



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

# FIRM:RODRIGUEZ TRANSPORTATION GROUP, INC.("Engineer")ADDRESS:11211 Taylor Draper Lane, Suite 100, Austin, TX 78759PROJECT:Gattis School Road (Segment 3)

# THE STATE OF TEXAS § COUNTY OF WILLIAMSON §

THIS CONTRACT FOR ENGINEERING SERVICES ("Contract") is made and entered into on this the \_\_\_\_\_ day of \_\_\_\_\_\_, 2018 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 <u>One Million Thirteen Thousand Thirty-Seven and 45/100 Dollars (\$1,013,037.45)</u> 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:

Bill Stablein Project Manager 2008 Enterprise Drive Round Rock, TX 78664 Telephone Number (512) 218-3237 Mobile Number (512) 801-4456 Fax Number (512) 218-5563 Email Address bstablein@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:

Robert Carrillo, P.E. Senior Project Manager 11211 Taylor Draper Lane, Suite 100 Austin, TX 78759 Telephone Number (512) 231-9544 (Ext. 108) Fax Number (512) 231-9133 Email Address rcarrillo@rtg-texas.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 indemnify, defend and hold harmless Engineer from all claims, damages, losses and expenses, including but not limited to attorneys fees, resulting therefrom.

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 federal, state 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) **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 harmless City and its officers and employees from all claims and liabilities due to activities of his/her/itself and his/her/its agents or employees, performed under this Contract, which are caused by or which result from the negligent error, omission, or negligent act of Engineer or of any person employed by Engineer or under Engineer's direction or control.

Engineer shall also save and hold City harmless from any and all expenses, including but not limited to reimbursement of reasonable attorney's fees which may be incurred by City in litigation or otherwise defending claims or liabilities which may be imposed on City as a result of 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, nonrenewal or any material change 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:

Stephan L. Sheets City Attorney 309 East Main Street Round Rock, TX 78664

#### **Engineer:**

Robert Carrillo, P.E. Senior Project Manager 11211 Taylor Draper Lane, Suite 100 Austin, TX 78759

#### ARTICLE 33 GENERAL PROVISIONS

(1) Time is of the Essence. 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.

(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.

CITY OF ROUND ROCK, TEXAS

APPROVED AS TO FORM:

By: \_\_\_\_\_ Craig Morgan, Mayor

Stephan L. Sheets, City Attorney

#### **ATTEST:**

By: \_\_\_\_\_\_\_Sara L. White, City Clerk

RODRIGUEZ TRANSPORTATION GROUP, INC.

By: \_\_\_

Signature of Principal Printed Name: \_\_\_\_\_

## LIST OF EXHIBITS ATTACHED

- (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**

Project Limits: From 0.25 miles west of A.W. Grimes Blvd. to 0.20 miles east of Double Creek Drive.

Project Length: 5,800' (1.10 Miles)

In general, the City of Round Rock and its representatives, to their best efforts, will render services as follows:

- 1. Schedule, coordinate, and conduct public involvement meetings.
- 2. Provide available criteria and full information as to the client's requirements for the project.
- 3. Furnish available horizontal control points and established City of Round Rock monumentation.
- 4. Furnish available existing plans and/or design information for the project and interface data for any adjacent projects.
- 5. Assist the Engineer by placing at their disposal all available written data pertinent to previous operations, reports and any other data (including hydraulic studies and models) affecting the project.
- 6. Provide available existing traffic counts and design year projections (to be used for geotechnical and geometric design purposes).
- 7. Furnish available right-of-way maps.
- 8. Provide available special specifications, special provisions and updated list of bid items applicable to the project.
- 9. Examine documents submitted by the Engineer and render decisions pertaining thereto, promptly, to avoid unreasonable delay in the progress of Engineer's services.
- 10. Respond promptly in writing to requests by the Engineer for authorization to proceed with specific activities deemed desirable.
- 11. Negotiate with all utility companies for any agreements and/or relocations required.
- 12. Pay all reviewing agency fees promptly including review, inspection and recording fees.
- 13. Acquire any off-site ROW and easement required for the project.

#### EXHIBIT B

#### **ENGINEERING SERVICES**

Project Limits: From 0.25 miles west of A.W. Grimes Blvd. to 0.20 miles east of Double Creek Drive.

Project Length: 5,800' (1.10 Miles)

The following will be used as the basis for the preparation of a geometric schematic and subsequent plans, specifications and estimate (PS&E). The geometric schematic will be developed to establish the ROW/easement requirements, preliminary cost estimate and other design parameters for the proposed improvements consisting of reconstructing the existing four-lane roadway to a Major Divided Arterial (MAD) 6 with improved pedestrian and bicycle facilities. Right and left turn bays will be provided at the three (3) major cross street intersections. The PS&E will be developed after the geometric schematic has been approved.

The Engineer shall maintain a direct line of communication and coordinate closely with City of Round Rock (the City) staff or their designated representative, local municipal agencies, and utility companies throughout the project. The Engineer shall complete the services to be provided by the Engineer according to the milestone work schedule established in the work authorization. The Engineer shall submit a written progress report to the City monthly indicating the actual work accomplished during the month, scheduled work to be accomplished for that month, and the estimated work to be accomplished for the coming month.

The Engineer shall furnish Microsoft Office and Microstation V8 or V8i-Geopak computer generated media containing the project design files to the City.

#### GENERAL REQUIREMENTS

- **A. Right-of-Entry and Coordination.** The Engineer shall notify the City and secure permission to enter private property to perform any surveying, environmental, engineering or geotechnical activities needed off existing right-of-way. The Engineer shall not commit acts which would result in damages to private property, and the Engineer shall make every effort to comply with the wishes and address the concerns of affected private property owners. The Engineer shall contact each property owner prior to any entry onto the owner's property.
- **B.** Quality Assurance and Quality Control. The Engineer shall provide peer review at all levels. For each deliverable, the Engineer shall have some evidence of their internal review and mark-ups of that deliverable. The City's project manager may require the Engineer to submit the Engineer's internal mark-ups (red-lines) or comments developed as part the Engineer's quality control step. The Engineer shall clearly label each document submitted for quality assurance as an internal mark-up document.

#### TASK DESCRIPTIONS AND FUNCTION CODES

The Engineer shall categorize each task performed to correspond with the Function Codes (FC) and Task Descriptions.

#### FC 110 - Route and Design Studies

- **A. Data Collection and Field Reconnaissance.** The Engineer shall collect, review and evaluate data described below. The Engineer shall notify the City in writing whenever the Engineer finds disagreement with the information or documents:
  - 1. Data, if available, from the City, including "as-built plans", right-of-way maps, Subsurface Utility Engineering (SUE) mapping, existing cross sections, existing planimetric mapping, environmental documents, existing channel and drainage easement data, existing traffic counts, accident data, identified endangered species, identified hazardous material sites, current unit bid price information, current special provisions, special specifications, and standard drawings.
  - 2. Documents for existing and proposed development along proposed route from local municipalities and local ordinances related to project development.
  - 3. Readily available flood plain information and studies from the Federal Emergency Management Agency (FEMA), the U. S. Army Corps of Engineers (USACE), local municipalities and other governmental agencies in addition to that provided by the City.
  - 4. The Engineer shall conduct field reconnaissance and collect data including a photographic record (to be maintained in Engineer's office) of notable existing features.
- **B.** Design Criteria. The Engineer shall develop the roadway and drainage design criteria based on the controlling factors specified by the City and by using the design speed, functional classification, roadway class and any other set criteria. In addition, the Engineer shall prepare the Design Summary Form (DSF) and submit it electronically. The Engineer shall obtain written concurrence from the City prior to proceeding with the design.
- **C. Sequence of Construction.** The Engineer shall develop preliminary sequence of construction exhibit to illustrate how traffic will be maintained during the various phases of construction. The exhibit should include: limits of construction, traffic flow arrows, limits of temporary pavement, temporary drainage and signals, traffic control signs and channelizing devices.
- **D. Preliminary Cost Estimates.** The Engineer shall develop a preliminary cost estimate using the TxDOT's Average Low Bid Unit Price and any other readily available data. The preliminary cost estimate shall be accurate enough to compare to the allocated funding amount to ensure the completed design will be within budget.

**E. Coordination Meeting.** The Engineer, in cooperation with the City shall plan, attend and document a Design Concept Conference (DCC) meeting to be held prior to the Initial milestone submittal. In preparation for the DCC, the Engineer shall complete the DSF to serve as a checklist for the minimum required design considerations.

The meeting will provide for a brainstorming session in which decision makers, stakeholders and technical personnel may discuss and agree on:

- 1. Roadway and drainage design parameters
- 2. Engineering and environmental constraints
- 3. Project development schedule
- 4. Other issues as identified by the City
- **F. Geotechnical Borings, Investigations and Pavement Design:** The Engineer shall conduct field investigations laboratory testing and recommended pavement design as further described below. The Engineer is responsible for arranging for utility locates and providing a traffic control plan in accordance with TxDOT standards.
  - 1. Engineer shall verify the existing pavement structure with proposed borings.
  - 2. Obtain and review existing and available geotechnical and geologic information. Perform field reconnaissance of the project limits. Attend one (1) coordination meeting.
  - 3. Perform pavement design borings, obtaining boring samples at 500-foot intervals from the 0.25 miles west of A.W. Grimes to Double Creek. The retaining wall borings described below will be used for the project limits east of Double Creek Road. Borings are estimated to consist of the following:
    - 9 borings to a depth of 10 feet within the at-grade or fill areas
    - Borings shall occur within the limits of the existing roadway as well as between the existing roadway edge and the ROW line, dependent upon utilities and access.
    - Borings will be marked for surveying of ground elevations and coordinates in order to locate in the plans.
    - Backfill borings with cuttings from the boring or gravel. Patch pavements with cold mix asphalt or concrete (match existing pavement surface).
    - Perform laboratory testing to classify soil strata, evaluate plasticity and shrink/swell potential and evaluate the compressive strength. Tests shall include moisture contents, Atterberg Limits, unconfined compressive strengths, sieve analyses, absorption swell test, lime-series tests, California Bearing Ratio (CBR) and sulfate content tests.
    - Develop a recommended flexible pavement design, with alternative rigid pavement design at major intersections, following City of Round Rock methodology.
  - 4. Perform retaining wall design borings, obtaining boring samples at 200-foot intervals to a minimum depth of 20 feet below proposed grade. Borings are estimated to consist of the following:
    - 2 borings to a depth of 20 feet within the at-grade or fill areas

- Borings shall occur within the limits of the existing roadway edge and the ROW line, dependent upon utilities and access.
- Borings will be marked for surveying of ground elevations and coordinates in order to locate in the plans. Backfill borings with cuttings from the boring or gravel.
- Perform laboratory testing to characterize the uniformity and strength for the soils. Laboratory testing will include: USCS Soil Classification, Atterberg Limits, sieve analyses, moisture content, consolidated drained direct shear test and unconfined compression tests.
- For spread footing walls, recommend the design soil lateral earth pressure and provide bearing capacity, sliding and slope stability analyses and evaluate the settlement of the wall.
- 5. Prepare Geotechnical report to include the summary of field investigations, laboratory testing results, recommended pavement design and recommendations for retaining wall foundations.

