, which shall include unmanned aerial vehicle (UAV) drone images ('personal' drone devices) which limits heights to 400'ft above ground elevation.
3. Gather and review information from the City and TxDOT including existing Kenney Fort Blvd, Old Settlers Blvd, CR 112, University Blvd, and site development plans, project files, automated road inventory sheets, PMIS data, existing geometric conditions, existing typical sections, existing drainage facilities, existing bridge and culvert data and traffic data. Gather and review related existing and draft studies from TxDOT and the City. Gather and review information from various planning documents such as the CAMPO 2040 plan, Texas Transportation Plan, Transportation Improvement Plan and the City master street/road plans impacting the project.
4. Gather and review County and City parcel data and preliminary plats along the project corridor.
5. Obtain FEMA Flood insurance maps and corresponding studies relating to the project corridor.

B. AGENCY COORDINATION

1. Prepare for and conduct kick-off meeting with the City to develop agency coordination plan.
2. Prepare for and conduct kick-off meeting with the County.

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- (a) Hold up to three (meetings with the County), in addition to the kick-off meeting
- 3. Prepare for and conduct kick-off meeting with the Developers.

C. GEOTECHNICAL INVESTIGATIONS

Our scope of services will be to determine subsurface soil conditions at the site and develop flexible and rigid pavement design recommendations and construction guidelines for segments 5 & 6 of Kenney Fort Boulevard. The design 18-kip Equivalent Single Axle Loads (ESALs) will be determined by street classification and/or anticipated average daily traffic (ADT) counts for a 20-year asphalt and 30-year rigid design life in general accordance with the City of Round Rock Transportation Criteria Manual.

In addition, we understand approximately 3,500 lineal feet of retaining walls are planned. Maximum walls heights are expected to be no more than 10 ft tall.

(a) FIELD SERVICES

As part of our scope of work, RKCI will perform the following:

- (i) Develop soil-boring layout spaced approximately 1,000 feet apart for roadway borings and approximately 500 ft apart for retaining wall borings along the alignment for the City of Round Rock approval prior to mobilization.
- (ii) The boring locations will be located in the field utilizing tape and right angle measurements from existing benchmarks or using a recreational grade Global Positioning System (GPS) device. Our scope of services does not include surveying of the boring locations.
- (iii) Subsurface soil conditions will be explored by drilling 15 pavement borings to 15 ft and 5 retaining wall borings to 20 ft below the existing ground surface utilizing a truck mounted drilling rig. Samples will be taken on 2 ft intervals. The above field work will be supervised by a graduate engineer or geologist familiar with local geology and TxDOT standards for drilling and sampling. We have assumed that the borings can be drilled during the day, right of entry is provided, and that all boring locations will be accessible to a truck-mounted drill rig.
- (iv) Perform dynamic cone penetrometer (DCP) testing at selected boring locations to evaluate subgrade stiffness.

(b) LABORATORY TESTING

Upon completion of the subsurface exploration, a testing program will be designed to define the strength and classification characteristics of soils. The testing program may include but not limited to the following tests: moisture content tests, Atterberg Limits (plasticity tests), sieve analysis, sulfate content, unconfined compression tests, pH/lime series, and California Bearing Ratio.

(c) GEOTECHNICAL ENGINEERING REPORT DELIVERABLE

The results of our field and laboratory testing will be utilized to determine the moduli of the existing asphalt pavement section and underlying subgrade. This information will then be utilized to provide new pavement design recommendations. The geotechnical engineering report will include the following information and recommendations, if applicable:

- (i) Geotechnical Investigation prepared by a professional geotechnical engineer with 15+ years of experience conducting roadway projects within the City of Round Rock (Williamson County).
- (ii) The following items will be included in the geotechnical report: soil boring locations, boring logs, boring location map, subsurface exploration procedures, field and laboratory test results, description of surface and subsurface conditions, groundwater conditions, estimated effective PI and estimated PVR calculations.
- (iii) Prepare retaining wall information in accordance with TxDOT specifications.
- (iv) Prepare 3 pavement design options for Kenney Fort Boulevard Segments 5 & 6, which will include 2 flexible pavement options and 1 rigid pavement. The pavement design analyses will be performed in general accordance with the City of Round Rock Transportation Criteria Manual and utilizing TxDOT's Pavement Design software, FPS21.
- (v) A Draft Pavement Report will be submitted to the design team comments and review. Comments will be incorporated in the final deliverable that will be reproduced in one electronic copy for distribution.

D. SCHEMATIC LAYOUT DEVELOPMENT

1. Develop the roadway design criteria established in the route alternative stage for the project to be discussed, revised and approved by the City. This set of criteria will then be compiled and documented into a design criteria spreadsheet.
2. Alignment Study
 - (a) Develop an alternative geometric configuration for Kenney Fort Blvd within the project limits to satisfy the project goals of the City. Prepare conceptual cost estimates for the project.
 - (b) Produce an exhibit depicting the above geometric configuration to a detail level sufficient for City review.
3. Develop existing and proposed typical sections for inclusion on project schematics.
4. Develop preliminary schematic cross sections at 100' intervals. These cross sections will be for estimation of cut and fill quantities, as well as determining retaining wall locations and heights.
5. Determine retaining wall limits for the project roadway.
6. Develop a conceptual traffic control plan primarily utilization typical sections. Conceptual plans are intended to depict major phases of traffic control on scroll plots. These conceptual layouts will propose methods for constructability and can serve as a basis for future development of PS&E documents.
7. Develop pavement edges for the selected configuration that will be shown on the schematic layout.
8. Finalize Engineer's opinion of probable cost for the selected configuration.
9. Prepare project schematic plots for the project corridor. Plots will include required elements suitable for submission to the City with a 1"=100' horizontal scale and 1"=10' vertical scale. Depict the following on the project layout plot:
 - (a) The horizontal alignments will show bearings in the tangent sections and curve data including delta angles, PI stations, tangent lengths, length of curve, and radii. The plan views will show the centerline, edge of pavement, striping, lane widths, shoulder widths, cross slopes, superelevations with transitions, direction of traffic flow, and layouts for speed change lanes.
 - (b) The vertical alignment will show existing and proposed elevations at 100-foot intervals, vertical curve VPI stations, curve lengths, superelevation rates and transitions, design speeds, and "K" values.
 - (c) The existing apparent ROW limits and proposed ROW limits.
 - (d) Anticipated retaining wall locations.
 - (e) Proposed striping and lane numbers, and proposed signal pole locations. Small signs will not be developed at the project layout phase.
 - (f) Current and projected traffic volumes as developed by the traffic data collection and analysis task and proposed design speed.
 - (g) Existing utility locations in plan emphasizing those, which are in conflict with the proposed construction. Proposed utilities will not be shown.
 - (h) Significant drainage structures (existing and proposed) as determined by Hydrologic and Hydraulic report.

E. TRAFFIC DATA COLLECTION, ANALYSIS AND REVIEW

To determine traffic volumes for the pavement design year, the Engineer shall perform the following tasks:

The Engineer shall develop a technical memorandum to summarize all analysis performed. The following tasks shall be completed:

1. Coordinate with the City, State, Williamson County, CAMPO, and project team to obtain necessary information.
2. Develop traffic volumes (24-hour) for pavement design year.
3. Review traffic forecasts with the City/State/Williamson County to obtain feedback and approval. A total of two (2) meetings have been assumed for budget purposes for the duration of the project.

F. HYDROLOGY AND HYDRAULIC ANALYSIS

1. Crossing Structure Hydrology and Hydraulic Analysis (Schematic layout Phase)

Perform preliminary hydrologic and hydraulic analysis/design to determine location and sizes of outfalls and cross drainage structures utilizing Atlas 14 rainfall data or approved data for City of Round Rock and UBCWCID requirements.

Anticipated outfalls/structures are:

- (i) Outfall at Old Settlers Boulevard into Chandler Branch Tributary 5.02
- (ii) Crossing/outfall to Chandler Branch Tributary 5 north of Bluffstone Drive
- (iii) McNutt Creek north of CR 112
- (iv) McNutt Creek south of CR 112
- (v) Outfall to UBCWCID Dam 16 or McNutt Creek Trib 01B

(b) Hydrology

For these crossings the hydrologic analysis will be performed using HEC-HMS software performing the SCS Unit Hydrograph method. The most up to date UBCWCID models will be used as best available data. Existing land use condition will be assumed for drainage areas outside the proposed ROW. The loss, routing and precipitation methodologies used in the UBCWCID will be used for these subdivided area. Existing and proposed flows for the two (2), ten (10), twenty-five (25) and one-hundred (100) year frequency storms will be computed.

(c) Hydraulics

The design criteria for these crossings will be based on the City's Drainage Specification Requirements. A summary of this criteria will be prepared and reviewed with the City. The hydraulic analysis will be performed using HEC-RAS software. Tailwater assumptions will be based off the water surface elevations from the most up to date UBCWCID or Wilco Atlas 14 models.

2. Hydrology and Hydraulic Impact Analysis

This section includes the analysis of the project impacts to McNutt Creek, McNutt Creek Trib 01 McNutt Creek Trib 01B, Chandler Branch Trib 5.2 and Chandler Branch Tributary 5 including the crossings at:

(i) McNutt Creek

a) CR 112

- 1. The Engineer shall coordinate with adjacent projects and studies. The proposed bridge shall be included in this project.

(ii) Chandler Branch Tributary 5

a) Bluffstone Drive

b) Old Settlers Boulevard

(b) Data Collection

The Engineer will collect and review the existing hydrologic and hydraulic analyses for the existing culverts at the three culverts listed above. The Engineer will conduct field investigations to observe existing channel characteristics and bridge/culvert structures. The Engineer will assess channel and overbank roughness values using field notes and photographs.

(c) Hydrology

The Engineer will expand upon the hydrology developed with the crossing structures above to assess the hydrologic impact of the proposed improvements. The change in flow due to the proposed project will be at a minimum quantified at the three culvert structures listed above.

(d) Hydraulics

The Engineer will analyze existing and proposed conditions hydraulics as a result of the proposed improvements using HEC-RAS. This includes assessing the hydraulic impacts as a result of any changes to the hydrology, the potential addition of embankment in the floodplain and analysis of the three culvert structures. The Engineer will summarize the relative impacts to computed water surface elevations between existing and proposed conditions.

(e) Mitigation

The Engineer will advise the City of the findings of the hydraulic analysis via memorandum. If no mitigation produces adverse impacts, the Engineer will advise the City in the memorandum of the impacted properties to determine if mitigation is required.

- (f) Based on the current effective FEMA-FIRM (date December 19, 2019) preparation of a Conditional Letter of Map Revision (CLOMR) and/or Letter of Map Revision (LOMR) are not anticipated and are not included in this scope of services. A determination if this work is needed based of a decision by the local floodplain administrator after the impacts have been assessed.

3. UBCWCID Impact Analysis

This section anticipates two coordination meetings with UBCWCID to determine impacts to the UBCWCID facilities including:

- (i) Dam 16 and
- (ii) Dam 17

The Engineer shall determine if there is any fill within the reservoirs for the above referenced dams and the additional runoff volume associated with the proposed roadway project. Any fill will require compensatory cut at 125% of the fill volume and any increase in runoff volume will require compensatory mitigation equal to the volumetric increase.

The engineer will identify potential sites for the compensatory cut and mitigation volume.

4. Drainage Report

The Engineer will prepare preliminary hydraulic report. The preliminary drainage report that includes a section summarizing the findings of the Crossing Structure Hydrology and Hydraulic Analysis (Schematic layout Phase) above. This section of the report will include:

- (i) Exhibits showing the contributing area to each anticipated crossing structure.
- (ii) Preliminary sizing of each structure
- (iii) Determination if any proposed drainage easements are required to adequately drain the proposed facility including typical ditch calculations and inundation areas created by the culvert crossings.
- (iv) Cost estimates for the culvert crossings.
- (v) Preliminary culvert layouts.

The preliminary hydraulic report will also include sections summarizing the methodology and results used in the Hydrologic and Hydraulic Impact Analyses. This section of the report will include:

- (i) Preliminary culvert hydraulic data sheets for the three (3) crossings.
- (ii) Exhibits showing the three (3) mitigation alternatives
- (iii) Summarize the results of the mitigation alternatives
- (iv) Develop a recommended alternative

G. WATER QUALITY

This project is not contained in the Edwards Aquifer Recharge or Contributing zones and is only adjacent to the Transition Zone. TCEQ BMP design and coordination is not included in this scope of services.

II. SOCIAL, ECONOMIC & ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT

Environmental services will consist of “due diligence” studies and technical reports for the portions of Kenney Fort Blvd between Old Settler’s Blvd and University Blvd

A. ENVIRONMENTAL SERVICES

1. RIGHT-OF-ENTRY SERVICES

Perform property ownership research utilizing the Williamson County Appraisal District records (Tax Maps and Ownership Records) and compile a list (Excel Spreadsheet) of landowners for distribution of right of entry letters. Obtain “right-of-entry” by signed letter from the owner of each of the subject properties. Also, contact property owners in advance of field surveys or to address specific property owner concerns about the work to be performed or being performed. This scope anticipates that the City will handle problems regarding landowners that refuse to grant right-of-entry or are otherwise hostile with respect to the completion of this scope of services. Record and

report results of mailings for future action. Landowner contacts will be recorded and provided to the Client.

2. ENVIRONMENTAL CONSTRAINTS ANALYSIS

(a) OBTAIN EXISTING ENVIRONMENTAL CONSTRAINTS DATA

Perform a desktop review of environmental constraints of the proposed study area. Constraints to be identified include:

- (i) Cemeteries
- (ii) Parks
- (iii) Soils
- (iv) Properties on the National Register of Historic Places
- (v) Archeological sites
- (vi) Hazardous material sites
- (vii) Data from the Texas Parks and Wildlife Department's Natural Diversity Database
- (viii) United States Fish and Wildlife Service's Critical Habitat Mapper
- (ix) National Wetland Inventory Data
- (x) Floodplains
- (xi) National Hydrography Dataset
- (xii) Land Uses identified through aerial photo interpretation

(b) FIELD RECONNAISSANCE

Conduct a field reconnaissance of the study area to verify and update the information identified through the desktop review.

(c) PRELIMINARY ENVIRONMENTAL CONSTRAINTS MAP

Prepare a preliminary environmental constraints map of the study area on digital orthophotography using GIS. The map shall include information from the desktop review and additional data obtained from the field reconnaissance.

(d) TECHNICAL MEMORANDUM

A technical memorandum describing environmental constraints within the study area will be prepared. The technical memorandum will include the above-mentioned items and the environmental constraints map will be included as an appendix. This information shall be provided to the project design team to assist in the development of alignment alternatives.

(e) PRELIMINARY EVALUATION OF ALIGNMENT ALTERNATIVES

Evaluate alignment alternatives developed by the design team based on environmental, engineering, and cost constraints.

(f) COORDINATION MEETINGS

Environmental staff shall participate in up to five coordination meetings with the City to discuss the status and/or findings of environmental investigations and studies.

B. DUE DILIGENCE STUDIES

1. Waters of the U.S./Wetlands/Floodplains

The Engineer will conduct due diligence investigations and perform a field survey to confirm the presence and extent of jurisdictional waters and jurisdictional wetlands within the proposed right-of-way. Investigation findings and survey results will be documented in a Water Quality Technical Report. Wetland delineations will be conducted using the three-parameter approach as outlined in the U.S. Army Corp of Engineers (USACE) Wetlands Delineation Manual (1987) and Regional Supplement to the Wetland Delineation Manual for the Great Plains Region (2010). Wetland data forms will be completed assessing hydrophytic vegetation, hydric soils, and site hydrology at each wetland. The Water Quality Technical Report will include an assessment of Section 404 permit requirements. Copies of wetland data forms will be included in the technical report.

National Flood Insurance Program (NFIP) maps will be used to determine whether the proposed right-of-way encroaches on the base (100-year) floodplain. Floodplain areas within the project area will be identified and mapped; encroachment area (in acres) will be quantified. The Water Quality Technical Report will include a

discussion of the number and extent of encroachments, potential for increased flood hazard, any support of incompatible floodplain developments, and their potential impacts. In addition, if encroachments would occur, the technical report will include a preliminary indication of whether the encroachment would be consistent with or would require a revision to the regulated floodway.

The draft Water Quality Technical Report will be submitted to the City for review. The Engineer will respond to up to two (2) rounds of review comments from the City. After addressing the City's review comments, a final report will be submitted to the City for inclusion in the project record.

2. Threatened and Endangered Species Habitat Assessment

A survey of the project area will be conducted to identify potentially suitable habitat state and federally-listed threatened, endangered, and candidate plant and animal species. A Habitat Assessment Technical Report summarizing the habitat survey findings will be prepared. The technical report will include a literature review for known karst invertebrate and salamander habitat in the project area and an analysis of the potential for project-related impacts to threatened and endangered species and to designated critical habitat.

A draft Habitat Assessment Technical Report will be submitted to the City for review. The Engineer will respond to up to two (2) rounds of review comments from the City. After addressing the City's review comments, a final report will be submitted to the City for inclusion in the project record

Under this task project personnel will, if requested by the City, attend up to three (5) meetings with the City, USFWS, and/or the Williamson County Conservation Foundation.

3. Hazardous Materials Initial Site Assessment

A database search and visual inspection will be conducted to assess the potential for encountering hazardous materials/contaminated materials within the proposed right-of-way. The results of the database search/visual inspection will be documented in a Hazardous Materials Initial Site Assessment Technical Report. The technical report will contain, if warranted, recommendations for further investigation and/or testing.

A draft Hazardous Materials Initial Site Assessment Technical Report will be submitted to the City for review. The Engineer will respond to up to two (2) round of review comments from the City. After addressing the City's review comments, a final report will be submitted to the City for inclusion in the project record.

4. Cultural Resources

The cultural resources study would consist of desktop archival research, an intensive archeological field survey, and production of a report suitable for review by the SHPO in accordance with the THC's Rules of Practice and Procedure, Chapter 26, Section 26, and the Council of Texas Archeologists' (CTA) Guidelines for Cultural Resources Management Reports.

(a) Task 1—Archival Research and Agency Coordination

Prior to initiating fieldwork, Horizon will:

- (i) Perform basic archival research at the THC, the General Land Office (GLO), the National Park Service's (NPS) online National Register Information System (NRIS), and/or other relevant archives for information on previous cultural resources investigations conducted in the vicinity of the project area and previously recorded archeological sites and historic properties within and in the vicinity of the project area. Desktop archival studies will examine a 1.0-mile radius surrounding the project area.
- (ii) Review the abovementioned archives; historical, geological, topographic, and soil maps; and aerial photographs prior to initiating fieldwork to evaluate the potential for encountering significant cultural resources within the project area.
- (iii) Define the Area of Potential Effect (APE) of the proposed project based on applicable federal and state agency guidelines, taking into account the horizontal extent of the construction footprint, the vertical depth of ground-disturbing impacts, and potential indirect (e.g., viewshed) effects beyond the construction footprint.
- (iv) Apply for and obtain a Texas Antiquities Permit from the THC (required for any project that falls under the jurisdiction of the Antiquities Code of Texas). The application for a Texas Antiquities Permit requires the signature of the project sponsor and/or landowner, as appropriate, as well as the archeological Principal Investigator. The Texas Antiquities Permit must be issued by the THC prior to the initiation of any cultural resources field activities.

(b) Task 2—Archeological Survey Fieldwork

Horizon will:

- (i) Perform an intensive archeological survey, consisting of pedestrian walkover with surface inspection and systematic shovel testing at a level of intensity sufficient to meet or exceed the Texas State Minimum Archeological Survey Standards (TSMASS) and guidelines established by the CTA unless field conditions warrant excavation of more or fewer shovel tests.
- (ii) Document any cultural resources encountered to a sufficient degree to make preliminary recommendations of the significance of the resources in terms of their eligibility for inclusion in the NRHP and/or for designation as SALs, as appropriate.
- (iii) Inspect the locales of any previously recorded archeological sites within the project area, assess their current condition, and document the sites to a sufficient degree to make preliminary recommendations of the significance of the resources in terms of their eligibility for inclusion in the NRHP and/or for designation as SALs, as appropriate.

(c) Task 3—Technical Report

Horizon will:

- (i) Complete and submit State of Texas Archeological Site Data Forms (for new archeological sites) or State of Texas Archeological Site Update Forms (for previously recorded archeological sites) to TARL.
- (ii) Permanent site trinomials will be obtained from TARL for any new archeological sites documented within the project area during the survey.
- (iii) Assess the significance of any cultural resources within the project area in terms of their potential eligibility for inclusion in the NRHP and/or for designation as SALs, as appropriate.
- (iv) Develop a draft technical report detailing the project background, environmental and cultural setting of the project area, research goals and survey methods, survey results, recommendations for any cultural resources documented during the survey, and a bibliography of references cited suitable for review by the THC and any other applicable regulatory agencies.
- (v) Submit a preliminary review copy of the archeological draft report describing the results of the survey in electronic (PDF) format to the client or review. Following approval of the draft report by the client, Horizon will submit an electronic copy of the report to the THC and any other applicable regulatory agencies for review and comment. Horizon will coordinate review with the regulatory agencies unless the client would prefer to coordinate agency review directly.
- (vi) Respond to any comments on the draft report offered by the THC and any other applicable regulatory agencies and produce a final report.
- (vii) Submit the final report to the client and the THC.

(d) Task 4—Records Curation

Horizon will:

- (i) Prepare project records for curation at TARL per the requirements of the Antiquities Code of Texas and TARL's Stipulations and Procedures for the Preparation of Archeological Records and Photographs, Curation Supplies, and Sources and/or Stipulations and Procedures for the Preparation of Archeological Material Collections, as appropriate.

C. PUBLIC INVOLVEMENT

1. Project Management

CD&P will prepare monthly invoices and progress reports as requested to include activities completed, initiated, or ongoing during the reporting period. CD&P will also participate in regular status meetings with the City of Round Rock and the internal CD&P team to stay up to date on project development and technical issues that may trigger additional messaging or outreach needs.

- (a) Prepare monthly invoices (up to 24) and status reports (up to 12)
- (b) Participate in a project kick-off meeting
- (c) Participate in CP&Y internal meetings (up to 24) and regular status meetings with City of Round Rock (up to 12)

2. Public Involvement Plan

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CD&P will work with the City to develop a public involvement plan that will guide an inclusive and meaningful outreach program that incorporates input to develop community supported solutions. The plan will outline initial stakeholders to engage, outreach, an anticipated timeline, and evaluation metrics to gauge success of outreach and adjust strategies as needed.

(a) Develop Public Involvement Plan and update as needed throughout the study

3. Project Materials

CD&P will develop project materials to explain the project development and design process, and how to be involved. The purpose of these materials will be to relay information to the public in a clear, concise, and transparent manner. Maps and infographics will be developed for inclusion in materials to demonstrate elements of the project. CD&P will identify appropriate materials for different phases, including a fact sheet, Frequently Asked Questions, and email updates not related to public meetings, and update as needed throughout the process. Materials will be made available on the project website, at public involvement activities, and via mail or email as requested. If materials translation is deemed necessary, CD&P will work with the City of Round Rock to develop a supplement for these services.

CD&P will develop content to be shared on a project webpage hosted through the City of Round Rock's website. This content will include background information on the project and team contact information and will be updated to include public meeting details, links to meeting materials, and a public meeting summary report.

(a) Provide fact sheet and revise as necessary (up to 1)

(b) Prepare FAQs and revise as necessary (up to 1)

(c) Prepare project email updates (up to 3)

(d) Provide content for project page to be hosted on the City of Round Rock website

4. Outreach and Communications

CD&P will provide outreach to engage those that live near the project limits, travel in the area, and other groups and individuals that may be interested in the project. CD&P will coordinate with the City to gather existing contact lists, updating and maintaining a stakeholder database to include neighborhood contacts, landowners, City contacts, nearby businesses, elected/public officials, and any interested individuals. CD&P will assist the City with preparing timely and informative responses to stakeholder questions and comments, logging communication and outstanding action items in the database.