#### FC 120 - Environmental Documentation

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

#### A. Data Collection Process:

1. Data Collection & Field Reconnaissance: Collect readily available environmental information relative to the project area from the appropriate local, state, and federal agencies. A regulatory records review will be performed to identify listed hazardous waste generators, treatment, storage and disposal facilities; solid waste landfills, unauthorized sites; documented spills; oil and gas exploration and production sites; and underground storage tank sites within the proposed site location. The review will also identify other environmental risks along the project corridor. A site reconnaissance will be conducted to visually inspect the project site for additional risks and field verify any environmental risks as identified by the review.

#### **B.** Hazardous Materials Initial Site Assessment

1. A Hazardous Materials Initial Site Assessment (ISA) shall be completed, based on the regulatory records review and field reconnaissance conducted during the data collection process. This ISA will identify potential hazardous material sites that may be impacted by the proposed project.

#### C. Section 404 Clean Water Act Compliance

1. A wetland determination will be conducted in the project area and summarized in a delineation report. Specific impacts of the project on waters of the U.S. will be determined, measures to minimize the impacts will be identified. A revised report will discuss

applicable Section 404 options in accordance with the current permits and conditions.

2. Authorization under section 404 of the Clean Water Act will be obtained. For the purposes of this scope & fee, it is assumed that permitting would not include the preparation of either a Pre-construction Notification or Individual Permit to the USACE.

#### **D. Endangered Species Act Compliance**

1. An analysis of the project's effects on federally listed threatened and endangered species will be conducted and reported in a letter to document the project's compliance with the Endangered Species Act. In addition to background research, a site visit would be conducted to assess the habitat relative to the habitat requirements of the federally listed species of potential occurrence in the project area. For the purposes of this scope and cost estimate, it is assumed that no federally listed species or suitable habitat would be impacted by the proposed project.

#### E. Texas Antiquities Code (TAC) Compliance

- 1. A background search of the appropriate files at the Texas Archeological Research Laboratory and the Texas Archeological Sites Atlas will be conducted to locate any known archeological sites within the project area.
- 2. A project initiation letter and Texas Antiquities Permit application and associated scope of work will be prepared for submittal to the City, and the THC. Coordination with the THC will also be conducted regarding the project scope and compliance requirements.
- 3. A survey will be conducted and will be of sufficient intensity to determine the nature, extent, and if possible, potential significance of any cultural resources located with the project area. The survey will consist of a 100 percent pedestrian survey with shovel testing as necessary.
- 4. An intensive survey report will be produced, in accordance with the full report guidelines as outlined by the THC's Rules of Practice and Procedure, if any historic or prehistoric sites are discovered during the survey. If no cultural resources are found during the survey, then a short report format will be followed. The report will evaluate, to the extent feasible, the potential for designation of the recorded archeological sites as State Archeological Landmarks, and for eligibility to the National Register of Historic Places (NRHP) at the survey level of effort consistent with the TAC and Section 106 of the National Historic Preservation Act. The report will be coordinated with the THC, respond to any comments, and provide documentation of the coordination to the City.
- 5. Project records, forms, artifacts, photos, and documentation will be submitted to the THC, and to an appropriate curation facility along with report final copies to complete the TAC permit per THC requirements.
- 6. The following assumptions have been made based on an initial project review and the likely outcome of the survey:
  - No federal funding and no NHPA Section 106 coordination
  - No backhoe trenching or deep subsurface prospection costs
  - No new archeological sites identified
  - Excludes any additional field or archival investigations of any kind recommended by the THC following review of survey report
  - No survey of any project elements outside of a 200 foot survey corridor
  - Archival study within 500 feet of either side of project centerline

Submittals of draft versions will be made electronically with PDF's and Word versions submitted via email. Final submittal includes one hard copy and submitting PDF copies.

The Public Involvement Services will include two (2) Property Owner Meetings and two (2) Public Meetings. The intention of the Public Involvement Services is to work closely with property owners, residents, local business owners and the community to collect and incorporate input and provide updates on the project as they become available.

#### F. Project Contact Database

- 1. (NLA) Develop and maintain a project contact database in Excel format which includes nearby property owners and residents, businesses, churches, educational/community organizations, elected/public officials, and other interested stakeholders.
- 2. Include mailing addresses and email addresses as available.

#### G. Property Owners Meetings (up to 2)

- 1. (NLA) Assist the City by creating and posting website updates regarding the property owners meetings.
- 2. (RTG) Prepare exhibits in preparation for the meetings.
- 3. (RTG) Provide one (1) PI staff member at the meetings to document the contents of the meeting, in a meeting summary and one engineering staff member to answer questions.

#### H. Public Meetings (up to 2)

- 1. (NLA) Assist the City in establishing dates and advertising the meetings (via project website, emails and handouts). Assumes City staff will schedule the meetings at a city venue.
- 2. (RTG) Prepare exhibits for the meetings
- 3. (NLA) Prepare sign-in sheets, comment forms, and a fact sheet for the meeting.
- 4. Provide one (1) PI staff member at the meetings to facilitate sign in, gather comments and document the contents of the meeting through photography, combining them into a meeting summary that include:
  - Copies of notification efforts
  - Copies of the sign-in sheets
  - Copies of comment received, and
  - Photo documentation

#### I. Website Updates (up to 3)

 Prepare information and photos/exhibits identified by the City of Round Rock regarding the project to be disseminated on the project webpage maintained by the City. Information will be prepared in accordance with website guidelines from the City of Round Rock. The updates will provide general information about the project, including milestones, schedule, and public input opportunities. Upon receipt of the City's comments on draft website materials, the Engineer shall prepare the final website materials.

#### J. Email Updates (Up to 3)

 Prepare project information and photos/exhibits identified by the City of Round Rock to be distributed electronically to the stakeholder database where emails are available. Information must be approved by the City prior to distribution and will focus on project milestones, schedule and public input opportunities. Updates may be developed in response to comments from the project email site (Gattisimprovements@roundrocktexas.gov).

#### FC 130 - Right-of-Way Data/Utilities

All standards, procedures and equipment used by the Surveyor shall be such that the results of the survey will be in accordance with Board Rule 663.15, as promulgated by the Texas Board of Professional Land Surveyors.

The Engineer shall locate the existing ROW within the project limits from the current project control monuments and prepare a layout map for the project.

**A. Right-of-Way Map.** The Engineer shall obtain information on existing ROW and property information from as-built plans, ROW maps, and tax records and prepare a base map depicting the information.

The Engineer shall review and evaluate the existing ROW plus the limits of proposed ROW acquisition to verify that all construction staging and alignment considerations have been taken into account. The Engineer shall make every effort to prevent detours and utility relocations from extending beyond the existing/proposed ROW. The Engineer shall notify the City in writing if it is necessary to obtain additional construction easements or rights-ofentry and shall provide justification for such action. The Engineer shall be responsible for identifying and delineating any temporary construction easements in areas outside the existing/proposed ROW.

- **B.** Utility Locations. The Engineer shall research available existing utility records and perform in-field utility verification (Quality Level C and D) with the objective of surveying and plotting visible above-ground utility features and using professional judgment in correlating those findings with utility records within the project limits. The lateral limits of the utility designating investigation are the greater extent of the existing ROW, proposed ROW, or temporary construction easements along the project route. To accomplish this scope of work, the Engineer will perform the following tasks:
  - 1. Contact the applicable "one call" agency and acquire records from all available utility owners including local municipalities (cities, counties, etc.).

- 2. Perform in-field visual site inspection. Compare utility record information with actual field conditions. Record indications of additional utility infrastructure and visual discrepancies with record drawings.
- 3. Interview available utility owners for needed clarification, resolution and found discrepancies, and details not provided on the record drawings.
- 4. Map the following utilities: water, wastewater, natural gas, gas/oil pipelines, electric, telephone, fiber, duct banks, cable TV, storm sewer and utility service lines. Irrigation lines are not included in this scope.
- 5. Record all marks on electronic field sketches and correlate such data with utility records and above ground appurtenances obtained from visual inspection to resolve differences and discrepancies. Denote any utilities found where ownership/utility type is not available from records as "unknown" facilities.
- 6. In-field utility verification (Quality Level A and B). Gather QL-B data at the intersections of AW Grimes Blvd., South Creek Drive, Double Creek Drive plus an additional 500' and gather QL-A data at 10 locations. Proposed locations of 500' of QL-B and QL-A will be determined after the Initial submittal. (Right-of-way permitting and maintenance of traffic for lane closures is not anticipated and is therefore not included).
- **C. Boundary Surveying and Parcel Preparation.** The Engineer shall perform the following tasks to assist with the acquisition of the proposed ROW as identified in the Layout:
  - 1. Perform sufficient field surveying operations to locate property corners and confirm existing ROW configuration
  - 2. Perform sufficient deed research and boundary analysis to prepare a property schematic of the overall project. This task will not include procuring a limited Title Abstract to be used for preliminary submittals and updated with title commitment for title review.
  - 3. Prepare ROW parcels for acquisition and dedication to the City of Round Rock. Deliverables will consist of a metes and bounds description and accompanying survey plan for each parcel (estimated at 13 parcels adjacent to the northern ROW and 18 parcels adjacent to the southern ROW for a total of 31 parcels).
  - 4. Establish appropriate monuments on the proposed right-of-way lines at intersecting property lines, and at all PCs, PTs, angle points, intersecting right-of-way lines of side streets. All monuments to be set will be 5/8" iron rods with aluminum caps.
  - 5. The Engineer shall prepare and submit a ROW Plan Set of the entire project limits. The plan set will depict ROW conditions existing and proposed, parcel numbering protocols, areas, and current ownership and/or legal descriptions, planimetric entities, and other pertinent data.

#### FC 140 – Project Management and Administration

A. Prepare invoices and monthly written progress reports.

- **B.** Develop and maintain a detailed project schedule to track project conformance to Exhibit C, Work Schedule, for each work authorization. The schedule submittals shall be hard copy and electronic format.
- C. Meet on a scheduled basis with the City to review project progress (6 Maximum).
- **D.** Prepare, distribute, and file both written and electronic correspondence.
- **E.** Implement and execute QAQC plan.

#### FC 150 – Field Surveying and Photogrammetry

It shall be the responsibility of the Engineer to secure right of entry to private property for the purpose of performing any surveying, environmental, engineering or geotechnical activities. The Engineer shall not commit acts which will result in damages to private property and the Engineer will make every effort to comply with the wishes and address the concerns of private property owners.

- **A. Field Surveying.** The Engineer shall verify the benchmark coordinates and establish additional horizontal and vertical control for the project. The Engineer shall provide supplemental field surveying services necessary to verify the Digital Terrain Model (DTM), produce topographic maps, establish the project baseline on the ground, locate and tie existing utilities to the project baseline, to tie the soil boring locations, and update topography. Coordinate geometry shall be based on and tied into State plane surface coordinate system. The Engineer shall provide:
  - 1. Horizontal and Vertical Control Surveys (Project Control):

The maximum distance between control points shall not exceed 1500 feet. The coordinate location and elevation of control points or center panel points based on GPS surveys conducted by the Surveyor shall meet standards of accuracy as set forth below.

DATUM. All coordinates shall be based on the North American datum (NAD) 83 (1993 Adjustment). All elevations shall be based on the North American vertical datum (NAVD) of 1988

Additionally, the Engineer shall locate previously set control points and benchmarks established by and for projects in the adjacent near proximity; establish benchmark circuit (run levels) throughout the Project; establish additional benchmarks at intervals not to exceed 1,000 feet for the limits of the Project; tie benchmarks (station/offset) to Project baseline. Perform the benchmark circuits in accordance with good surveying practices.

2. Horizontal and Vertical Control Sheets. The Engineer's Surveyor shall prepare a Horizontal and Vertical Control Sheet, signed, sealed and dated by the professional engineer in direct responsible charge of the surveying and the responsible RPLS for insertion into the plan set. The Horizontal and Vertical Control sheet identifies the

primary survey control and the survey control monumentation used in the preparation of the project.

The following information should be shown on the Horizontal/Vertical Control Sheet:

- Station and offset (with respect to the baseline or centerline alignments) of each identified control point.
- Monumentation set for Control (Description and Location ties).
- Surface Adjustment Factor and unit of measurement.
- Coordinates (SPC Zone and surface or grid).
- Relevant metadata.
- Graphic (Bar) Scale.
- Placement of note "The survey control information has been accepted and incorporated into this PS&E" which is signed, sealed and dated by a Texas Professional Engineer.
- RPLS signature, seal and date.
- 3. Perform datum ties as required. If required, establish an elevation base on the project control's datum to other public entities published benchmarks.
- 4. Profile and cross section project limits, intersecting streets and driveways. Survey limits along Gattis School Road should extend 20-feet (min.) beyond the existing or proposed ROW as currently defined by the Corridor Study defined by others. Survey limits for intersecting streets should extend 300 feet from the centerline of Gattis School Road. Driveway ties should be based on proposed ROW limits. Existing trees within the survey limits are to be tied to with a description of tree type and size.
- 5. Cross section four (4) drainage channels for a distance of 500 feet each way outside the ROW lines. Cross sections shall not exceed 100 feet intervals and shall be taken at right angles to the channels. The width of the cross sections shall cover the top of the channel over bank extending at least 50 feet beyond. Cross section data shall include flow line of the channel. Roadway elevations, in the vicinity of all culverts should be included.
- 6. Cross sections the limits of an existing concrete weir spillway structure, located upstream of the project.
- 7. Secure right-of-entry, as needed for the project. The Engineer shall not commit acts which will result in damages to private property and the Engineer will make every effort to comply with the wishes and address the concerns of private property owners.
- 8. Tie to visible existing underground and overhead utilities (location, elevation, size and direction). This information will be combined with the record drawings to develop a single "existing utility" DGN file. Obtain the top elevation and outside visible perimeter shots of all utility manholes, pull boxes, junction boxes, meters, valves, etc. Provide flowline shoots and direction on all incoming and outgoing conduits in sanitary sewer manholes.

- 9. Obtain profiles of existing drainage facilities. Obtain the top elevation and outside visible perimeter shots of all drainage junctions such as inlets, manholes, accessible junction boxes, etc. Obtain the flowline and direction of all conduits entering and exiting all drainage structures. If silt is present, remove as much as feasible to provide an accurate flowline shot. Provide the type and size of all conduits include pipes and box culverts.
- 10. Provide temporary signs, traffic control, flags, safety equipment, etc. and obtain necessary permits. Traffic shall be controlled in and near surveying operations adequately to comply with the latest edition of the TMUTCD.
- 11. Tie down soil boring locations by station, offset and surface elevation.
- 12. If at any time during the contract period, the Surveyor encounters unforeseen circumstances which may materially affect the scope, complexity or character of the work authorized by the City, the Surveyor shall notify the City in writing immediately with a complete description of the circumstances encountered.
- 13. The following definitions shall apply:
  - DGN Two-dimensional digital map containing natural ground features and improvements plotted in a horizontal plane along the X and Y axes. A planimetric map does not include relief elements such as spot elevations, cross-sections, or contours.
  - DTM Three-dimensional digital model of the ground containing those features necessary to define surface relief. A three-dimensional model does not normally contain those planimetric features not necessary to define relief.
  - Horizontal and vertical ground control-Survey control points for which the X and Y coordinate and elevation have been determined by on the ground surveys.

#### B. Digital Planimetric Mapping (DGN) and Digital Terrain Modeling (DTM).

- 1. The Surveyor shall prepare DGN files covering the specific work location, meeting the City's standards and specifications. All areas obscured by vegetation or other obstructions resulting in voids shall be surveyed on the ground.
- 2. The Surveyor shall prepare DTM files covering the specific work location, meeting the City's standards and specifications. All areas obscured by vegetation or other obstructions resulting in voids shall be surveyed on the ground.
- 3. The Surveyor shall provide DGN and DTM files on a medium and in a format acceptable to the City.

#### FC 160 – Roadway Design

#### A. Geometric Design. The Engineer shall:

Develop a geometric schematic layout (Layout) for the full length of the project to be reviewed and approved by the City. The Layout shall consist of a planimetric file of existing features, the proposed improvements and identification of ROW acquisition requirements. The Layout shall also include the following features: existing/proposed horizontal and vertical alignment and profile grade line, cross culverts, lane widths, cross slopes, ditch slopes, pavement structure, clear zone, dedicated right turn lanes, signals, guard rail, limits of retaining walls (if applicable) and water surface elevations for various rainfall frequencies, etc. Existing major subsurface and surface utilities shall be shown. The proposed alignment shall avoid, as much as possible, the relocation of existing utilities. The Engineer shall provide horizontal and vertical alignment of the project layout in English units for main lanes and cross streets.

Coordination with adjacent segment engineers will be required during the development of the Layout

B. Roadway Plans. The Engineer shall:

Make final refinements to the horizontal/vertical geometry and continue with the development of detailed plans. Effort will include development and/or updates to the following:

- 1. Title Sheet/Project Layouts
- 2. Typical Sections
- 3. Plan and Profile
- 4. Intersection/Driveway Details
- 5. Others (HAL Data, Removal Layouts, Misc. Roadway Details)
- 6. Update model/design cross sections

#### FC 161 – Drainage

A. Drainage Report. The Engineer shall use data from as-built plans and FEMA maps to locate drainage outfall(s) and to determine proposed culvert sizes, design flows, and water surface elevations for use in the design of roadway geometry. The Engineer shall conduct a Preliminary Drainage Study to determine and evaluate the adequacy of the ROW needed to accommodate roadside channels and side slopes. The study will identify the water surface elevations for the 2, 5, 10, 25, 50 and 100-year storm events, identify and locate outfalls, provide an offsite drainage area map, on-site drainage area maps, and provide a drainage report identifying the results of the study. The Engineer shall evaluate the adequacy of the existing drainage structures. If existing structures are found to be inadequate, the Engineer shall perform a hydraulic analysis to determine a proposed replacement structure size in order to determine if the existing or proposed roadway vertical profiles will accommodate the proposed structure.

- **B.** Culvert and Storm Drain Design. The Engineer shall design all conventional storm drainage and cross drainage in conformance with the latest edition of the City's Design and Construction Standards unless otherwise directed in writing. Storm drain design shall be performed using GEOPAK Drainage. Cross drainage design shall be performed using Geopak Drainage, HY 8 or HEC RAS. The Engineer shall continue with development of detailed plans. Effort will include development and/or updates to the following:
  - 1. On and Off-site Drainage Area Maps.
  - 2. Hydraulic Computations (Run-off and Inlet, and Storm Drain)
  - 3. Storm Drain Plan/Profile
  - 4. Storm Drain Profiles
  - 5. Others (Misc. Drainage Details)
  - 6. Storm Water Pollution Prevention Plan/Temp. Erosion Sediment Control Plan
  - 7. Permanent Erosion Control Plan.
- **C. Culvert Layout and Detailing of Drainage Features.** The Engineer shall use standard details were practical. Effort will include development and/or updates to the following:
  - 1. Culverts Layouts: New culverts; culvert replacement.
  - 2. Outfall channels

#### FC 162 – Signing, Pavement Markings, Signals and Illumination

- **A. Signing and Pavement Markings.** The Engineer shall develop signing and pavement marking layouts to include: striping, small signs, delineators and MBGF locations. Small sign details will be prepared for non-standard signs.
- **B.** Signals. The Engineer shall develop temporary and permanent signal layouts and details at the following intersections: Windy Park Drive, AW Grimes Blvd., South Creek Dr. and Double Creek Dr. The temporary signals assume a three phase traffic control plan and signal layouts will be prepared for each phase.
- **C. Illumination.** The Engineer shall use standard details were practical. Effort will include development and/or updates to the following:
  - 1. Illumination Layouts The Engineer will design street lighting using arterial roadway criteria (i.e. 200 250' spacing) and photometric analysis.
  - 2. Electrical Schematic Plan The Engineer shall provide electrical circuit plans and details.
  - 3. Electrical Service Coordination- The Engineer shall coordinate with the utility providers and the City in identifying the power source.

#### FC 163 – Miscellaneous

Miscellaneous task includes: utility coordination/layouts, TCP, retaining wall layouts, the final assembly of the construction plans, specifications and estimate, traffic The Engineer shall provide the following services:

#### A. Retaining Walls

- 1. Retaining Wall Layouts 2 walls assumed with 800' (max) total length
- 2. Retaining Wall Boring Logs
- 3. Retaining Wall Horizontal Alignment Data
- 4. Retaining Wall Typical Sections
- 5. Retaining Wall Global Stability

#### **B.** Traffic Control Plan

- 1. Narrative Sequence of Construction
- 2. Typical Sections
- 3. Traffic Control Plan
- 4. Detour Layouts
- 5. Safety Review Meeting
- 6. Construction Schedule

#### C. Water/Wastewater

- 1. Meetings The Engineer will attend a maximum of 6 meetings with the City to coordinate, discuss status and address review comments.
- 2. Route/Size Coordination The Engineer will meet with City staff to determine the desired location and coordinate the water line diameter for the proposed facilities. It is assumed the City will provide the required design flows for the water and wastewater facilities.
- 3. Existing Service Connection The Engineer will work with the City to obtain site plans for existing tracts along the alignment to determine the quantity and locations of existing water and wastewater connections. It is assumed the Engineer will make a formal request for existing site plans and the City will research and provide the requested plans.
- 4. Construction Drawings The Engineer will prepare utility plan and profile sheets (estimated at 18 plan sheets). Additionally, utility detail sheets will be prepared as needed (estimated at 10 detail sheets). It is assumed from the City GIS records that there are no pressure reducing valve and vaults.
- 5. Technical Specifications The Engineer will review City standard specifications and provide special provisions as applicable.
- **D.** Utility Coordination The Engineer shall prepare existing Utility Layout, identify and coordinate with each utility company for relocations required. The Engineer shall attend utility coordination meetings (12 maximum), as requested to facility utility conflict identification and resolution. The Engineer shall coordinate with the City to determine the location of each existing and proposed utility.
- **E. Quantities/Summary Sheets** Updated summary sheets should be provided at the 60%, 90% and Final submittals.
- **F. Standards, Specifications and Estimate** Updated estimates should be provided at the 60%, 90% and Final submittals.
- G. Preparation of Bid Documents/Review Bids

#### **Deliverable/Submittal Requirements**

At each submittal, Engineer will provide a pdf of submitted documents and a flash drive containing native files (CADD files, calculation spreadsheets, roadway and drainage models, etc) to the City.