CD&P will coordinate with community groups, neighborhood associations, faith-based communities and local residents and businesses to share project information and updates. General outreach activities may include block-walking, phone calls, email blasts, and social media posts as directed by the City of Round Rock. Property owners and community groups that may be directly impacted by project outcomes will be contacted via mail and offered a one-on-one meeting with the project team or to arrange presence at a regularly scheduled group meeting. All meetings will be summarized with key takeaways and highlights of input.

(a) Develop and maintain a stakeholder database, including contact information and communication log

(b) Provide timely and informative responses to community inquiries and comments

(c) Conduct outreach to engage community groups, residents, and businesses

(d) Coordinate, facilitate, and document one-on-one or small group stakeholder meetings with potentially impacted property owners, community groups and local leadership (up to 15)

5. Public Meetings

CD&P will plan, schedule, conduct, and facilitate two NEPA-compliant public meetings with in-person and virtual participation options to maintain federal funding eligibility. Meetings will be planned at key milestones in project development at convenient locations and times. For both meetings, CD&P will coordinate with the City and the CP&Y team to support logistics coordination (including development and review schedules, venue booking, and facility prep), meeting promotion, dress rehearsal coordination and participation, and meeting facilitation. CD&P will promote the meeting through print advertisements, web notices, and mailers in accordance with NEPA guidelines, including development of an updated mailing list prior to each meeting, and identify additional promotion opportunities such as social media campaigns, outreach calls and emails, and signage placed in the project area. A media release and social media post will be prepared for each meeting, and CD&P will support media coordination such as preparation of talking points and interview coordination as needed. CD&P will develop and produce informative meeting materials and exhibits such as display boards, presentation slides and talking points, and project handouts. Documentation of each public meeting will be prepared in accordance with

environmental guidelines, including all input received and responses to comments.

- (a) Coordinate meeting logistics
- (b) Develop meeting announcements including official notice of public meeting, web notices, mailers, print advertisements, signage, outreach calls, media release and social media post for City distribution
- (c) Meeting materials and exhibits in paper and electronic formats (up to 2 rounds of revisions per meeting package)
- (d) Coordination and facilitation of two (2) meeting rehearsals
- (e) Coordination and facilitation of two (2) public meetings
- (f) Develop documentation package for each meeting (2)

III. SURVEYING SERVICES

A. PROJECT CONTROL SERVICES

The Surveyor will attempt to recover and utilize City of City of Round Rock NAD-83/93 (HARN) NAVD 88 datum, Texas State Plane Coordinate System, Texas Central Zone primary control monuments for this project unless requested to use another source of datum. In the case that the control has been destroyed the Client will be notified immediately. This scope and fee do not include effort to re-establish destroyed control. A Global Positioning System (GPS) and conventional land surveying methods will be used to establish additional project control if needed. These methods will also be used to perform the various tasks of this project.

B. Data Collection and Property Research

1. The Engineer will do the necessary research to obtain the deeds and plats, from recorded information, along the proposed project to help us establish the applicable boundaries or right-of-way.

C. DESIGN SERVICES

1. The Surveyor shall generate, recover, and/or verify existing horizontal and vertical project primary control at the site, if any, and reconcile the control to known existing intersecting projects.
2. The Surveyor shall establish or densify additional secondary control as needed for the project to collect data along the length of the project.
3. The Surveyor shall, at their discretion, use 5/8" iron rods with distinguishing caps, cotton spindles (paved areas) or other durable entities for the project control as applicable. The surveyor shall set three (3) brass discs over an iron rod for GPS points at both ends of the project and one near CR 112.
4. The Surveyor shall perform differential leveling through the project control (primary and secondary) to establish or extend vertical control for the project.
5. The project limits for surveying shall be the proposed alignment of Kenney Fort Boulevard from Old Settlers Blvd to University Blvd. (approximately 2.7 miles). This width is approximately 130 to 150-foot. The survey will extend along the cross streets.
 - (a) 300 foot east and 300 foot west on Old Settlers Blvd., right-of-way to right-of-way.
 - (b) 300 foot east and 300 foot west on Bluffstone., right-of-way to right-of-way.
 - (c) 200 foot north and 200 foot south of County Road 117, right-of-way to right-of-way.
 - (d) 200 foot west and 200 foot east of County Road 112, right-of-way to right-of-way.
 - (e) 400 foot west and 400 foot east of University Blvd., right-of-way to right-of-way.
6. The Surveyor shall perform a topographic/design survey within the project limits. The topographic/design survey includes, but is not necessarily limited to: roadway, ditches, major grade breaks, culverts, culvert types and sizes, metal beam guard fence, fences, driveways, mailboxes, traffic and other signs, striping, and visible above ground utilities.
7. The Surveyor shall survey driveways within the project limits to a distance of 20' beyond the proposed alignment or far enough to establish drainage.
8. The Surveyor shall provide digital photograph of each end of each cross road drainage structures located within the project limits.
9. The Surveyor shall process the collected information into a 1-foot contour DTM file utilizing Geopak V8i.

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10. The Surveyor shall locate right-of-way monumentation and other evidence to reestablish the existing right-of-way lines, within the project limits, for Old Settlers Blvd., Bluffstone Dr., County Road 117, County 112, and University Blvd. and adjacent parcels within the limits of survey. This is not to be construed as boundary surveying at this time nor is it considered taxable for the purposes intended at this time.
11. The Surveyor shall set project control (N, E, Elev.) in such manner to reasonably assure the control will survive construction.
12. The Surveyor shall locate trees that are 8 inches in diameter and larger, and note the size, species and canopy area.

D. ROW Documents

1. Develop the final ROW documents. The Surveyor will prepare up to twelve (12) parcel plats with metes and bounds descriptions signed and sealed by a Texas Registered Professional Land Surveyor for additional right-of-way acquisition along either side of the existing right-of-way corridor. The actual acquisition area will be delineated from information provided by the owner or prime consultant and verified in conjunction with Item III.B.1. Additionally, the Surveyor will prepare parcel plats and metes and bounds for up to twelve (12) temporary construction easements (no metes and bounds description) contiguous with the previously stated right-of-way acquisition parcels. These parcels will also be delineated from information provided by the owner or prime consultant and verified in conjunction with Item III.B.1.
2. The Surveyor will set monuments along the proposed additional right-of-way acquisition line as determined in Item III.D.1. The Surveyor shall use 5/8" diameter iron rods with brass disc caps stamped "CORR ROW" or other durable entities for the monumentation as applicable. Brass disc caps will be provided to the Surveyor. Concrete monuments will not be set.

E. GEOTECHNICAL LOCATIONS

1. The Surveyor will stake prior to boring and locate up to boring thirty (30) geotechnical locations. The Engineer is to provide the locations for the borings.

F. DELIVERABLES

1. The Surveyor shall provide:
 - (a) 2D MicroStation V8 planimetric file.
 - (b) 3D MicroStation V8 DTM file including break-lines and 1 foot contours.
 - (c) Geopak V8i DTM (tin) file.
 - (d) ASCII point file.
 - (e) Two CD-ROM containing the specified files.
 - (f) PDF file of each Surveyor's project field book.
 - (g) Spreadsheet of landowners for right-of-entry letters

G. ASSUMPTIONS

1. The Surveyor shall notify the client prior to performing the work if:
 - (a) Sufficient right-of-way monumentation cannot be found to re-establish the existing alignments and associated right-of-way lines along the project corridor.
 - (b) Traffic Control cannot be managed by the Surveyor's personnel.
 - (c) The work is delayed due to weather or other circumstances beyond the Surveyor's direct control.
 - (d) Existing Project Control cannot be recovered or verified.

H. UTILITIES

1. Subsurface Utility Engineering (SUE)
 - (a) The project consists of providing Quality Level (QL)-B on the existing underground utilities. QL-D and QL-C services are inclusive with the QL-B product.
 - (b) Provide QL-B services for the various utilities noted on the site visit for preparing this scope of services with associated fees. The various utilities noted are: water, sanitary sewer, natural gas, telephone communications (cable and fiber optic) and electrical. This scope of services is based upon the effort to provide SUE services for these utility systems.

- (c) Utility services from the main utility to the right-of-way to service a lot or structure are not included within this scope of service nor the estimated utility linear footage previously shown.
 - (d) Identify and map the existing utility facilities located on existing utility poles within the project limits. The facilities company name and contact information will be provided as part of the deliverables.
 - (e) Definitions:
 - (i) Quality Service Level D (QL-D) – This level of service is inclusive of QL-B and consists of collecting existing utility record information (as-built) from utility purveyors, municipalities, counties and other agency suppliers within the area of investigation. Contact the TxDOT Permit Office to obtain available records of any utility crossing IH 35 within the project limits.
 - (ii) Quality Service Level C (QL-C) – This level of service is inclusive of QL-B and consists of surveying and obtaining accurate horizontal position of visible utility surface features associated with the project area to be designated by the Engineer.
 - (iii) Quality Service Level B (QL-B Designating Services) – Designate is to indicate, by marking with paint, the presence and approximate horizontal location of subsurface utilities using geophysical prospecting techniques, including, without limitations, electromagnetic, sonic, and acoustical techniques.
 - (iv) Quality Service Level A (QL-A Locating (Test Hole) Services) – Locating services is to locate the accurate horizontal and vertical position of subsurface utilities by excavating a test hole using vacuum excavation techniques and equipment that is non-destructive to utilities.
2. The Engineer will develop a contact list of the affected utility owners in the project corridor.
 3. The Engineer will contact each utility company and meet individually with them to review their assumed utility locations developed from the SUE process. The Engineer shall attend the City monthly coordination meetings, as necessary for coordination. It is assumed up to twenty four (24) meetings.
 4. The Engineer will prepare scroll plots indicating researched utility locations to provide to utility companies / owners for their review and comment.
 5. Utility Coordination
 - (a) Preliminary Design Phase
 - (i) Project Team Meetings. Utility Coordinator shall attend project team meetings (up to 4) to assist in minimizing utility impacts and discuss alternatives. These meetings will include meeting preparation, travel time, and meeting.
 - (ii) Develop Utility Contact List. Utility Coordinator will established contact with existing utility companies within and adjacent to the project area and create a utility contact list. This list will be maintained throughout the project.
 - (iii) As-builts/Records Research. Utility Coordinator shall make contact with all known utilities providers in and adjacent to the project area and request maps and/or as-builts of their existing facilities. Utility Coordinator will make a site visit for additional field verification.
 - (iv) Existing Utility Layout. Utility Coordinator, shall create an existing utility layout in the latest version of MicroStation V8 or AUTOCAD using base topo and proposed roadway files provided by CP&Y and Subsurface Utility Engineering (SUE) provided by *The Wallace Group*. This layout shall include all existing utilities in relation to proposed roadway alignment to assist in conflict assessment, monitor necessity of relocation and evaluate alternatives.
 - (v) Preliminary Conflict Assessment. Utility Coordinator will perform a preliminary conflict assessment to determine utility conflicts within the proposed roadway alignment.
 - (vi) Initial Project Notification Letters. Utility Coordinator will prepare and mail written notification letters to all known Utility Owners within and adjacent to the project site.
 - (vii) Project Kick-Off Utility Coordination Meeting. Utility Coordinator shall establish contact with existing utility companies within and adjacent to the Project and set up a utility coordination meeting to discuss proposed roadway alignment. This meeting will include meeting preparation, travel time, meeting and follow-up meeting minutes. Utility Coordinate will set agenda for all coordination meeting as directed by the *City* and *CP&Y*.

IV. PLANS, SPECIFICATIONS & ESTIMATE

The engineer will develop and submit Plans, Specifications & Estimates (PS&E) plans at levels consistent with and required for City 30%, 90%, and final 100% plans.

A. ROADWAY DESIGN CONTROLS

1. Miscellaneous Plans

- (a) A project title sheet will be prepared as required for the construction plans.
- (b) A detailed index of sheets will be prepared that shows each sheet's location in the plan set, as well as its corresponding sheet number. This index will be updated throughout the submittal process to allow for easier reference during the review process.
- (c) Project layout sheets will be prepared at a scale of 1"=200' that clearly indicates the limits of the entire project.
- (d) Benchmark layout sheets will be completed at a scale of 1"=200' that clearly indicate the benchmark locations and associated control information. These sheets will later be sealed by a RPLS for submittal.