#### Initial Submittal (Geometric Schematic)

Provide the City with all required items, including four (4) paper copies and one (1) pdf copy for review of the items below.

- 1. Preliminary Geometric Schematic
- 2. Preliminary Property Schematic
- 3. Preliminary Sequence of Construction Layouts
- 4. Preliminary Drainage Report
- 5. Preliminary Geotech Reports
- 6. Preliminary Construction Cost Estimate
- 7. Preliminary Supporting Documents: Cost Estimate, Design Summary Form, Design Cross Sections, Potential Utility Conflicts, etc.

#### 30% Submittal (Final Geometric Schematic/ROW Limits)

Upon addressing the review comments, the Engineer will provide the City with all required items, included four (4) paper copies and one (1) pdf copy of the items below.

- 1. Final Geometric Schematic
- 2. Final Property Schematic/Draft ROW Plan Set
- 3. Final Sequence of Construction Layouts
- 4. Final Drainage Report
- 5. Final Geotech Reports
- 6. Updated Supporting Documents: Cost Estimate, Design Summary Form, Design Cross Sections, Environmental Documents, Potential Utility Conflicts, Preliminary Construction Timeline, Review Comment Resolution Log, etc.

#### 60% Submittal (PS&E)

Following approval of the geometric schematic, the Engineer will provide the City with all required items, included four (4) paper copies and one (1) pdf copy of the items below.

- 1. Plans w/o standards
- 2. Updated ROW Plan Set
- 3. Utility Layouts/Status
- 4. Updated Supporting Documents: Cost Estimate, Design Summary Form, Design Cross Sections, Environmental Documents, Construction Timeline, etc.

#### 90% Submittal (PS&E)

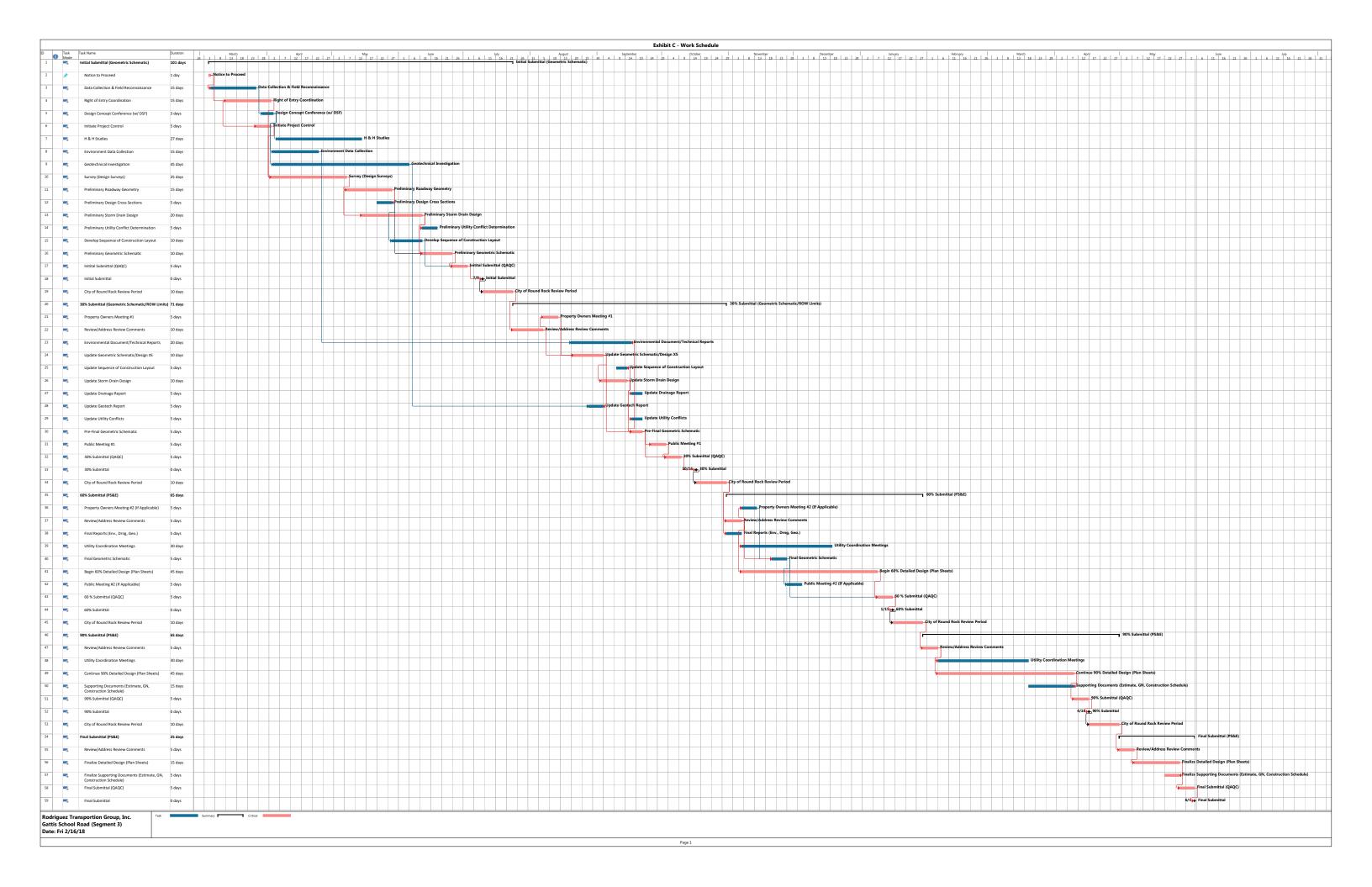
The Engineer will provide the City with all required items, included four (4) paper copies and one (1) pdf copy of the items below.

- 1. Updated Plans w/ standards
- 2. Final ROW Plan Set
- 3. Utility Layouts/Status
- 4. Updated Supporting Documents: Cost Estimate, Design Summary Form, Design Cross Sections, Environmental Documents, Construction Timeline, General Notes, Special Specification/Provisions, etc.

#### Final Submittal (PS&E)

The Engineer will provide the City with all required items, included four (4) paper copies and one (1) pdf copy of the items below.

- 1. Final Plans w/ standards
- 2. Final ROW Plan Set
- 3. Final Utility Layouts/Status
- 4. Final Supporting Documents: Cost Estimate, Design Summary Form, Design Cross Sections, Environmental Documents, Construction Timeline, General Notes, Special Specification/Provisions, Bid Forms, etc.



#### Exhibit D Fee Schedule

RODRIGUEZ TRANSPORTATION GROUP, Inc. Estimate of Engineering Services Budget						City of Round Roc Gattis School Roa		
TASK	RODRIGUEZ TRANSPORTATION GROUP, INC.	CORSAIR CONSULTING LLC	COX McLAIN ENV. CONSULTING INC.	HDR ENGINEERING INC.	INLAND GEODETICS LLC	K FRIESE & ASSOCIATES INC.	NANCY LEDBETTER & ASSOCIATES INC.	TOTAL COST
FC 110 Route and Design Studies; Geotechnical Investigation	\$28,656.92	\$29,301.20	\$1,395.00	\$2,768.00	\$0.00	\$5,915.40	\$0.00	\$68,036.52
FC 120 Environmental Documentation	\$13,708.02	\$0.00	\$16,020.75	\$0.00	\$0.00	\$0.00	\$35,898.00	\$65,626.77
FC 130 ROW Data/Utilities	\$5,410.68	\$0.00	\$0.00	\$0.00	\$136,466.00	\$0.00	\$0.00	\$141,876.68
FC 140 Project Management and Administration	\$40,390.32	\$0.00	\$870.50	\$5,216.00	\$6,260.00	\$6,003.00	\$5,542.00	\$64,281.82
FC 150 Field Surveying and Photogrammetry	\$2,617.52	\$0.00	\$0.00	\$0.00	\$54,152.00	\$0.00	\$0.00	\$56,769.52
FC 160 Roadway Design	\$132,279.22	\$0.00	\$0.00	\$2,420.00	\$0.00	\$0.00	\$0.00	\$134,699.22
FC 161 Drainage	\$132,957.24	\$0.00	\$0.00	\$4,340.00	\$0.00	\$0.00	\$0.00	\$137,297.24
FC 162 Signing, Pavement Markings, Signals and Illumination	\$11,430.42	\$0.00	\$0.00	\$121,271.00	\$0.00	\$0.00	\$0.00	\$132,701.42
FC 163 Miscellaneous	\$77,953.86	\$0.00	\$0.00	\$3,544.00	\$0.00	\$54,226.10	\$0.00	\$135,723.96
Subtotal - Labor	\$ 445,404.20	\$ 29,301.20	\$ 18,286.25	\$ 139,559.00	\$ 196,878.00	\$ 66,144.50	\$ 41,440.00	\$ 937,013.15
Subtotal - Other Direct Expenses	\$ 46,050.60	\$ 24,228.00	\$ 1,353.00	\$ 195.50	\$ 1,307.20	\$ 412.50	\$ 2,477.50	\$76,024.30
GRAND TOTAL	\$ 491,454.80	\$ 53,529.20	\$ 19,639.25	\$ 139,754.50	\$ 198,185.20	\$ 66,557.00	\$ 43,917.50	\$ 1,013,037.45

Exhibit D - FEE SCHEDULE RODRIGUEZ TRANSPORTATION GROUP, INC. (RTG) Estimate of Engineering Services Budget

City of Round Rock

Gattis School Road (Segment 3)

	No. of	Project	Senior	Project	Design		Sr. Engineer	Sr. Engineer	Engineer	Admin./	Total	Total Labor
Rodriguez Transportation Group, Inc.	Sheets	Manager	Engineer	Engineer	Engineer	EIT	Specialist	Tech	Tech	Clerical	Hours	Cost
		\$212.46	\$186.97	\$158.64	\$127.48	\$96.32	\$141.64	\$124.64	\$84.98	\$65.15		
FC 110 Route and Design Studies; Geotechnical Investigation A. Data Collection and Field Reconnaissance		1	1		1	1		1	1	1	1	
<ol> <li>Secure and review available misc. data</li> </ol>		4	4	4					2		14	\$2,402.24
Secure and review site plans (existing & proposed)     Secure and review available flood plain information		4	4	4		6			2		20 6	\$2,980.16 \$1,121.82
<ol> <li>Conduct field reconnaissance and photographic record</li> <li>Develop design critieria (roadway and drainage)</li> </ol>		4	4	4		4					16 8	\$2,617.56 \$1,597.72
C. Develop preliminary sequence of construction exhibit		4			40		25	25			94	\$12,606.04
D. Develop preliminary cost estimate E. Prepare for and attend DCC meeting		2	2	2 4			8				14 14	\$2,249.26 \$2,657.20
F. Geotech & Pavement Design (Support Only)		2									2	\$424.92
FC - 110 Subtotal - Labor Hrs.	0	30	28	18	40	10	33	25	4	0	188	\$28,656.92
FC 120 Environmental Documentation A. Data Collection Process (Review Only)	1	2	[	1	1	(	1	[	r	1	2	\$424.92
B. Hazardous Materials Initial Site Assessment (Review Only)		2									2	\$424.92
C. Section 404 Clean Water Act Compliance (Review Only) D. Endangered Species Act Compliance (Review Only)		2									2	\$424.92 \$424.92
E. Texas Antiquities Code Compliance (Review Only)		2									2	\$424.92 \$212.46
F. Project Contact Database (Review Only) G. Property Owners Meetings (up to 2)		4	4	4			8				20	\$3,365.40
H. Public Meetings (up to 2) I. Website Updates (up to 3) (Review Only)		8	8	8			16				40	\$6,730.80 \$637.38
J. Email Updates (up to 3) (Review Only)		3									3	\$637.38
FC - 120 Subtotal - Labor Hrs.	0	29	12	12	0	0	24	0	0	0	77	\$13,708.02
FC 130 ROW Data/Utilities												
A. Right-of-Way Map 1. Prepare base map of existing ROW/parcel boundaries												
(Review Only)		2		2							4	\$742.20
2. Review design data to confirm existing/proposed ROW (Review B. Utility Locations		2		2							4	\$742.20
<ol> <li>Request marking of underground utilities and field tie</li> </ol>											0	\$0.00
Secure record drawings of all utilities along the corridor     A. Reconcile differences (record drawings and field data)		~		~							0	\$0.00
(Review Only)		2		2							4	\$742.20
C. Boundary Surveying and Parcel Preparation 1. Locate property corners and confirm existing ROW limits											0	\$0.00
2. Prepare property schematic of the overall project 3. ROW documents (35 parcels) (Review Only)		2		2			12				16 4	\$2,441.88 \$742.20
4. Establish monuments on the proposed ROW		-									0	\$0.00
	_		_		-			-	-	_		
FC - 130 Subtotal - Labor Hrs.	0	10	0	10	0	0	12	0	0	0	32	\$5,410.68
FC 140 Project Management and Administration							•					
A. Prepare Invoices and Monthly Progress Reports (12 Mo.)	1	24		1							24	\$5,099.04
B. Develop and maintain work schedule		6									6	\$1,274.76
C. Prepare for and attend City meetings (up to 6) D. Project file maintenance (12 Mo.)		24 12	8	8			8				48 12	\$8,997.04 \$2,549.52
E. Implement and execute QAQC plan (schematic, 60%, 90% and Fir	nal)	12	12	40			80				144	\$22,469.96
FC - 140 Subtotal - Labor Hrs.	0	78	20	48	0	0	88	0	0	0	234	\$40,390.32
	-				-				-	-		,
FC 150 Field Surveying and Photogrammetry												
A. Field Surveying 1. Project Control											0	\$0.00
2. Project Control Sheets 3. Datum Ties											0	\$0.00 \$0.00
4. Field Surveys											0	\$0.00
5. Field survey (drainages channels) 6. Field surveys (existing concrete weir)											0	\$0.00 \$0.00
7. Secure right of entry											0	\$0.00
8. Tie visible utilities and develop DGN file 9. Profile existing drainage facilities								<u> </u>			0	\$0.00 \$0.00
10. Provide traffic control for survey activities 11. Tie soil boring locations											0	\$0.00 \$0.00
B. Digital Planimetric Mapping (DGN) and DTM		-		_								
Planimetric (DGN) file (Review Only)     DTM File (Review Only)		2		2			4 4				8	\$1,308.76 \$1,308.76
FC - 150 Subtotal - Labor Hrs.	0	4	0	4	0	0	8	0	0	0	16	\$2,617.52
ru - 190 Subtotal - Labor Hrs.	U	*	U	•	U	U	U	U	v	Ū	10	φ <b>2,017.</b> 32
FC 160 Roadway Design												
A. Geometric Design (Geometric Layout)     1. Develop horizontal alignments		4		8							12	\$2,118.96
<ol><li>Develop and refine vertical profiles</li></ol>		4		8	8						20	\$3,138.80
2. Develop typical sections     4. Develop 3D model (design cross sections)		2 8	20	4		8	120				14 148	\$1,830.04 \$22,435.88
<ol><li>Establish proposed ROW limits</li></ol>		4	4	4							12	\$2,232.28
6. Prepare and refine Geometric Layout B. Roadway Plans		8	8	8		25	25				74	\$10,413.56
1. Title-Index Sheets/Project Layouts	5	5		10	10	25	15	10			75	\$9,702.50
2. Typical Sections (plus Utility) 3. Plan & Profile	7 10	7 10		14 20	14 20	35 40		15 25	10 25		95	\$11,583.50 \$16,940.30
3. Plan & Profile 4. Intersection/Driveway Details	10 13	10 13		20 26	20 26	40 60		25 20	25 20		140 165	\$16,940.30 \$20,172.70
5. Others (HAL Data, Removal Layouts, Misc Rdwy Details)	15	15		15	15	75		20	20		160	\$18,895.10
6. Update 3D Model (design cross sections)		4		4			80				88	\$12,815.60
FC - 160 Subtotal - Labor Hrs.	50	84	32	121	93	268	240	90	75	0	1003	\$132,279.22
FC 161 Drainage	I	I	L	ļ	ļ	L	I		L	ļ	L	
A. Drainage Report (Summary of Preliminary Design)			40	40		30	20			12	142	\$20,328.60
B. Preliminary Culvert and Storm Drain Design 1a. On-site Drainage Area Maps	10		16	16		40	48				120	\$16,181.28
1b. Off-site Drainage Area Maps	1		4	8		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	8				20	\$3,150.12