2. Roadway Plans & Geometry

- (a) Existing typical sections will be completed depicting the existing conditions of the project roadways.
- (b) Proposed typical sections will be completed depicting the improvements to Kenney Fort Blvd and cross streets. The proposed typical sections are intended to show the general cross-sectional configuration of the roadway in logical sections, and will be prepared to the appropriate level of detail and limits to convey that general information.
- (c) A horizontal alignment data sheet will be prepared depicting the horizontal geometric information for the project roadways to be included in the construction plan set.
- (d) Kenney Fort Blvd plan and profile sheets shall be completed depicting the proposed construction. The plan and profile sheets will be prepared at a scale of 1"=100' H and 1"=10' V.
- (e) Cross Street plan and profile sheets (University Blvd, CR 112, CR 117, Bluffstone, Old Settlers Blvd., Wallin Bradley) shall be completed depicting the proposed construction. The plan and profile sheets will be prepared at a scale of 1"=100' H and 1"=10' V.
- (f) Supplemental grading sheets will be prepared at a scale of 1"=50' for areas of the project that require additional grading information for construction or review purposes.
- (g) The Engineer shall provide plan sheets of removals at a scale of 1"=100'. Removal sheets shall clearly identify the disposition of roadway appurtenances. Description of removal items, including material, shall be included.

3. Grading and Details

- (a) Design cross sections will be completed at 50-foot stations and other locations as necessary for the determination of cut and fill quantities. These sections will also be used to further refine the design vertical geometry. Cut and fill quantities determined from the design cross sections will be shown on the plan/profile sheets. Cross sections will not be developed as a deliverable for phased TCP.
- (b) The Engineer shall complete intersection layouts for five (5) intersections/locations. The intersection layouts will include the design of the pavement and drainage layouts, as well as other pertinent details not discernable elsewhere in the plans.
- (c) Driveway details will be prepared for each driveway along the project corridor. When possible these driveways will be defined in a tabular format. Non-typical driveways may require special details.
- (d) The Engineer will develop driveway profiles as required for the project. These profiles will be developed to show driveway tie-back slopes, as well as limits for the contractor's information.
- (e) Miscellaneous roadway detail sheets will be developed for the project. The sheets will depict details required that are not defined in standard detail sheets. When possible, City of Round Rock, TxDOT Statewide and TxDOT Austin District standards will be used for the project development.

B. DRAINAGE DESIGN

1. Crossing Structure Hydrology and Hydraulic Analysis

Perform hydrologic and hydraulic analysis/design to determine sizes of major and minor cross drainage structures except for those along Dyer Creek.

Anticipated structures are:

- (i) Outfall at Old Settlers Boulevard into Chandler Branch Tributary 5.2
- (ii) Crossing/outfall to Chandler Branch Tributary 5 north of Bluffstone Drive
- (iii) McNutt Creek near CR 112
- (iv) McNutt Creek culvert improvements crossing CR 112
- (v) Outfall to Dam 16 or McNutt Creek Trib 01B

(a) Data Collection

The Engineer will utilize the data collected during the schematic phase and build upon it with field visits as necessary to observe conditions of existing structures, channels and field conditions. The Engineer will obtain and review existing hydraulic and hydrologic data associated with nearby developments and existing outfalls into the proposed roadway corridor.

(b) Hydrology

The Engineer will expand upon the hydrology developed during the schematic with the crossing structures above in order to assess the hydrologic impact of the proposed improvements. Hydrologic analysis for crossings (as listed above) will be performed in accordance with the City of Round Rock Drainage Criteria Manual. Existing and proposed flows for the two (2), ten (10), twenty-five (25) and one-hundred (100) year frequency storms will be computed. Existing and proposed external drainage area maps will be developed at a scale of 1" = 500'. An additional drainage area map will be provided at a larger scale to show the overall project and drainage basin divides.

(c) Hydraulics

The Engineer will analyze existing and proposed conditions hydraulics and modify from the schematic design as a result of the proposed improvements using HEC-RAS, FHWA HY-8, GEOPAK Drainage, or StormCAD software. Hydraulic analysis for bridge class culverts (any culvert with a clear opening of more than 20-feet, measured along the center of the roadway between inside of end walls), and FEMA 100-year floodplain crossings will be performed with HEC-RAS. Hydraulic analysis for cross structures that are not bridge class culverts or FEMA crossings, will be performed with HY-8 or StormCAD. For crossings that are incorporated into the onsite storm drain system or are long enough to warrant storm drain analysis over culvert analysis, GEOPAK Drainage or StormCAD will be used. In the event that a minor crossing is incorporated into the storm sewer system, this analysis will be included in the storm sewer analysis and modeled as described in Storm Sewer Design. This includes assessing the hydraulic impacts as a result of any changes to the hydrology. Tailwater assumptions will be determined from the water surface elevations of McNutt Creek and Chandler Branch Tributary 5 from most up to date UBCWCID model for outfalls within a FEMA floodplain based on a peak timing assessment. The Engineer will summarize the relative impacts to computed water surface elevations between existing and proposed conditions on the culvert layout sheets and provide additional detailed information on hydraulic data sheets.

(d) Culvert Layout Sheets

Culvert layout plan & profile sheets will be developed at all the crossing locations specified not covered by storm sewer plan and profiles. These sheets will be developed at a scale of 1"=40' H and 1"=10' V. It is anticipated that there will be 5 sheets. For crossings that are incorporated into the onsite storm drain system, sheets will be developed with the onsite storm drain plan and profiles sheets. It is not anticipated that this will require any additional storm drain sheets.

(e) Hydraulic Data Sheets

A hydraulic data sheet will be developed at all the crossing locations specified above (5 crossing total) not covered by storm sewer plan and profiles. These sheets will include data related to the performance of the crossing such as water surface elevations, tailwater assumptions, and overtopping data. It is anticipated that there will be 5 sheets.

(f) Culvert Standards and Detail Sheets

Culvert standards will be selected based on headwall configuration and fill conditions. Details will developed as needed for non-standard headwalls, special grading at upstream and downstream transitions and energy dissipation. It is anticipated that there will be 4 detail sheets and standards provided as required.

2. Hydrology and Hydraulic Impact Analysis

This section includes the analysis of the project impacts to McNutt Creek, McNutt Creek Trib 01, McNutt Creek

Trib 01B, Chandler Branch Trib 5.2 and Chandler Branch Tributary 5 including the crossing at:

(i) McNutt Creek

a) CR 112

(ii) Chandler Branch Tributary 5

a) Bluffstone Drive

b) Old Settlers Boulevard

(b) Data Collection

The Engineer will review the schematic data with respect to the final design. Field visits will be conducted as necessary to obtain data to finalize and refine analysis.

(c) Hydrology

No hydrology analysis is anticipated for mitigation purposes.

(d) Hydraulics

No hydraulic analysis is anticipated for mitigation purposes.

(e) Hydraulic Impact Mitigation

No hydraulic impact mitigation design anticipated.

(f) Scour Analysis

The Engineer shall perform a scour analysis for one proposed bridge structure and provide the potential scour depths, envelope and recommended countermeasures including bridge design modifications and/or revetment.

3. Storm Sewer Design

(a) Interior drainage area maps will be finalized at a scale of 1"=100'. These maps will depict drainage area boundaries and flow direction arrows. Each area will be identified and cross-referenced to the calculation sheets. It is anticipated that there will be 12 sheets.

(b) Run-off to each inlet and inlet hydraulic information will be calculated in accordance with City of Round Rock Drainage Criteria Manual and shown on the run-off and inlet computation sheets. It is anticipated that there will be 4 sheets.

(c) Storm sewers will be analyzed and computations will be prepared for the storm sewer design using StormCAD, Geopak Drainage or other approved software.

(d) Storm sewer plan and profile sheets will be completed depicting locations of inlets, manholes, storm sewers, culverts, known utilities, channel improvements, and ditch locations and flowlines as required. The storm sewer plan sheets will be prepared at a scale of 1"=50'. Storm sewer profiles will be prepared at a scale of 1"=50' H and 1"=5' V. Storm sewer profiles will show pipe size and type, slope, existing and proposed ground lines above the pipe, pertinent hydraulic information, and locations of inlets and junctions. It is anticipated that there will be 12 plan sheets and 24 profile sheets.

(e) The Engineer will prepare a tabular ditch layout schedule that depicts pertinent information about the roadside ditch geometry and design. This table will include station, offset, flow line elevation, ditch lining material, as well as ditch bottom width. The tables will be shown the hydraulic data sheets. It is anticipated that there will be 1 sheet.

(f) The Engineer shall provide drainage design details for "non-standard" drainage structures in instances where they are not covered by City of Round Rock or TxDOT standard details. Structural design will be included for these structures. The Engineer shall use City of Round Rock or TxDOT standard details where practical. It is anticipated that there will be 3 sheets.

(g) The Engineer will identify areas within the construction of the storm sewer and culvert construction that will require trench protection or special shoring.

4. Drainage Report

The Engineer will update the preliminary drainage report with the final hydrology and hydraulic data from the PS&E design.

5. FEMA Permitting

The preparation of a FEMA permit including a Conditional Letter of Map Revision (CLOMR) or a Letter of Map Revision (LOMR) is not included in this scope of services.

6. SW3P and Erosion Control

- (a) Erosion control plans will be prepared for the length of project including the removed section of CR 117 between CR 112 and north of Linda Herrington Elementary School. Temporary storm water management devices will be needed to minimize the sediment runoff during construction of this project. The anticipated design components to be utilized on this project are erosion control logs, sand bags, rock filter dams, inlet protection, soil retention blanket, tree protection, and construction entrance and exits or similar. A temporary erosion control plan depicting the entire project in one phase will be developed with notes that indicate that the contractor is responsible for phasing the devices along with the construction sequencing. Permanent erosion control measures will be included on these sheets as well. It is anticipated that there will be 14 sheets.
- (b) A Storm Water Pollution Prevention Plan (SW3P) will be prepared for this job in accordance with TCEQ regulations.
- (c) Erosion control details will be prepared for any related items that are not covered by City of Round Rock and TxDOT standard details.

C. SIGNING, MARKINGS AND SIGNALIZATION

1. Small Signing and Pavement Markings

- (a) Signing and Pavement marking layouts will be prepared at a scale of 1"=100'. Road signs and markings will be shown all on the same plan sheet. These layouts will depict striping and delineator type and location, as well as MGBF location, lengths, and end treatments. Each sign will have a corresponding number for cross-reference to the sign summaries.
- (b) Pavement marking details will be prepared for non-standard conditions.
- (c) Detail sheets for small signs will be prepared for non-standard signs. This sheet is intended to show the overall dimensions of the signs by determining letter size and spacing. Details will not be to scale.

2. Signalization

Traffic signal plans will be prepared for the following locations:

- (i) Kenney Fort Blvd and Old Settlers Blvd intersection - Modification of existing mast arm signal to provide for the northern extension of Kenny Fort Boulevard and to accommodate a right turn lane on Kenney Fort Boulevard in both the northbound and southbound directions. One (1) new mast arm pole is expected to be installed and two (2) mast arm poles are expected to be relocated. Other associated signal equipment may be adjusted or relocated based on the roadway configuration, as required.
 - (ii) Kenney Fort Blvd and Wallin Bradley - New signal installation
 - (iii) Kenney Fort Blvd and CR 112 - New signal installation
 - (iv) Kenney Fort Blvd and University Blvd - New signal installation
- (a) Collect and evaluate traffic data, including forecasted traffic volumes and other recommendations from the Traffic Analysis Technical Memorandum.
 - (b) Conduct informational traffic signal warrant study to confirm and/or determine conditions for traffic signal installations. Utilize forecasted traffic volumes for future analysis. Formal signal warrants are not met when using forecasted traffic volumes. Consequently, this study will inform decision making for signal design and implementation.
 - (c) Conduct field review at the intersections to note and verify physical constraints, power connection, utility placement, and any other details necessary for signal plan preparation.
 - (d) Coordinate with electric utility company in the field to discuss pole locations and source of power for each signal. Identify potential overhead utility conflicts, and coordinate with the City and utility companies to resolve conflicts. Two (2) meetings are assumed for budget purposes
 - (e) Prepare existing signal layout for Kenney Fort Blvd and Old Settlers Blvd. Plans will be developed at a scale of 1" = 40' (or larger) and will indicate existing conditions, existing utilities, existing striping, and existing traffic control devices, if applicable. No existing layout will be created for the new intersections of Kenney Fort Blvd and Wallin Bradley, Kenney Fort Blvd and CR 112 and Kenney Fort Blvd and University Blvd.