2a. Hydraulic Computations (Runoff, Inlet & Storm Sewer)			8	8	16	16	27				75	\$10,169.96
2b. Hydraulic Computations (Culverts)	4		8	8		8	8				32	\$4,668.56
2c. Hydraulic Computations (Channels)	1		2	2		2	2				8	\$1,167.14
3. Storm Drain Plan/Profile	10		30	50		20	80				180	\$26,798.70
<ol> <li>Storm Drain Profiles</li> </ol>			12	16		16	16				60	\$8,589.24
5a. Others - Misc Details	8		20	30		15	15				80	\$12,068.00
6a. SW3P	1			16							16	\$2,538.24
6b. ESCP Plans	10		20	30		15	15				80	\$12,068.00
C. Culvert Layouts												
1. Preliminary Cross Culvert Layouts (4 Culverts)	4		8	10		20	42				80	\$10,957.44
2. Preliminary outfall channel layouts	2		4	12		8	6				30	\$4,271.96
3. Miscellaneous Structural Details	2		-	12		Ū	v				0	\$0.00
5. Miscellarieous Structural Details											0	\$0.00
FC - 161 Subtotal - Labor Hrs.	51	0	172	246	16	190	287	0	0	12	923	\$132,957.24
FC 162 Signing, Pavement Markings, Signals and Illumination												
A. Signing and Pavement Markings	7	7	1	10	10	30	1	20	20		97	\$11,430.42
B. Signals											0	\$0.00
C. Illumination											-	
1. Illumination Layouts											0	\$0.00
2. Electrical Circuit Plan											0	\$0.00
3. Power Source Identification											0	\$0.00
3. Fower Source Identification											0	\$0.00
		l										
FC - 162 Subtotal - Labor Hrs.	7	7	0	10	10	30	0	20	20	0	97	\$11,430.42
	L		I	I	L	L			· · · · · · · · · · · · · · · · · · ·	L	L	L
FC 163 Miscellaneous												
A. Retaining Walls		1		1								
A. Retaining Walls     1. Retaining Wall Layouts	2	2		20		18					40	\$5,331.48
			l	20		ίð	6					
2. Retaining Wall Boring Logs	1	I			ļ	ļ	6	ł	L	ļ	6	\$849.84
3. Retaining Wall Horizontal Alignment Data	1						4				4	\$566.56
<ol> <li>Retaining Wall Typical Sections</li> </ol>	1			4				4			8	\$1,133.12
5. Retaining Wall Global Stability				8							8	\$1,269.12
B. Traffic Control Plan												
1. Narrative Sequence of Construction	2	2		8		6					16	\$2,271.96
2. Typical Sections	2	2		8		8		6			24	\$3,212.44
3. Traffic Control Plan (2 phases + advance warning signs)	15	15		24	24	75		12	12		162	\$19,793.22
4. Detour Layouts	1				5	10					15	\$1,600.60
5. Safety Review Meeting		4		4							8	\$1,484.40
6. Construction Schedule		2			8						10	\$1,444.76
C. Water/Wastewater					0						10	ψ1,444.70
1. Attend coordination meetings (up to 6)											0	\$0.00
2. Route/Size Coordination											0	\$0.00
3. Existing Service Connections											0	\$0.00
4. Construction Drawings											0	\$0.00
4. Construction Drawings     5. Technical Specifications											0	\$0.00
4. Construction Drawings     5. Technical Specifications     6. Permitting												
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination											0	\$0.00 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permitting	10	10		10		20			40		0	\$0.00
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination	10	10 8		10 4		20	4		40		0	\$0.00 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts	10					20	4		40		0 0 80	\$0.00 \$0.00 \$9,036.60
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments	10	8				20	4				0 0 80 16	\$0.00 \$0.00 \$9,036.60 \$2,900.80
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)	10	8 36		4	8	20	4				0 0 80 16 52	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$9,008.24
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets		8 36		4	8		4		16		0 0 80 16 52 8	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$9,008.24 \$1,484.40
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility confiss and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantites/Summy Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)		8 36 4 		4 4 8	8	8	24		16 8		0 0 16 52 8 32 80	\$0.00 \$0.00 \$9,036.60 \$9,008.04 \$1,484.40 \$3,739.36 \$9,994.16
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets		8 36 4		4 4 8	8	8			16 8		0 0 80 16 52 8 32	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$9,008.24 \$1,484.40 \$3,739.36
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids	8	8 36 4 8 8		4 4 8 8		8 20	24 8		16 8 20		0 0 16 52 8 32 80 16	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$9,008.24 \$1,484.40 \$3,739.36 \$9,994.16 \$2,832.80
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility confiss and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantities/Specifications and Estimate (60%, 90%, Final)		8 36 4 	0	4 4 8	8	8	24	22	16 8	0	0 0 16 52 8 32 80	\$0.00 \$0.00 \$9,036.60 \$9,008.24 \$1,484.40 \$3,739.36 \$9,994.16
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.	8 43	8 36 4 8 8	0	4 4 8 8		8 20	24 8	22	16 8 20	0	0 0 16 52 8 32 80 16	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$9,008.24 \$1,484.40 \$3,739.36 \$9,994.16 \$2,832.80
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids	8	8 36 4 8 8	0	4 4 8 8		8 20	24 8	22	16 8 20	0	0 0 16 52 8 32 80 16	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$9,008.24 \$1,484.40 \$3,739.36 \$9,994.16 \$2,832.80
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.	8 43	8 36 4 8 8	0	4 4 8 8		8 20	24 8	22	16 8 20	0	0 0 16 52 8 32 80 16	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$9,008.24 \$1,484.40 \$3,739.36 \$9,994.16 \$2,832.80
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579	45 204	8 20 165 663	24 8 46 738	157	16 8 20 96		0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$9,008.24 \$1,484.40 \$3,739.36 \$9,994.16 \$2,832.80
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS	8 43	8 36 4 8 8 8 101		4 4 8 8 110	45	8 20 165	24 8 46	157	16 8 20 96		0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$9,008.24 \$1,484.40 \$3,739.36 \$9,994.16 \$2,832.80
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579	45 204	8 20 165 663	24 8 46 738	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.036.60 \$2.900.80 \$1,484.40 \$1,484.40 \$3,739.36 \$2,832.80 <b>\$77,953.86</b>
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantites/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     Total - Labor Hours     Total - Labor Cost	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579	45 204	8 20 165 663	24 8 46 738	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.036.60 \$2.900.80 \$1,484.40 \$1,484.40 \$3,739.36 \$2,832.80 <b>\$77,953.86</b>
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Cost	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579	45 204 \$26,005.92	8 20 165 663 \$63,860.16	24 8 46 738	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.036.60 \$2.900.80 \$1.484.40 \$3.739.36 \$2.832.80 \$77.953.86 \$445,404.20
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11"x17")	8 43	8 36 4 8 8 101 343	264	4 8 8 110 579	45 204 \$26,005.92 sheets @	8 20 165 663 \$63,860.16 \$0.20	24 8 46 738 ########	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$2.900.80 \$3.709.24 \$1,484.40 \$3.739.36 \$9.994.16 \$2.832.80 \$77,953.86 \$445,404.20 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hours     Total - Labor Hours     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies BW (11"x17")	8 43	8 36 4 8 8 101 343	264	4 8 8 110 579	45 204 \$26,005.92 sheets @ sheets @	8 20 165 663 \$63,860.16 \$0.20 \$0.20 \$0.15	24 8 46 738 ######### / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.036.60 \$2.900.80 \$1.484.40 \$3.739.36 \$9.994.16 \$2.832.80 \$77,953.86 \$445,404.20 \$445,404.20 \$0.00 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantites/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies Color (11"x17")	8 43	8 36 4 8 8 101 343	264	4 8 8 110 579	45 204 \$26,005.92 sheets @ sheets @ sheets @	8 20 165 663 \$63,860.16 \$0.20 \$0.15 \$1.50	24 8 46 738 ######## / sheet / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.008 \$9.008.24 \$1.484.40 \$3.739.36 \$9.994.16 \$2.832.80 \$77,953.86 \$445,404.20 \$0.00 \$0.00 \$0.00 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     Total - Labor Hours     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies BW (15"x11")	8 43	8 36 4 8 8 101 343	264	4 4 8 7 110 579 \$91,852.56	45 204 \$26,005.92 sheets @ sheets @ sheets @ sheets @	8 20 165 663 \$63,860.16 \$0.20 \$0.15 \$1.50 \$0.75	24 8 46 738 ######### / sheet / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$1,484.40 \$3,739.36 \$2,832.80 \$77,953.86 \$445,404.20 \$445,404.20 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantites/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies Color (11"x17")	8 43	8 36 4 8 8 101 343	264	4 4 8 7 110 579 \$91,852.56	45 204 \$26,005.92 sheets @ sheets @ sheets @	8 20 165 663 \$63,860.16 \$0.20 \$0.15 \$1.50	24 8 46 738 ######### / sheet / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.008 \$9.008.24 \$1.484.40 \$3.739.36 \$9.994.16 \$2.832.80 \$77,953.86 \$445,404.20 \$0.00 \$0.00 \$0.00 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     Total - Labor Hours     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies BW (15"x11")	8 43	8 36 4 8 8 101 343	264	4 4 8 7 110 579 \$91,852.56	45 204 \$26,005.92 sheets @ sheets @ sheets @ sheets @	8 20 165 663 \$63,860.16 \$0.20 \$0.15 \$1.50 \$0.75	24 8 46 738 ######### / sheet / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$2.900.80 \$9.008.44 \$1,484.40 \$3,739.36 \$9.994.16 \$2,832.80 <b>\$77,953.86</b> \$445,404.20 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Cost  DIRECT EXPENSES Photocopies BW (815"x11") Photocopies Color (11"x17") Photocopies Color (11"x17") Photocopies Color (8.5"x11")	8 43	8 36 4 8 8 101 343	264	4 4 8 7 110 579 \$91,852.56	45 204 \$26,005.92 sheets @ sheets @ sheets @ miles @ Dataciac @	8 20 165 663 \$63,860.16 \$0.20 \$0.15 \$1.50 \$0.75 \$0.55 \$14.00	24 8 46 738 ######### /sheet /sheet /sheet /sheet /sheet /sheet /sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.036.60 \$2.900.80 \$1.484.40 \$3.739.36 \$9.994.16 \$2.832.80 \$77.953.86 \$445,404.20 \$445,404.20 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11*x17*)     Photocopies BW (11*x17*)     Photocopies Color (11*x17*)     Photocopies Color (18.5*x11*)     Mileage     Overnight Mail - Letter Size	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579 \$91,852.56 0	45 204 \$26,005.92 sheets @ sheets @ sheets @ miles @ Deliveries @	8 20 165 663 \$63,860.16 \$0.20 \$0.15 \$1.50 \$0.75 \$0.55 \$14.00	24 8 46 738 ######## / sheet / sheet / sheet / sheet / sheet / sheet / sheet / sheet / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$2.900.80 \$9.008.44 \$1,484.40 \$3,739.36 \$9.994.16 \$2,832.80 <b>\$77,953.86</b> \$445,404.20 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hurs.     TotAL SHEETS     Total - Labor Hours     Total - Labor Hours     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies Color (11"x17")     Photocopies Color (11"x17")     Photocopies Color (4.5"x11")     Mileage     Overnight Mail - Letter Size     Overnight Mail - Oversize Box	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579 \$91,852.56 0 158	45 204 \$26,005.92 sheets @ sheets @ sheets @ beliveries @ Deliveries @ Deliveries @ Deliveries @	8 20 165 663 \$63,860.16 \$0.20 \$0.15 \$1.50 \$0.75 \$0.55 \$14.00 \$50.00	24 8 46 738 ######## /sheet /s	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.008 \$9.0082.900.80 \$9.00824 \$1.484.40 \$3.739.36 \$9.994.16 \$2.832.80 <b>\$77,953.86</b> \$445,404.20 \$0.00
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     Total - Labor Hours     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies BW (11"x17")     Photocopies Color (15"x11")     Mileage     Overnight Mail - Letter Size     Overnight Mail - Oversize Box SUE Services (Cardno-Labor Cost)     SUE Services (Cardno-Labor Cost)	8 43	8 36 4 8 8 101 343	264	4 4 8 8 8 9 579 \$91,852.56 0 0 0	45 204 \$26,005.92 sheets @ sheets @ miles @ Deliveries @ Deliveries @ hours @ hours @	8 20 165 663 \$63,860.16 \$0.20 \$0.75 \$15.00 \$50.05 \$14.00 \$50.00 \$50.00 \$50.00 \$235.00	24 8 46 738 738 738 738 738 738 738 738 738 738	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9,008,200.80 \$9,008,24 \$1,484.40 \$3,739.36 \$9,934.16 \$2,832,80 \$445,404.20 \$445,404.20 \$0.000\$00 \$0.000\$00 \$0.000\$00\$00\$00\$000\$0
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Hours     Total - Labor Cost  DIRECT EXPENSES Photocopies BW (8.5*x11*) Photocopies Color (11*x17*) Photocopies Color (11*x17*) Photocopies Color (15.5*x11*) Mileage     Overnight Mail - Utert Size     Overnight Mail - Oversize Box     SUE Services (Cardno-OL B)     SUE Services (Cardno-OL Utility Inventory)	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579 \$91,852.56 0 158 84 6	45 204 \$26,005.92 sheets @ sheets @ sheets @ sheets @ miles @ Deliveries @ Deliveries @ hours @ hours @ hours @	8 20 165 663 \$63,860.16 \$0.20 \$0.20 \$0.20 \$0.20 \$0.25 \$1.50 \$0.55 \$14.00 \$50.00 \$100.70 \$235.00	24 8 738 738 738 738 738 738 738 738 738 7	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$9,008,24 \$9,008,24 \$9,008,24 \$9,994,16 \$2,832,80 \$2,832,80 \$77,953,86 \$445,404,20 \$0.000 \$0.0000\$0 \$0.000 \$0.0000\$0 \$0.0000\$000\$
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies BW (11"x17")     Photocopies Color (16.5"x11")     Mileage     Overnight Mail - Letter Size     Overnight Mail - Letter Overlian Cost     SUE Services (Cardno-Dabor Cost)     SUE Services (Cardno-Ot Utility Inventory)     SUE Services (Cardno-A) (0 feet to 4.99 feet)	8 43	8 36 4 8 8 101 343	264	4 4 8 8 8 9 110 579 \$91,852.56 \$91,852.56 0 0 1588 844 6 6 6	45 204 \$26,005.92 sheets @ sheets @ sheets @ miles @ Deliveries @ hours @ hours @ hours @ hours @	8 20 165 663 \$63,860.16 \$0.20 \$0.15 \$1.5 \$1.5 \$1.5 \$1.0 \$0.75 \$1.0,00 \$50.0,00 \$100,70 \$235.00 \$175.00	24 8 46 738 738 738 738 738 738 738 738 738 738	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$2,900.80 \$9,008.24 \$1,484.40 \$3,739.36 \$9,994.16 \$2,832.80 <b>\$77,953.86</b> \$77,953.86 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$15,910.60 \$19,740.00 \$1,97.00.00 \$1,050.00 \$4,550.00
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hurs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Hours     Total - Labor Hours     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies Color (11"x17")     Photocopies Color (11"x17")     Photocopies Color (15"x11")     Mileage     Overnight Mail - Oversize Box     SUE Services (Cardno-Labor Cost)     SUE Services (Cardno-CL B)     SUE Services (Cardno-CL A) (0 feet to 9.99 feet)     SUE Services (Cardno-CL A) (5 feet to 9.99 feet)	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579 \$91,852.56 0 0 1588 844 6 6 4 4	45 204 \$26,005.92 sheets @ sheets @ sheets @ beliveries @ Deliveries @ Deliveries @ hours @ hours @ hours @ hours @ hours @	8 20 165 663 \$63,860.16 \$0.20 \$0.75 \$1.50 \$1.50 \$100.70 \$50.00 \$175.00 \$175.00 \$750.00	24 8 46 738 ######### / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.008.00 \$9.008.24 \$1.484.40 \$3.739.36 \$9.984.16 \$2.832.80 \$77,953.86 \$445,404.20 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$19,740.00 \$19,740.00 \$19,740.00 \$3.800.00
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies BW (11"x17")     Photocopies Color (16.5"x11")     Mileage     Overnight Mail - Letter Size     Overnight Mail - Letter Overlian Cost     SUE Services (Cardno-Dabor Cost)     SUE Services (Cardno-Ot Utility Inventory)     SUE Services (Cardno-A) (0 feet to 4.99 feet)	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579 \$91,852.56 0 0 1588 844 6 6 4 4	45 204 \$26,005.92 sheets @ sheets @ sheets @ miles @ Deliveries @ hours @ hours @ hours @ hours @	8 20 165 663 \$63,860.16 \$0.20 \$0.15 \$1.5 \$1.5 \$1.5 \$1.0 \$0.75 \$1.0,00 \$50.0,00 \$100,70 \$235.00 \$175.00	24 8 46 738 ######### / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$2,900.80 \$9,008.24 \$1,484.40 \$3,739.36 \$9,994.16 \$2,832.80 <b>\$77,953.86</b> \$77,953.86 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$15,910.60 \$19,740.00 \$1,97.00.00 \$1,050.00 \$4,550.00
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hurs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Hours     Total - Labor Hours     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies Color (11"x17")     Photocopies Color (11"x17")     Photocopies Color (15"x11")     Mileage     Overnight Mail - Oversize Box     SUE Services (Cardno-Labor Cost)     SUE Services (Cardno-CL B)     SUE Services (Cardno-CL A) (0 feet to 9.99 feet)     SUE Services (Cardno-CL A) (5 feet to 9.99 feet)	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579 \$91,852.56 0 0 1588 844 6 6 4 4	45 204 \$26,005.92 sheets @ sheets @ sheets @ beliveries @ Deliveries @ Deliveries @ hours @ hours @ hours @ hours @ hours @	8 20 165 663 \$63,860.16 \$0.20 \$0.75 \$1.50 \$1.50 \$100.70 \$50.00 \$175.00 \$175.00 \$750.00	24 8 46 738 ######### / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.008,200,80 \$9.008,24 \$1,484,40 \$3,739,36 \$9.994,16 \$2,832,80 \$77,953,86 \$77,953,86 \$445,404,20 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$19,740,00 \$19,740,00 \$19,510,60,00 \$4,500,00 \$3,800,00
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies Color (11"x17")     Photocopies Color (11"x17")     Photocopies Color (8.5"x11")     Mileage     Overnight Mail - Letter Size     Overnight Mail - Centra Cost     SUE Services (Cardno-CH DB)     SUE Services (Cardno-CH LB)     SUE Services (Cardno-CH LB)     SUE Services (Cardno-CH LB)     SUE Services (Cardno-CH LA) (5 feet to 9.99 feet)     SUE Services (Cardno-CH LA)	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579 \$91,852.56 0 0 1588 844 6 6 4 4	45 204 \$26,005.92 sheets @ sheets @ sheets @ beliveries @ Deliveries @ Deliveries @ hours @ hours @ hours @ hours @ hours @	8 20 165 663 \$63,860.16 \$0.20 \$0.75 \$1.50 \$1.50 \$100.70 \$50.00 \$175.00 \$175.00 \$750.00	24 8 46 738 ######### / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$2.900.80 \$9.008.24 \$1.484.40 \$3.739.36 \$9.994.16 \$2.832.80 <b>\$77,953.86</b> \$445,404.20 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$15,910.60 \$19,740.00 \$1,050.00 \$3.800.00 \$3.800.00 \$1,050.00
4. Construction Drawings     5. Technical Specifications     6. Permitting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hurs.     TotAL SHEETS     Total - Labor Hours     Total - Labor Hours     Total - Labor Hours     Total - Labor Hours     DiRECT EXPENSES     Photocopies BW (11"x17")     Photocopies Color (11"x17")     Photocopies Color (11"x17")     Photocopies Color (5.5"x11")     Mileage     Overnight Mail - Oversize Box     SUE Services (Cardno-Labor Cost)     SUE Services (Cardno-Cu B)     SUE Services (Cardno-Cu B)     SUE Services (Cardno-Cu A) (0 feet to 9.99 feet)     SUE Services (Cardno-Cu A) (5 feet to 9.99 feet)	8 43	8 36 4 8 8 101 343	264	4 4 8 8 110 579 \$91,852.56 0 0 1588 844 6 6 4 4	45 204 \$26,005.92 sheets @ sheets @ sheets @ beliveries @ Deliveries @ Deliveries @ hours @ hours @ hours @ hours @ hours @	8 20 165 663 \$63,860.16 \$0.20 \$0.75 \$1.50 \$1.50 \$100.70 \$50.00 \$175.00 \$175.00 \$750.00	24 8 46 738 ######### / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9.008.00 \$2.900.80 \$1.484.40 \$3.739.36 \$2.832.80 \$77,953.86 \$445,404.20 \$445,404.20 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$19,740.00 \$19,740.00 \$19,740.00 \$19,740.00 \$3.800.00
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quanities/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hurs.     TotAL SHEETS     Total - Labor Hours     Total - Labor Hours     Total - Labor Hours     DIRECT EXPENSES     Photocopies BW (11"x17")     Photocopies BW (11"x17")     Photocopies Color (11"x17")     Photocopies Color (11"x17")     Photocopies Color (15"x11")     Mileage     Overnight Mail - Oversize Box     SUE Services (Cardno-Labor Cost)     SUE Services (Cardno-CL B)     SUE Services (Cardno-CL B)     SUE Services (Cardno-CL A) (5 feet to 4.99 feet)     SUE Services (Cardno-CL A) (5 feet to 9.99 feet)     SUE Services (Cardno-CL A) (5 feet to 9.99 feet)     SUE Services (Traffic Control)(Single Lane Closure)	8 43 151	8 36 4 8 8 101 343	264	4 4 8 8 110 579 \$91,852.56 0 0 1588 844 6 6 4 4	45 204 \$26,005.92 sheets @ sheets @ sheets @ beliveries @ Deliveries @ Deliveries @ hours @ hours @ hours @ hours @ hours @	8 20 165 663 \$63,860.16 \$0.20 \$0.75 \$1.50 \$1.50 \$100.70 \$50.00 \$175.00 \$175.00 \$750.00	24 8 46 738 ######### / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$9,036.60 \$2,900.80 \$1,494.40 \$3,739.36 \$2,832.80 \$2,832.80 \$445,404.20 \$445,404.20 \$445,404.20 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$1,050.00 \$1,050.00 \$1,050.00 \$1,050.00 \$1,050.00 \$1,050.00 \$3,800.00 \$3,800.00 \$1,050.00 \$3,800.00 \$3,900.00 \$3,800.00 \$3,800.00 \$3,800.00 \$3,800.00 \$3,800.00 \$3,800.00 \$3
4. Construction Drawings     5. Technical Specifications     6. Permiting     D. Utility Coordination     1. Prepare Existing Utility Layouts     2. Identify potential utility conflicts and develop log     3. Attend utility coordination meetings (up to 12)     4. Coordinate with City to establish utility assignments     E. Quantites/Summary Sheets     F. Standards, Specifications and Estimate (60%, 90%, Final)     G. Preparation of Bid Documents/Review Bids     FC - 163 Subtotal - Labor Hrs.     TOTAL SHEETS     Total - Labor Hours     Total - Labor Hours     Total - Labor Cost     DIRECT EXPENSES     Photocopies BW (11°×17°)     Photocopies Color (11°×17°)     SUE Services (Cardno-Labor Cost)     SUE Services (Cardno-Cabor Cost)     SUE Servic	8 43 151	8 36 4 8 8 101 343	264	4 4 8 8 110 579 \$91,852.56 0 0 1588 844 6 6 4 4	45 204 \$26,005.92 sheets @ sheets @ sheets @ beliveries @ Deliveries @ Deliveries @ hours @ hours @ hours @ hours @ hours @	8 20 165 663 \$63,860.16 \$0.20 \$0.75 \$0.55 \$1.50 \$100.70 \$50.00 \$175.00 \$175.00 \$750.00	24 8 46 738 ######### / sheet / sheet	157	16 8 20 96 195	12	0 0 80 16 52 8 32 80 16 585	\$0.00 \$0.00 \$2,900.80 \$3,008.24 \$1,484.40 \$3,739.36 \$3,9.94.16 \$2,832.80 <b>\$77,953.86</b> <b>\$77,953.86</b> \$77,953.86 \$77,953.86 \$77,953.86 \$77,953.86 \$77,953.86 \$77,953.86 \$77,953.86 \$77,953.86 \$77,953.80 \$1,953.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$15,910.65 \$1,910.60 \$1,050.00 \$3,800.00 \$3,0000\$\$3,000\$\$3,000\$\$3,0000\$\$3,000\$

# Exhibit D - FEE SCHEDULE SUBPROVIDER: CORSAIR CONSULTING, LLC. (CC) Estimate of Engineering Services Budget

# City of Round Rock Gattis School Road (Segment 3)

Estimate of Engineering Services Budget												
Corsair Consulting, LLC.	No. of Sheets	Sr. Project Manager \$172.48	Project Manager \$166.73	Project Engineer \$146.61	Laboratory Manager \$89.11	Project Geologist \$89.11	Graduate Professiona \$100.61	Sr. Eng. Technician \$100.61	Technician & Draft Per. \$83.36	Admin./ Clerical \$60.37	Total Hours	Total Labor Cost
FC 110 Route and Design Studies; Geotechnical Investigation	I	¢112.10	¢100.10	¢110.01	000.11	<b>\$</b> 00.11	¢100.01	0100.01	00.00	¢00.07		
A. Data Collection and Field Reconnaissance												
Secure and review available misc. data     Secure and review site plans (existing & proposed)							-				0	\$0.00 \$0.00
Secure and review available flood plain information     Conduct field reconnaissance and photographic record											0	\$0.00
B. Develop design critieria (roadway and drainage)											0	\$0.00 \$0.00
C. Develop preliminary sequence of construction exhibit D. Develop preliminary cost estimate											0	\$0.00 \$0.00
E. Prepare for and attend DCC meeting											0	\$0.00
F. Geotech & Pavement Design     I. Field Investigation (Coordination, Traffic Control, Logging)		1		3			3	20			27	\$2,926.34
2. Geotechnical Data Report Preparation     3. Retaining Wall Design		8	10 10	20 15	20		15 10				73 40	\$9,270.69 \$5,734.95
<ol><li>Pavement Thickness Design (New and Overlay)</li></ol>		8	15	20			20	15			78	\$10,334.34
5. Meetings		6									6	\$1,034.88
FC - 110 Subtotal - Labor Hrs	. 0	28	35	58	20	0	48	35	0	0	224	\$29,301.20
FC 120 Environmental Documentation	•	ļ		ļ	I		<u> </u>	ļ	ļ			1
FC - 120 Subtotal - Labor Hrs	. 0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 130 ROW Data/Utilities	I											1
FC - 130 Subtotal - Labor Hrs	. 0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 140 Project Management and Administration	1											
FC - 140 Subtotal - Labor Hrs	. 0	0	0	0	0	0	0	0	0	0	0	\$0.00
		U	U	U	U	U		U	U	U	U	\$0.00
FC 150 Field Surveying and Photogrammetry	<b> </b>						<b></b>					ļ
FC - 150 Subtotal - Labor Hrs	. 0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 160 Roadway Design	T											1
FC - 160 Subtotal - Labor Hrs	. 0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 161 Drainage	1	1		1	<u> </u>		1	1	1	г Г		
FC - 161 Subtotal - Labor Hrs	. 0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 162 Signing, Pavement Markings, Signals and Illumination	I	1		1				1	1	I		1
FC - 162 Subtotal - Labor Hrs	. 0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 163 Miscellaneous	T											1
FC - 163 Subtotal - Labor Hrs	. 0	0	0	0	0	0	0	0	0	0	0	\$0.00
TOTAL SHEETS												
				50								
Total - Labor Hours		28	35	58	20	0	48	35	0	0	224	
Total - Labor Cos		\$4,829.44	\$5,835.55	\$8,503.38	\$1,782.20	\$0.00	\$4,829.28	\$3,521.35	\$0.00	\$0.00		\$29,301.20
DIRECT EXPENSES												
Photocopies BW (11"'x17")					sheets @		/ sheet					\$0.00
Photocopies BW (8.5"x11") Photocopies Color (11"x17")					sheets @ sheets @		/ sheet / sheet					\$0.00 \$0.00
Photocopies Color (8.5"x11")	1				sheets @	\$0.75	/ sheet					\$0.00
Mileage Overnight Mail - Letter Size					miles @ Deliveries @	\$0.55 \$14.00	/ mile / each					\$0.00 \$0.00
Overnight Mail - Oversize Box					Deliveries @	\$50.00						\$0.00
FIELD INVESTIGATION Mobilization - Drill truck, water truck and crew (per mobilization)				50	obilization @	\$E 00	/ mile					\$250.00
All-terrain vehicle with drill rig (additional charge)					ATV w/ rig @	\$600.00						\$0.00
Drilling & sampling w/ 3", thin wall tube sampler, continuous to 10'	it or -	male-			Drilling @	\$18.00	/ foot					\$0.00
Continuous drilling & sampling with 3", thin walled tube sample or sp Standard penetration tests	m-spon sa	ampier		130	Drilling @ Test @	\$35.00 \$25.00	/ foot / each					\$4,550.00 \$0.00
TxDOT cone penetration tests				8	Test @	\$31.00	/ each					\$248.00
Rock coring - Drill in soft rock Rock coring - Drill in hard rock					Coring @ Coring @	\$26.00 \$35.00						\$0.00 \$0.00
Wash or auger borings drilled and logged from cuttings: - Soil					Boring @	\$15.00	/ foot					\$0.00
Wash or auger borings drilled and logged from cuttings: - Rock Casing of boreholes					Boring @ Casing @	\$24.00 \$20.00						\$0.00 \$0.00
Hourly charges for boring layout, excessive time,& for other reaso	ns			2	Etc. @	\$190.00	/ hour					\$380.00
Steel drums for drill cuttings (delivered)					Drums @	\$7.00	/ each					\$0.00
Plugging boreholes with bentonite/concrete slurry Cone penetrometer testing					Plugging @ Test @	\$8.00 \$3,450.00						\$0.00 \$0.00
Falling Weight Deflectometer Testing - Fugro Roadware Inc. (COST)	1				ls	\$2,800.00	/ day					\$0.00
FWD Mobilization (COST) HMAC cores					Mobilization core	\$3.50 \$50.00						\$0.00 \$0.00
Patching boreholes with cold patch asphalt					patch	\$50.00	/ each					\$550.00
Traffic control (Allow)				2	day	\$2,500.00	/ day					\$5,000.00
LABORATORY TESTING Particle-Size Analysis of Soils (without hydrometer)				51	Test @	\$65.00	/ each					\$3,315.00
Anistor Content Moisture Content Atterberg Limits	1			61	Test @	\$15.00	/ each					\$915.00
				51	Test @	\$75.00	/ each					\$3,825.00