- (f) Develop traffic signal layouts at a scale of 1"=40' (or larger) and indicate existing conditions, location of signal poles, conduit, ground boxes, proposed traffic control devices, existing and proposed utilities, and proposed roadway improvements. Traffic signals will include accessible pedestrian signals, illumination, internally lighted street name (ILSN) signs, stop line/advanced detection, emergency vehicle preemption, and communications equipment. Wiring for power to controller, illumination, and ILSN signs will run in separate conduit from traffic signal cable.
- (g) Develop schedules, signing, and phasing sheets for each traffic signal location. Schedules and diagrams will include phasing diagrams, conduit and conductor schedules, pole wiring schedules, electrical service data, and other information based on each signal installation, as required.
- (h) Prepare traffic signal elevations showing the vertical clearance required for each mast arm and pedestrian push button/signal head mounting height.
- (i) Prepare vehicle detection details based on proposed traffic signal layout sheets to demonstrate detector locations and detection zones for each signal approach.
- (j) Identify and prepare standard traffic signal drawings. Standards are generally expected to be TxDOT standards but may include standard drawings from the City of Round Rock or other agencies, as appropriate. Standards that require modification will be corrected and sealed by the Engineer.
- (k) Identify and prepare traffic signal general notes. Review general notes provided by the City for applicability to the project. Mark-up and return a set to the City for inclusion in the final plan set.
- (l) Identify and prepare applicable specifications, special specifications, and special provisions for submission with the final PS&E package.
- (m) Prepare opinions of probable construction cost for traffic signal items for submission at PS&E milestones.
- (n) Provide shop drawing review

D. MISCELLANEOUS ROADWAY

1. Retaining Walls

- (a) The Engineer will investigate each wall location and determine what the most suitable wall type is for each application. The anticipated wall type is MSE.
- (b) The Engineer will provide a location plan of all walls at a scale of 1"=200'. The intent is to show the location of all walls in plan including the wall designation and beginning and ending stations.
- (c) The Engineer shall prepare retaining wall layouts at a max scale of 1"=50' H and 1"=5' V. The layouts will show plan and profile views of the retaining wall. Up to 3,500 lf of walls are assumed.
- (d) Non-proprietary wall designs (i.e., Tie-back, soil nailed, drill shaft) are not included in this scope of work.

2. Traffic Control Plan

- (a) Traffic control typical sections will be prepared for each stage of the construction sequence to clearly delineate the position of the existing traffic with respect to the proposed construction. Temporary traffic barriers and pavement markings will also be shown and dimensioned.
- (b) The Engineer will develop overview plans for each stage of traffic control. These plans will act as key maps for each phase of TCP and shall be developed at a 1"=400' scale.
- (c) The Engineer will prepare 1"=400' plan layouts of all advance warning signs for Kenney Fort Blvd and all cross streets.
- (d) A detailed narrative for the sequence of construction and traffic control general notes will be prepared and submitted to the City for review and incorporation into the plans. The narrative will include a phase-by-phase, step-by-step written account of the proposed activities throughout the construction process. This is intended to be a narrative account of the activities shown in the traffic control plan layouts.
- (e) Detailed traffic control plans will be prepared at a scale of 1"=100'. These plans will be developed based on the City's approval of the conceptual plans developed at the schematic design level. This plan will describe the maintenance of traffic and sequence of work for each phase of the proposed construction. Detour alignments, location of work areas, temporary paving, temporary shoring, signing, barricades and other details will be required to describe the traffic control plan. The Engineer will be required to ensure that proper drainage can be maintained during each phase of construction.
- (f) Traffic control details will be developed for items not covered by City of Round Rock or TxDOT standard details.
- (g) An Engineer's opinion of construction schedule will be computed in order to determine an approximate duration for each of the phases of construction. The schedule will be prepared using Microsoft Project.

3. Illumination and ITS

The engineer shall coordinate with the electrical provider for the City (Oncor) on the continuous illumination design and electrical service locations.

- (a) The Engineer will design continuous and safety lighting along the project corridor. The lighting will be shown on illumination layouts.
- (b) The Engineer shall provide electrical circuit plans and details for the roadway lighting systems within the project limits.
- (c) The Engineer will coordinate with the City in identifying power sources, conduit runs, and will show them on the project plans. The Engineer shall identify potential overhead utility conflicts, and coordinate with the State and the utility company to help resolve the conflicts.
- (d) The Engineer will layout conduit for future ITS lines to interconnect City signals. The layout shall include conduit and ground box locations.

4. Quantities

Quantities will be tabulated for each of the following and as necessary to bid this project:

- (a) Traffic Control (per each phase)
- (b) Earthwork
- (c) Roadway
- (d) Retaining Walls
- (e) Removal
- (f) Drainage
- (g) Culverts
- (h) Small / Large Signs
- (i) Pavement Markings
- (j) Signals
- (k) Illumination
- (l) Utilities
- (m) Erosion Control and SW3P

5. Summary Sheets

Quantities that are calculated will be tabulated on individual summary sheets for inclusion in the construction plan set:

- (a) Traffic Control (per each phase)
- (b) Earthwork
- (c) Roadway
- (d) Retaining Walls
- (e) Removal
- (f) Drainage
- (g) Culverts)
- (h) Small / Large Signs
- (i) Pavement Markings
- (j) Signals
- (k) Illumination
- (l) Utilities
- (m) Erosion Control and SW3P

6. Standards, Specifications and Estimate

- (a) The Engineer will download the appropriate standards for the project from the City of Round and TxDOT's web site. Standards that require modification will be corrected and sealed by the Engineer. All other standards will have their title blocks filled out with the applicable project data and printed for inclusion in the final plan set.
- (b) A tabulation of applicable specifications, special specifications and special provisions will be prepared for submission with the final PS&E package.
- (c) The Engineer will review general notes provided by the City for applicability to the project. The Engineer will mark-up a set and return it to the City for their inclusion in the final plan set. The Engineer will work with the City to complete the basis of estimate prior to beginning quantity calculations.

- (d) An opinion of probable construction cost will be prepared at the 30%, 60% 90% and prior to final PS&E submittal, and supplied to the City in Microsoft Excel format.

7. Bid Documents

- (a) The Engineer will prepare contract bid documents and proposals and make them available in electronic format (PDF) as well as hard copy for the City's use and publish using CivCast or other system as directed by the City of Round Rock

V. PROJECT MANAGEMENT

A. PROJECT MANAGEMENT

1. Create and submit monthly invoices suitable for payment by the City.
2. Prepare monthly progress reports for submission with the monthly invoices to provide a written account of the progress made to date on the project.
3. Prepare a schedule depicting the key milestones and critical path items necessary to complete the environmental, public involvement and PS&E phase of project development. The schedule shall incorporate and depict the various aspects of the environmental process (including review times) and the interdependence of various tasks, subtasks, milestones and deliverables. The schedule will be updated monthly throughout the duration of the project to reflect substantial changes in progress that are found during review and coordination meetings. Any issues that need resolution or action items will be identified in the progress report. The environmental schedule shall be incorporated into the overall project schedule.
4. Meet formally twice a month with the City to review project progress.
5. Meet with property owners, stakeholders, the City, County and TxDOT staff as required through the project development process.
6. The Engineer will have internal meetings with the consultant design team every two weeks for the length of the project. It is assumed that these meetings will include key personnel from each discipline and will be required to discuss and resolve project issues.
7. Prepare project meeting summaries for applicable meetings during the project development process.
8. The Engineer shall prepare and execute contracts with sub-consultants, monitor sub-consultants activities (staff and schedule), complete monthly reports and review and recommend approval of sub-consultant invoices.
9. Coordinate and review subconsultant work activities and submittals. The Engineer will review and coordinate work of sub-consultants to ensure quality products are delivered to the City. The Engineer will also be responsible for the consistency and coordination between plans developed by each sub-consultant on the design team.
10. The Engineer shall formally close out the project and perform a documented archive process.

VI. BID AND CONSTRUCTION PHASE SERVICES

A. BID PHASE SERVICES

1. The Engineer will coordinate with the City in all aspects of the Bid Package including but not limited to answering prospective bidder questions and preparing addenda as necessary.
2. The Engineer will attend one pre-bid meeting.
3. The Engineer will assist the City at contract bid opening.
4. The Engineer will tabulate the bids, research low bidder and make a recommendation of award to the City.

B. CONSTRUCTION PHASE SERVICES

1. Create and submit monthly invoices suitable for payment by the City.
2. The Engineer shall attend the pre-construction meeting.
3. The Engineer shall attend up to thirty (30) construction meetings as requested by the City.

4. The Engineer shall provide Construction Support Services at the written request of the City project manager. The written request shall include a description of the work requested, a mutually agreed upon time limit, a mutually agreed upon level of effort, a defined deliverable and any special instructions for coordination and submittal. These services shall include, but are not limited to the following:
 - Responding to requests for information (RFIs)
 - Providing redesign as directed by the City for Change orders and documentation
 - Other project related tasks in support of the City during construction

The Engineer shall provide minor redesign as requested by the City project manager. In the event that revisions are requested, and the work is considered to be additional to that set forth on the original contract or scopes of work, the Engineer shall prepare a budget and a schedule for the additional work requested. The Engineer shall not commence work on a task prior to receiving written approval by the City.

5. Review the Application for Payment and supporting documentation submitted by the Contractor, recommended to the Owner the amount that the Contractor is to be paid on monthly estimates as required by the Construction Contract. An eighteen (18) month construction schedule is assumed.
 - (a) Such recommendation for payment to the Contractor shall not be a representation that the Engineer:
 - has made exhaustive or continuous on-site observations to check the quality or quantity of the Contractor's work,
 - has reviewed construction means, methods, techniques, sequences, or procedures,
 - has reviewed copies of invoices received from subcontractors, material suppliers or other data requested by the Owner to substantiate the Contractor's right to payment,
 - has ascertained how or for what purpose the Contractor has used monies previously paid by the Owner, or
 - has determined that title to any of the Contractor's work has passed to the Owner free and clear of any liens, claims, security interests or encumbrances.
6. Upon notice from the Contractor that the Contractor's work is ready for its intended use, conduct, in company with the Owner's representative and the Contractor, an inspection to determine if the work is substantially complete. If the Owner and the Engineer consider the work substantially complete, issue a certificate of substantial completion containing a list of required tasks for the Contractor to complete prior to issuance of certificate of final completion. Conduct a final inspection together with the Owner and the Contractor to determine if the work has reached final completion so that the Engineer may recommend final payment to the Contractor. If appropriate, make recommendations to the Owner for final payment to the Contractor.
7. Provide shop drawing review. The shop drawing submittals will be limited to those specifically called for in the construction contract documents (plans, standard specifications, special provisions to the standard specifications and special specifications). Such reviews will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto.
8. An engineer's concurrence letter and 11"x17" record drawings (one Mylar copy and a digital copy on CD) will be submitted to the Public Works Department. The Engineer and Contractor shall verify that all final revisions and changes have been made to the Mylar and digital copy prior to City submittal. Record construction drawings shall be provided to the City in digital format as AutoCAD ".dwg" files, MicroStation ".dgn" files or ESRI ".shp" files as well as PDF ".pdf" on CD. The set of Record Drawings, which are stamped by the Engineer, shall be the sole documents relied upon by the Owner as a reflection of the condition of the project location after completion of the construction activities.

EXHIBIT C

Work Schedule

Attached Behind This Page

EXHIBIT D

Fee Schedule

Attached Behind This Page

**Kenney Fort Blvd.
Segment 5 & 6
City of Round Rock**

Task Description	Total Cost
<u>TOTAL LABOR COSTS</u>	
I. ROUTE DESIGN STUDIES	
DATA COLLECTION	STV \$ 5,875.00
AGENCY COORDINATION	STV \$ 17,450.00
SCHEMATIC LAYOUT DEVELOPMENT	STV \$ 121,755.00
GEOTECHNICAL	Raba Kistner \$ 27,865.00
DRAINAGE	Halff \$ 79,886.96
TRAFFIC STUDY	ATG \$ 15,576.00
I. ROUTE DESIGN STUDIES Subtotal	\$ 268,407.96
II. Environmental & Public Involvement	
Environmental Services	STV \$ 30,740.00
Due Diligence Studies	STV \$ 100,500.00
Cultural Resources	Horizon \$ 17,700.00
Public Involvement	STV \$ 62,970.00
Public Involvement	CD&P \$ 107,075.00
II. Environmental & Public Involvement Subtotal	\$ 318,985.00
III. SURVEYING SERVICES	
Survey	STV \$ 174,117.00
SUE	STV \$ 97,412.00
Utility Coordination	CobbFendley \$ 60,759.00
III. SURVEYING SERVICES Subtotal	\$ 332,288.00
IV. PLANS, SPECIFICATIONS AND ESTIMATE	
Roadway Design Controls	STV \$ 262,365.00
Drainage Design	Halff \$ 407,929.05
Signing, Markings	STV \$ 74,750.00
Traffic Signalization	STV \$ 105,395.00
Miscellaneous Roadway	STV \$ 308,605.00
IV. PLANS, SPECIFICATIONS AND ESTIMATE Subtotal	\$ 1,159,044.05
V. PROJECT MANAGEMENT	
Project Management (18 months)	STV \$ 75,485.00
Project Management - Halff	Halff \$ 14,353.42
Project Management - ATG	ATG \$ 5,940.00
V. PROJECT MANAGEMENT Subtotal	\$ 95,778.42
VI. Bid and Construction Phase Services	
Bid Phase	STV \$ 11,610.00
Bid Phase - Halff	Halff \$ 8,227.62
Construction Phase	STV \$ 83,055.00
Construction Phase - Halff	Halff \$ 38,110.19
VI. Bid and Construction Phase Services Subtotal	\$ 141,002.81
SUBTOTAL LABOR EXPENSES	
	\$ 2,315,506.24
EXPENSES - STV	STV \$ 10,140.00
EXPENSES - Raba Kistner	Raba Kistner \$ 39,879.30
EXPENSES - CD&P	CD&P \$ 4,425.00
EXPENSES - ATG	ATG \$ 156.25
EXPENSES - Cobb Fendley	CobbFendley \$ 1,132.00
EXPENSES - Halff	Halff \$ -
GRAND TOTAL	\$ 2,371,238.79
<u>SUMMARY of Cost breakdown by Firm</u>	
	STV \$ 1,542,224.00
	CobbFendley \$ 61,891.00
	Horizon \$ 17,700.00
	Halff \$ 548,507.24
	CD&P \$ 111,500.00
	ATG \$ 21,672.25
	Raba Kistner \$ 67,744.30

**Kenney Fort Blvd.
Segment 5 & 6
City of Round Rock**

Fee Schedule/Budget

Fee Schedule/Budget for STV, Inc.

Project Phase	Task Description	Project Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior CAD Technician	CAD/GIS Technician	Sr ENV Planner	ENV Planner II	Admin	Total Labor Hours	Total Direct Labor Costs
		\$315.00	\$235.00	\$175.00	\$160.00	\$125.00	\$150.00	\$95.00	\$240.00	\$110.00	\$95.00		
I. ROUTE DESIGN STUDIES													
A DATA COLLECTION													
1, 2	Conduct site visit (2 visits)		2	8		8						18	\$ 2,870.00
3	Collect existing plans and data	1			2	8		4				15	\$ 2,015.00
4	Collect parcel and plat data			2	4							6	\$ 990.00
												39	\$ 5,875.00
B AGENCY COORDINATION													
1	Prepare for and conduct kick-off meeting with City	4			8	12		2	4	2		32	\$ 5,410.00
2	Prepare for and conduct kick-off meeting with County	4		4		4		2	4	2		20	\$ 3,830.00
	Hold up to 3 meetings with the County	6		6					6			18	\$ 4,380.00
3	Prepare for and conduct kick-off meeting with Developers	4		4		4		2	4	2		20	\$ 3,830.00
												90	\$ 17,450.00
D SCHEMATIC LAYOUT DEVELOPMENT													
1	Develop roadway design criteria and compile spreadsheet	1	1		4							6	\$ 1,190.00
2	Alignment Study												
a	Develop alternative geometric configuration	6	9	30	42	100	12	9				208	\$ 31,130.00
b	Produce exhibit depicting alternatives for review	3	3	6	10	20		40				82	\$ 10,600.00
5	Develop existing and proposed typical sections	1	4		16	24		16				61	\$ 8,335.00
6	Develop schematic cross sections at 100' intervals	1	12		24	100						137	\$ 19,475.00
7	Determine retaining wall limits	1	3		8	16						28	\$ 4,300.00
8	Develop conceptual traffic control plan	2	8		16	24		12				62	\$ 9,210.00
9	Develop proposed pavement edges	1	4		30	60		12				107	\$ 14,695.00
10	Develop two (2) engineer's opinion of probable cost	2	6		8	20						36	\$ 5,820.00
11	Prepare Schematic Layout plots of corridor	4	8		16	60		40				128	\$ 17,000.00
												855	\$ 121,755.00

**Kenney Fort Blvd.
Segment 5 & 6
City of Round Rock**

Fee Schedule/Budget

Fee Schedule/Budget for STV, Inc.

Project Phase	Task Description	Project Manager	Design Engineer	ENV Manager	Sr ENV Planner	ENV Planner IV	ENV Planner III	Sr Env Scientist	Sr Env Scientist IV	Sr Env Scientist III	Senior Technician	CAD/GIS Technician	Admin	Total Labor Hours	Total Direct Labor Costs
		\$315.00	\$160.00	\$245.00	\$240.00	\$160.00	\$140.00	\$250.00	\$160.00	\$125.00	\$125.00	\$95.00	\$95.00		
II. Environmental & Public Involvement															
A Environmental Services															
1	Right of Entry			8			16					24		48	\$ 6,480.00
2	ENV Constraints Analysis													0	\$ -
a	Obtain Existing Env Constraints Data				2	2	4	2	2	8	2	8		30	\$ 4,190.00
b	Field Reconnaissance				4		4	4		4				16	\$ 3,020.00
c	Preliminary Env Constraints Map			4	2	2		2	2		4	8		24	\$ 3,860.00
d	Prepare Technical Memorandum			4	2	4		2	2				8	22	\$ 3,680.00
e	Preliminary Evaluation of Alignment Alternatives			2	2			2			4	2		12	\$ 2,160.00
f	Coordination Meeting (Up to 5)			10	10			10						30	\$ 7,350.00
														182	\$ 30,740.00
B Due Diligence Studies															
	Waters of the US/Wetlands/Floodplains			16				24	100	100	24	24	8	296	\$ 44,460.00
	Threatened/Endangered Species Habitat Assessment			16				20	60	60	24	24	8	212	\$ 32,060.00
	Hazardous Materials Initial Site Assessment			16	20	32	40				12	24	8	152	\$ 23,980.00
														660	\$ 100,500.00
C Public Involvement															
	Review PI Plan and associated PI materials	2		16										18	\$ 4,550.00
	Conduct door-to-door outreach for project		8	8			8			8				32	\$ 5,360.00
	Stakeholder Meetings (up to 15)	15		15								20		50	\$ 10,300.00
	Coordinate & Attend (2) Public Meeting/review report	8	8	24	20			10			20	20		110	\$ 21,380.00
	Coordinate & Attend (2) Public Workshop/review report	8	8	24	20			10			20	20		110	\$ 21,380.00
														320	\$ 62,970.00
II. Environmental & Public Involvement- SUBTOTAL															
HOURS SUB-TOTALS		33	24	163	82	40	72	86	166	180	110	174	32	1162	
SUBTOTAL		\$ 10,395.00	\$ 3,840.00	\$ 39,935.00	\$ 19,680.00	\$ 6,400.00	\$ 10,080.00	\$ 21,500.00	\$ 26,560.00	\$ 22,500.00	\$ 13,750.00	\$ 16,530.00	\$ 3,040.00		\$ 194,210.00

**Kenney Fort Blvd.
Segment 5 & 6
City of Round Rock**

Survey Fee Schedule/Budget

Fee Schedule/Budget for STV, Inc.

Project Phase	Task Description	Senior PM/RPLS	PM/RPLS	Sr. Survey Tech	1-person Crew	2-person Crew	3-person Crew	Admin			Total Labor Hours	Total Direct Labor Costs
		\$225.00	\$175.00	\$130.00	\$145.00	\$165.00	\$190.00	\$84.00				
III. SURVEYING SERVICES												
A	PROJECT CONTROL SERVICES											
	Project Control			1		5					6	\$ 955.00
B	DATA COLLECTION AND PROPERTY RESEARCH											
	Data Collection and Property Research										0	\$ -
C	DESIGN SERVICES											
	Right-of-Entry Coordination	2	2	5				3			12	\$ 1,702.00
	Horizontal Control	1	2			15					18	\$ 3,050.00
	Vertical Control	1	3			70					74	\$ 12,300.00
	Design Survey	3	50	150	5	142	15				365	\$ 55,930.00
	Manhole Inverts	1	5	60		80					146	\$ 22,100.00
	Locate Geotech Bores	1	2	2		25					30	\$ 4,960.00
	Establish Existing Right-of-way and Boundary	1	25	25		60					111	\$ 17,750.00
											756	\$ 117,792.00
D	RIGHT-OF-WAY DOCUMENTS											
	Prepare Right-of-way Documents w/TCE		84	224		70					378	\$ 55,370.00
III. SURVEYING SERVICES- SUBTOTAL												

FEE SCHEDULE

Kenney Fort Blvd.

Segment 5 & 6

City of Round Rock

SUE QUALITY LEVEL "B, C, D"	LABOR CLASS.	Sr. PROJECT MANAGER	SUE PROJECT MANAGER	FIELD CREW MANAGER	UTILITY TECH	CADD TECH	CLERICAL SUPPORT	TOTAL HOURS
LABOR COSTS		\$215.00	\$150.00	\$126.00	\$126.00	\$126.00	\$84.00	
Records Research		0	0	0	12	0	0	12
Production/Review of QL"B, C, D" Plan Deliverables		4	16	0	0	80	0	100
Project Meetings / Safety Orientation		0	4	8	0	0	0	12
Permit Coordination/Acquisition		0	2	0	2	0	0	4
Contract Administration		2	4	0	0	0	4	10
SUBTOTAL HOURS		6	26	8	14	80	4	138
SUBTOTAL DOLLARS		\$1,290.00	\$3,900.00	\$1,008.00	\$1,764.00	\$10,080.00	\$336.00	\$18,378.00
SUBSURFACE UTILITY ENGINEERING COSTS								
		QTY	RATE	UNIT	UNIT			TOTAL
Designating (3-Man Crew & Equipment) - Quality Level B		104.0	\$ 235.00	per hour	per hour			\$24,440.00
Survey of QL"B"								
Surveying (2-Man Crew, GPS Equipment & Processing)		5.0	\$ 1,850.00	per day	per day			\$9,250.00
SUBTOTAL DOLLARS								\$33,690.00
TOTAL ESTIMATED QUALITY LEVEL "B" FEE								\$52,068.00
SUE QUALITY LEVEL "A"	LABOR CLASS.	Sr. PROJECT MANAGER	SUE PROJECT MANAGER	FIELD CREW MANAGER	UTILITY TECH	CADD TECH	CLERICAL SUPPORT	TOTAL HOURS
LABOR COSTS		\$215.00	\$150.00	\$126.00	\$126.00	\$126.00	\$84.00	
Records Research		0	0	0	4	0	0	4
Production/Review of QL"A" Deliverables		8	16	0	0	24	0	48
Project Meetings / Safety Orientation		0	2	2	0	0	0	4
Permit Coordination/Acquisition		0	1	0	1	0	0	2
Contract Administration		0	2	0	0	0	2	4
SUBTOTAL HOURS		8	21	2	5	24	2	62
SUBTOTAL DOLLARS		\$1,720.00	\$3,150.00	\$252.00	\$630.00	\$3,024.00	\$168.00	\$8,944.00
Locating (Quality Level "A" - Test Holes)								
0 feet to 5.00 feet		10	\$ 1,200.00	per hole				\$12,000.00
over 5.00 feet to 8.00 feet		7	\$ 1,550.00	per hole				\$10,850.00
over 8.00 feet to 11.00 feet		3	\$ 1,850.00	per hole				\$5,550.00
over 11.00 feet to 15.00 feet		0	\$ 2,550.00	per hole				\$0.00
Greater than 15 ft (per foot)		0	\$ 200.00	per hole				\$0.00
Depths over 15 feet are an additional cost of \$200 per foot.								
Designating (2-Man Crew & Equipment) - Quality Level B		10.0	\$ 185.00	per hour				\$1,850.00
Mob-Demob Fee		1	\$ 600.00	each				\$600.00
Survey of QL"A"								
Surveying ((2-Man Crew, GPS Equipment & Processing)		3.0	\$ 1,850.00	per day				\$5,550.00
SUBTOTAL DOLLARS								\$36,400.00
TOTAL ESTIMATED QUALITY LEVEL "A" FEE								\$45,344.00
DIRECT EXPENSES								
Miscellaneous Items								
Asphalt/Concrete Coring & Pavement Repair		0	\$ 400.00	each				\$0.00
Remove/Install Concrete Sidewalk		0	\$ 4,500.00	each				\$0.00
Permitting								
PERMIT		0	\$ 600.00	each				\$0.00
Traffic Control								
Single Lane Closure - Daily Rate (Includes Warning Signs & Cones, Arrow Board, Delivery & Pickup)		0	\$ 2,450.00	each				\$0.00
Per Diem (Includes Lodging)			\$ 180.00	per day				\$0.00
Permit / Inspection Fees			\$ 350.00	each				\$0.00
TOTAL ESTIMATED DIRECT EXPENSE DOLLARS								\$0.00
TOTAL COMBINED ESTIMATED FEE								\$97,412.00

Fee Schedule/Budget for STV, Inc.

Task Description	Project Manager	Senior Engineer	Design Engineer	EIT	Senior CAD Technician	Senior Technician	CAD/GIS Technician	Admin	Total Labor Hours	Total Direct Labor Costs
	\$315.00	\$235.00	\$160.00	\$125.00	\$150.00	\$125.00	\$95.00	\$95.00		
IV. PLANS, SPECIFICATIONS AND ESTIMATE										
A Roadway Design Controls										
1 Miscellaneous Plans										\$ -
a Title Sheet	1		1	8					10	\$ 1,475.00
b Index of Sheets	1		1	6			6		14	\$ 1,795.00
c Project Layout 1"=200'	1		4	16		20			41	\$ 5,455.00
d Benchmark Layout 1"=200'	2		2	8		16			28	\$ 3,950.00
2 Roadway Plans & Geometry										\$ -
a Existing Typical Sections			2	10		8			20	\$ 2,570.00
b Proposed Typical Sections	2	4	10	24		30			70	\$ 9,920.00
c Horizontal Data Sheet	1		1	6		4			12	\$ 1,725.00
d KFB Plan & Profile Sheets 1"=100' H and 1"=10' V	16	40	100	220		80	60		516	\$ 73,640.00
e 6 Cross Street Plan & Profile Sheets 1"=100' H and 1"=10' V	2	10	72	144		48	12		288	\$ 39,640.00
f Supplemental Grading Sheets 1"=40'	2	8	8	24		20			62	\$ 9,290.00
g Removal Sheets 1"=100'		2	20	60		20			102	\$ 13,670.00
3 Grading and Details										\$ -
a 50-ft cross sections	4	30	106	220		40			400	\$ 57,770.00
b Intersection layouts (5 locations) 1"=40'	2	8	16	60		40	24		150	\$ 19,850.00
c Driveway Details		2	10	40					52	\$ 7,070.00
d Driveway Profiles		1	4	20					25	\$ 3,375.00
e Miscellaneous roadway details	2	4	10	40		24			80	\$ 11,170.00
									1870	\$ 262,365.00
B Drainage Design										
a Performed by Halff									0	\$ -
C Signing, Markings and Signalization										
1 Signing, Markings										\$ -
Site visits of project corridor and surrounding areas										\$ -
a Small Signing & Pavement marking layouts 1"=100'	4	20	120	220		50	100		514	\$ 68,410.00
b Pavement Marking Details	2	4		8		6			20	\$ 3,320.00
c Detail sheets for small signs	2		4	8		6			20	\$ 3,020.00
									554	\$ 74,750.00
2 Traffic Signalization										\$ -
a Collect & Evaluate traffic data		2	4	4					10	\$ 1,610.00
b Informational Traffic Signal Warrant Study		8	12						20	\$ 3,800.00
c Field Review		4	4						8	\$ 1,580.00
d Power and Utility Coordination	2	6	8						16	\$ 3,320.00
e Existing Signal Layouts		4	8	16					28	\$ 4,220.00
f Traffic Signal Layouts	4	30	42	64					140	\$ 23,030.00
g Schedule, signing, and phasing sheets		26	32	42					100	\$ 16,480.00
h Traffic Signal Elevations		12	24	64					100	\$ 14,660.00
i Detection Detail Sheets		5	32	42					79	\$ 11,545.00
j Standards		4	8	16					28	\$ 4,220.00
k General Notes		4	8	8					20	\$ 3,220.00
l Specifications		8	8						16	\$ 3,160.00
m Cost Estimates		8	12						20	\$ 3,800.00
n Shop Drawing Review		10	40	16					66	\$ 10,750.00
									651	\$ 105,395.00
D Miscellaneous Roadway										
1 Retaining Walls										\$ -
a Investigate wall locations and determine wall type		2	8	2					12	\$ 2,000.00
b Retaining Wall Location Map			4	10		16			30	\$ 3,890.00
c Retaining Wall Plan and Profile 1"=50' H 1"=5' V	4	20	80	160		60	40		364	\$ 50,060.00
2 Traffic Control Plan										\$ -
KFB Specific Exhibit D_2023-05-08.xlsx	2		4	40		32			78	\$ 10,270.00

Fee Schedule/Budget for STV, Inc.

Task Description	Project Manager	Senior Engineer	Design Engineer	EIT	Senior CAD Technician	Senior Technician	CAD/GIS Technician	Admin	Total Labor Hours	Total Direct Labor Costs
	\$315.00	\$235.00	\$160.00	\$125.00	\$150.00	\$125.00	\$95.00	\$95.00		
b TCP Overview		2		10		8	12		32	\$ 3,860.00
c TCP Advanced Warning Layouts 1"=400'		2	8	16			4		30	\$ 4,130.00
d TCP Narrative for Sequence of Construction	2	4	12						18	\$ 3,490.00
e TCP Plans Sheets 1"=100'	6	20	100	180		80	60		446	\$ 60,790.00
f TCP Details - Non Standard		1		4		8	8		21	\$ 2,495.00
g TCP Construction Schedule Developed	2	8	8						18	\$ 3,790.00
3 Illumination										\$ -
a Continuous Lighting Layouts	4	10	100	240		100	80		534	\$ 69,710.00
b Electrical Circuit Plans and Details		10	8	30			24		72	\$ 9,660.00
c State and Utility Coordination, Power Source Coordination			4						4	\$ 640.00
d ITS Layouts (Signal interconnects)	2		20	80		20			122	\$ 16,330.00
4 Quantities										\$ -
a Traffic Control			2	4			4		10	\$ 1,200.00
b Earthwork	2	2	2	8					14	\$ 2,420.00
c Roadway	1	2	2	10			10		25	\$ 3,305.00
d Retaining Walls		1	1	4					6	\$ 895.00
e Removal		1	1	10			10		22	\$ 2,595.00
f Drainage										\$ -
g Culverts										\$ -
h Signs		1	2	10			10		23	\$ 2,755.00
i Pavement Markings	1	2		10			10		23	\$ 2,985.00
j Signals	1	2	2	10			10		25	\$ 3,305.00
k Illumination		1	1	10			10		22	\$ 2,595.00
l Utilities										\$ -
m Erosion Control and SW3P										\$ -
5 Summary Sheets										\$ -
a Traffic Control	1			2			4		7	\$ 945.00
b Earthwork				2			4		6	\$ 630.00
c Roadway	1	1		2			4		8	\$ 1,180.00
d Retaining Walls		1		2			4		7	\$ 865.00
e Removal				2			4		6	\$ 630.00
f Drainage										\$ -
g Culverts										\$ -
h Signs				2			4		6	\$ 630.00
i Pavement Markings	1			2			4		7	\$ 945.00
j Signals		1		2			4		7	\$ 865.00
k Illumination	1	1		2			4		8	\$ 1,180.00
l Utilities				2			4		6	\$ 630.00
m Erosion Control and SW3P										\$ -
6 Standards, Specifications and Estimate										\$ -
a Download, Prepare and Modify Standards	1	2		20					23	\$ 3,285.00
b Specifications	4	16	8	4					32	\$ 6,800.00
c General Notes	4	12		2					18	\$ 4,330.00
d Preliminary Cost Estimate and item price identification	4	4	24	32					64	\$ 10,040.00
7 Prepare contract bid documents and proposals	4	10	32	30					76	\$ 12,480.00
IV. PLANS, SPECIFICATIONS AND ESTIMATE- SUBTOTAL									2232	\$ 308,605.00
HOURS SUB-TOTALS	98	403	1166	2370	0	736	534	0	5307	
SUBTOTAL	\$ 30,870.00	\$ 94,705.00	\$ 186,560.00	\$ 296,250.00	\$ -	\$ 92,000.00	\$ 50,730.00	\$ -		\$ 751,115.00

**Kenney Fort Blvd.
Segment 5 & 6
City of Round Rock**

Fee Schedule/Budget for STV, Inc.

	Task Description	Project Manager	Senior Engineer	Design Engineer	EIT	Admin		Total Labor Hours	Total Direct Labor Costs	
		\$315.00	\$235.00	\$160.00	\$125.00	\$95.00	\$0.00			
<u>V. PROJECT MANAGEMENT</u>										
A	Project Management (18 months)									
1	Create and submit monthly invoices	12				18		30	\$ 5,490.00	
2	Prepare monthly progress reports	9	9					18	\$ 4,950.00	
3	Prepare schedule	4		6				10	\$ 2,220.00	
4	Meet with City twice a month	36		36				72	\$ 17,100.00	
5	Internal Design Team Meetings	15	15	15	15			60	\$ 12,525.00	
6	Meet with property owners, stakeholders, and City	12	12					24	\$ 6,600.00	
7	Prepare project meeting summaries	4	12	24				40	\$ 7,920.00	
8	Monitor and Review Sub-consultant invoices	10				10		20	\$ 4,100.00	
9	Coordinate and Review Sub-consultant work products	6	40					46	\$ 11,290.00	
10	Project Closeout	2		8	8	4		22	\$ 3,290.00	
								342	\$ 75,485.00	
	V. PROJECT MANAGEMENT - SUBTOTAL									
	HOURS SUB-TOTALS	110	88	89	23	32	0	342		
	SUBTOTAL	\$ 34,650.00	\$ 20,680.00	\$ 14,240.00	\$ 2,875.00	\$ 3,040.00	\$ -		\$ 75,485.00	

**Kenney Fort Blvd.
Segment 5 & 6
City of Round Rock**

Fee Schedule/Budget for STV, Inc.

Task Description	Project Manager	Senior Engineer	Design Engineer	EIT	Admin		Total Labor Hours	Total Direct Labor Costs
	\$315.00	\$235.00	\$160.00	\$125.00	\$95.00	\$0.00		
<u>VI. Bid and Construction Phase Services</u>								
A Bid Phase								
A1	Coordinate with City during Bid Package	4	8	16	12		40	\$ 7,200.00
A2	Attend pre-bid meeting	3		3			6	\$ 1,425.00
A3	Assist City at contract bid opening	2			2		4	\$ 880.00
A4	Tabulate bids, research low bidder, make recommendation	1	2	2	8		13	\$ 2,105.00
							63	\$ 11,610.00
B Construction Phase								
B1	Create and submit monthly invoices (18 months)	9				18	27	\$ 4,545.00
B2	Prepare for and attend pre-construction meeting	4		4			8	\$ 1,900.00
B3	Attend bi-weekly construction meetings (18 months)	36	36				72	\$ 19,800.00
B4	Respond to RFI's, make updates as agreed	10	20	30	60		120	\$ 20,150.00
B5	Review Contractor Pay Applications (18 months)	4		4	36		44	\$ 6,400.00
B6	Conduct final site visit for substantial completion	1	8		2		11	\$ 2,445.00
B7	Provide shop drawing review	1	4	60	40		105	\$ 15,855.00
B8	Develop as-builts	2	8	20	50		80	\$ 11,960.00
							467	\$ 83,055.00
VI. Bid and Construction Phase Services- SUBTOTAL								
HOURS SUB-TOTALS		77	86	139	210	18	0	530
SUBTOTAL		\$ 24,255.00	\$ 20,210.00	\$ 22,240.00	\$ 26,250.00	\$ 1,710.00	\$ -	\$ 94,665.00

**Kenney Fort Blvd.
Segment 5 & 6
City of Round Rock**

Expense Item	Unit	Unit Cost	Amount	Total Cost
CADD Plotting	sf	\$ 1.50	200	\$ 300.00
Mylar Plots (22x34 As-Builts)	lf	\$ 6.00		\$ -
Digital Ortho Plotting	lf	\$ 2.00		\$ -
11" X 17" Mylar	sheet	\$ 1.00		\$ -
8 1/2" X 11" B/W Paper Copies	sheet	\$ 0.10	1,000	\$ 100.00
11" X 17" B/W Paper Copies	sheet	\$ 0.15	1,000	\$ 150.00
8 1/2" X 11" Color Paper Copies	sheet	\$ 1.00	250	\$ 250.00
11" X 17" Color Paper Copies	sheet	\$ 1.80	250	\$ 450.00
Fax Copies	sheet	\$ 0.10		\$ -
Film and Development	roll	\$ 8.00		\$ -
4 X 6 Digital Color Prints	picture	\$ 0.50		\$ -
Oversized Digital Color Prints	picture	\$ 50.00		\$ -
Standard Postage	letter	\$ 0.44		\$ -
Express Mail (Standard)	each	\$ 15.00		\$ -
Express Mail (Oversized)	each	\$ 30.00		\$ -
Deliveries	each	\$ 25.00	4	\$ 100.00
Airfare	each	\$ 200.00		\$ -
Rental Car	day	\$ 80.00	15	\$ 1,200.00
Lodging	day	\$ 85.00	15	\$ 1,275.00
Meals	day	\$ 36.00	15	\$ 540.00
Mileage	mile	\$ 0.550	2,500	\$ 1,375.00
GPS Rental	day	\$ 80.000	5	\$ 400.00
HazMat Database Search	each	\$ 2,000.000	2	\$ 4,000.00
SUBTOTAL DIRECT EXPENSES				\$ 10,140.00

**Kenney Fort Blvd.
Segment 5 & 6
City of Round Rock**

Fee Schedule/Budget

Horizon								
Project Phase	Task Description						Total Labor Hours	Total Direct Labor Costs
II	Environmental & Public Involvement							
B	Due Diligence Studies							
	4 Cultural Resources							
a	Task 1—Archeological Background Studies							\$ 1,000.00
b	Task 2—Archeological Survey Fieldwork							\$ 11,500.00
c	Task 3—Archeological Technical Report							\$ 3,500.00
d	Task 4—Records Curation							\$ 1,700.00
								\$ 17,700.00
	Sub Total							\$ 17,700.00

**Kenney Fort Blvd.
Segment 5 & 6
City of Round Rock**

Fee Schedule/Budget

Half Associates, Inc.

Project Phase	Task Description	Sr Eng/QC	PM	Project Engineer	Design Engineer	EIT	Tech III	Tech II	Tech I	Admin II	Admin I	Total Labor Hours	Total Direct Labor Costs
		\$310.08	\$237.47	\$179.38	\$140.09	\$116.17	\$108.39	\$85.28	\$68.40	\$84.91	\$67.52		
I.	ROUTE AND DESIGN STUDIES												
A	DATA COLLECTION		2	8	10	20						40	\$ 5,634.28
B	AGENCY COORDINATION												
D	SCHEMATIC LAYOUT DEVELOPMENT											0	\$ -
8	Engineer's opinion of probable cost	1	2	2	4	4						13	\$ 2,168.82
9	Prepare project schematic plots											0	\$ -
h)	Drainage structures from H&H report	1	2	4	8	15						30	\$ 4,365.81
F	HYDROLOGY AND HYDRAULIC ANALYSIS											0	\$ -
1	Cross Structure H&H											0	\$ -
a)	Hydrology	2	4	10	20	40						76	\$ 10,812.44
b)	Hydraulics	4	8	20	40	80						152	\$ 21,624.88
2	Hydrology and Hydraulic Impact Analysis											0	\$ -
a)	Data Collection											0	\$ -
b)	Hydrology				2	4						6	\$ 744.86
c)	Hydraulics				4	8						12	\$ 1,489.72
d)	Mitigation	1	1	2	4	16						24	\$ 3,325.39
e)	CLOMR/LOMR (N/A)											0	\$ -
3	UBCWCID Impact Analysis	6	4	4	6							20	\$ 4,368.42
4	Preliminary Drainage Report	8	10	20	40	60	40					178	\$ 25,352.34
G	WATER QUALITY (N/A)											0	\$ -
												551	\$ 79,886.96
IV	PLANS, SPECIFICATIONS & ESTIMATE												
B	DRAINAGE DESIGN											0	\$ -
1	Cross Structure H&H											0	\$ -
a)	Data Collection											0	\$ -
b)	Hydrology	1	2	4	8	12						27	\$ 4,017.30
c)	Hydraulics	1	2	4	12	24						43	\$ 5,971.70
d)	Culvert Layout Sheets	5	10	20	40	60	100					235	\$ 30,925.50
e)	Hydraulic Data Sheets	5	5	10	20	20	60					120	\$ 16,160.15
f)	Culvert Standards and Detail Sheets				1	4	4					9	\$ 1,038.33
2	Hydrology and Hydraulic Impact Analysis											0	\$ -
a)	Data Collection											0	\$ -
b)	Hydrology (Internal Drainage)											0	\$ -
c)	Hydraulics (Internal Drainage)											0	\$ -
d)	Hydraulic Impact Mitigation (N/A)											0	\$ -
f)	Scour Analysis	10	10	20	20	30						90	\$ 15,350.00
3	Storm Sewer Design (Plan Production)											0	\$ -
a)	Interior Drainage Area Maps	8	10	40	80	100	120					358	\$ 47,861.54
b)	Hydraulic Data Sheets	4	8	16	32	64	128					252	\$ 31,801.84
c)	Storm Sewer Computations		20	100	140	160						420	\$ 60,887.20
d)	Storm Sewer P&P	20	40	60	80	160	320					680	\$ 90,942.40
e)	Tabular Ditch Data	2	4	8	16	32	64					126	\$ 15,900.92
f)	Non Standard Details	6	8	10	40	100	160					324	\$ 40,117.04
g)	Identify Trench Protection	1			2	8						11	\$ 1,519.62
4	Final Drainage Report (Updated for Design)	2	4	10	20	40	10					86	\$ 11,896.34
5	FEMA Permitting (N/A)											0	\$ -
6	SW3P and Erosion Control		8	36	50	95						189	\$ 26,398.09

**Kenney Fort Blvd.
Segment 5 & 6
City of Round Rock**

Fee Schedule/Budget

Half Associates, Inc.

Project Phase	Task Description	Sr Eng/QC	PM	Project Engineer	Design Engineer	EIT	Tech III	Tech II	Tech I	Admin II	Admin I	Total Labor Hours	Total Direct Labor Costs
		\$310.08	\$237.47	\$179.38	\$140.09	\$116.17	\$108.39	\$85.28	\$68.40	\$84.91	\$67.52		
7	Streambank Stability Analysis (N/A)											0	\$ -
E	MISCELLANEOUS ROADWAY											0	\$ -
4	Quantities											0	\$ -
f)	Drainage			2	8	20						30	\$ 3,802.88
g)	Culverts			2	8	16						26	\$ 3,338.20
5	Summary Sheets (N/A) - CP&Y											0	\$ -
f)	Drainage											0	\$ -
g)	Culverts											0	\$ -
												3,026	\$ 407,929.05
V	PROJECT MANAGEMENT												
A	PROJECT MANAGEMENT											0	\$ -
1	Monthly Invoices		18							18		36	\$ 5,802.84
2	Monthly Progress Reports		18									18	\$ 4,274.46
3	Attend up to 3 meetings with the City		6	4	4	6						20	\$ 3,399.72
4	Prepare Meeting Summaries			1		6						7	\$ 876.40
5	Bi weekly Design Meetings											0	\$ -
												81	\$ 14,353.42
VI	BID AND CONSTRUCTION PHASE SERVICES												
A	BID PHASE SERVICES											0	\$ -
1	Bid package and bidder questions		2	2	10	40						54	\$ 6,881.40
2	Attend pre-bid meeting		2	2	2	2						8	\$ 1,346.22
												62	\$ 8,227.62
B	CONSTRUCTION PHASE SERVICES												
1	Monthly Invoices		9							18		27	\$ 3,665.61
2	Pre-construction meeting		2	2		2						6	\$ 1,066.04
3	Construction meetings (6)		2	2	12	12						28	\$ 3,908.82
4	Construction Support Services		4	8	16	40						68	\$ 9,273.16
6	Final Inspection			2	2	2						6	\$ 871.28
7	Provide shop drawings review			24		40						64	\$ 8,951.92
8	Provide record drawings			8	24	48						80	\$ 10,373.36
												279	\$ 38,110.19
												3,999	\$ 548,507.24
	Sub Total	88	227	467	785	1,390	1,006	0	0	36	0		

EXHIBIT E

Certificates of Insurance

Attached Behind This Page

DESCRIPTIONS (Continued from Page 1)

All Risk Coverage - Agreed Value

Leased / Rented / Borrowed Equipment from Others Sublimit: \$100,000

2. Contractor's Pollution Liability:

Policy #: 03106092 / Policy Term: 4/1/2023 - 4/1/2024

Insurance Carrier: Allied World Assurance Company (U.S.) Inc. / NAIC#: 19489

Per Pollution Condition: \$5,000,000

Aggregate Limit: \$5,000,000

3. The Captioned Commercial General Liability Policy includes the following coverage:

a. XCU

b. Contractual Liability

c. Contractual Liability - Railroads is included by amending the definition of an "Insured Contract" when working within 50ft of a Railroad (CG 24 17 10 01)

4. The Captioned Workers Compensation & Employers Liability coverage includes the following coverage on an if any basis:

a. USL&H

b. Maritime

c. FELA

5. The captioned Workers Compensation Policy includes Employers Liability / Stop GAP Coverage for the following states subject to the following limits:

1. North Dakota

2. Washington

3. Wyoming

4. Ohio

Limits:

1. \$1,000,000 Employers Liability - Each Accident

2. \$1,000,000 Employers Liability - Disease - Each Employee

3. \$1,000,000 Employers Liability - Disease - Policy Limit

6. A Waiver of Subrogation is provided in favor of the Additional Insureds under the captioned Commercial General Liability, Business Automobile Liability, Commercial Excess Liability, Workers Compensation & Employers Liability and Contractor's Pollution Liability Coverages if required by written contract & permitted by state law.

7. The captioned Commercial Excess Liability policy is following form of the Commercial General Liability, Automobile Liability, and Employers Liability Policies.

8. 30 Days Notice of Cancellation and Non-Renewal, 10 Days Notice in the event of Non-Payment of Premium, will be provided subject to the terms and conditions of the policy.

Kenney Fort Boulevard Segments 5 & 6

STV Project No. RNDR2100769.00

City Manager - City of Round Rock are included as Additional Insureds if required by written contract under the following coverage:

Commercial General Liability, Business Automobile Liability, Contractors Pollution Liability and Commercial Excess Liability Coverage. The Additional Insured coverage is provided on a Primary Noncontributory basis if required by written contract. The Additional Insured coverage under the Commercial General Liability is provided for both Ongoing and Completed Operations under ISO Form #s CG 20 10 07 04 and CG 20 37 07 04.