Material finer than the 200 Sieve	51 Test @ \$65.00	/ each	\$3,315.00
Soluble Sulfate Content	9 Test @ \$120.00	/ each	\$1,080.00
Lime Series pH	2 Test @ \$85.00	/ each	\$170.00
CBR	1 Test @ \$450.00	/ each	\$450.00
Moisture-Density Relationship	1 Test @ \$180.00	/ each	\$180.00
Subtotal - Other Direct Expenses			\$24,228.00
GRAND TOTAL			\$53,529.20

Cox McLain Environmental Consulting, Inc       No. of Sheets       Project Manager       Sr. Env. Planner //I       Env. Planner //I       Env. Specialist       Biologist III       Biologist //I       Bi	ator Tech	Clerical	Total Hours	Total Labor Cost
FC 110 Route and Design Studies; Geotechnical Investigation         A. Data Collection and Field Reconnaissance         1. Secure and review available misc. data         2. Secure and review available misc. data         3. Secure and review available misc. data         4. Conduct Inder Reconnaissance         3. Secure and review available flood plan information         3. Secure and review available flood plan information         4. Conduct Inder Reconnaissance and photographic record         5. Develop regin rulerinary sequence of construction exhibit         D. Develop preliminary sequence of construction exhibit         D. Develop reliminary sequence of construction exhibit         D. Develop preliminary sequence of construction exhibit         D. Develop preliminary sequence of construction exhibit         D. Enclass Antification         K. Caduet A Pavement Design (Support Only)         FC 101 Subtotal - Labor Hrs.       0         6       0       0         FC 20 Envi		\$51.75	0	
A. Data Collection and Field Reconnaissance <ul> <li>A. Data Collection and Field Reconnaissance</li> <li>Secure and review available misc. data</li> <li>Conduct field reconnaissance and photographic record</li> <li>Conduct field reconnaissance and photographic record</li> <li>Convelop preliminary sequence of construction exhibit</li> <li>Develop preliminary cost estimate</li> <li>Frepare for and atterd OCC meeting</li> <li>FC - 110 Subtotal - Labor Hrs.</li> <li>O 6</li> <li>O 0</li> <li>O 0</li> <li>O 6</li> <li>O 0</li> <li>O 0&lt;</li></ul>			0	
2. Secure and review site plans (existing & proposed)			0	
4. Conduct field reconnaissance and photographic record			0	\$0.00 \$0.00
C. Develop preliminary sequence of construction exhibit <th< th=""></th<>			0	\$0.00 \$0.00
E. Prepare for and attend DCC meeting         6         6         6           F. Geotech & Pavement Design (Support Only)			0	\$0.00 \$0.00
FC - 110 Subtotal - Labor Hrs.         0         6         0 <th< td=""><td></td><td></td><td>0</td><td>\$0.00 \$1,395.00</td></th<>			0	\$0.00 \$1,395.00
FC 120 Environmental Documentation         1         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         4         16         8         2         4         16         8         12         16         8         12         16         8         12         4         16         8         12         4         16         8         12         4         16         8         12         4         16         8         12         16         8         12         4         12         16         8         12         4         12         16         8         12         4         12 <th12< th="">         12         12</th12<>			0	\$0.00
A. Data Collection Process         1         1         2         1         1         2         2         4         16         8         0         2         4         16         8         12         16         8         12         16         8         12         4         16         8         12         4         16         12         16         8         12         4         16         12         4         16         12         16         12         16         12         4         12         16         12         4         12         16         12         4         12 <th12< th="">         12         <th12< th=""></th12<></th12<>	0	0	12	\$1,395.00
C. Section 404 Clean Water Act Compliance         1         12         16         88           D. Endangered Species Act Compliance         1         8         12         4           E. Texas Antiquities Code Compliance Review Only.         2         16         12         12		1	9	\$760.75
D. Endangered Species Act Compliance         1         8         12         4           E. Texas Antiguities Code Compliance (Review Only)         2         16         12         12		2	33 39	\$2,569.50 \$3,129.50
	28	1	26 72	\$2,119.75 \$4,855.50
F. Chapter 26 Notification, Comment Response & Summary 2 8 G. Project Contact Database (Review Only)	4	1	15 0	\$1,115.75 \$0.00
H. Property Owners Meetings (up to 2)         6         6           I. Public Meetings (up to 2)         6         6			0 18	\$0.00 \$1,470.00
J. Website Updates (up to 3) K. Email Updates (up to 3)			0	\$0.00 \$0.00
FC - 120 Subtotal - Labor Hrs. 0 8 0 9 16 18 26 60 34	32	9	212	\$16,020.75
	52			\$10,020.75
FC 130 ROW Data/Utilities	1			
FC - 130 Subtotal - Labor Hrs.         0 <th< td=""><td>0</td><td>0</td><td>0</td><td>\$0.00</td></th<>	0	0	0	\$0.00
FC 140 Project Management and Administration				
A. Prepare Invoices and Monthly Progress Reports (8 Mo.) 4 B. Develop and maintain work schedule		6	10 0	\$870.50 \$0.00
D. Project file maintenance			0	\$0.00
E. Implement and execute QAQC plan			0	\$0.00 \$0.00
FC - 140 Subtotal - Labor Hrs. 0 4 0 0 0 0 0 0 0 0 0 0	0	6	10	\$870.50
			1	
FC 150 Field Surveying and Photogrammetry				
FC - 150 Subtotal - Labor Hrs.         0 <th< td=""><td>0</td><td>0</td><td>0</td><td>\$0.00</td></th<>	0	0	0	\$0.00
FC 160 Roadway Design				1
FC - 160 Subtotal - Labor Hrs. 0 0 0 0 0 0 0 0 0 0 0 0	0	0	0	\$0.00
FC 161 Drainage			1	
A. Drainage Report (Summary of Preliminary Design) B. Preliminary Culvert and Storm Drain Design			0	\$0.00
1. Drainage Area Maps			0	\$0.00
2. Develop preliminary storm drain design     3. Develop preliminary cross culvert design			0	\$0.00 \$0.00
4. Identify and metigate utility conflicts (where feasible)     5. Not applicable			0	\$0.00 \$0.00
6. Prepare hydraulic data sheets C. Culvert Layouts C. Culvert Layouts			0	\$0.00
1. Preliminary Cross Culvert Layouts			0	\$0.00
2. Preliminary outfall channel layouts			0	\$0.00
FC - 161 Subtotal - Labor Hrs.         0 <th< td=""><td>0</td><td>0</td><td>0</td><td>\$0.00</td></th<>	0	0	0	\$0.00
FC 162 Signing, Pavement Markings, Signals and Illumination				
A. Signing and Pavement Markings B. Signals			0	\$0.00 \$0.00
C. Illumination 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			0	\$0.00
2. Electrical Circuit Plan			0	\$0.00
3. Power Source Identification			0	\$0.00
FC - 162 Subtotal - Labor Hrs.         0 <th< td=""><td>0</td><td>0</td><td>0</td><td>\$0.00</td></th<>	0	0	0	\$0.00
FC 163 Miscellaneous A. Miscellaneous Utility Requirements				
1. Attend utility coordination meetings (up to 3)		-	0	\$0.00
2. Identify potential utility conflicts and develop log		1	0	\$0.00 \$0.00
FC - 163 Subtotal - Labor Hrs.         0 <th< td=""><td>0</td><td>0</td><td>0</td><td>\$0.00</td></th<>	0	0	0	\$0.00
TOTAL SHEETS 0			<u> </u>	
		15 0 \$776.25	234	\$18,286.25
Total - Labor Hours         18         0         9         16         18         32         60         34           Total - Labor Hours         18         0         9         16         18         32         60         34	3.00 \$1,472.0	ο \$776.25	<u> </u>	\$18,286.25
Total - Labor Cost         \$2,520.00         \$0.00         \$810.00         \$1,360.00         \$1,440.00         \$2,960.00         \$4,500.00         \$2,44				\$40.00
Total - Labor Cost         \$2,520.00         \$0.00         \$810.00         \$1,360.00         \$2,960.00         \$4,500.00         \$2,44           DIRECT EXPENSES Photocopies BW (11*x17')         200 sheets @         \$0.20 / sheet				
Total - Labor Cost         \$2,520.00         \$0.00         \$810.00         \$1,360.00         \$1,440.00         \$2,960.00         \$4,500.00         \$2,44           DIRECT EXPENSES				\$150.00
Total - Labor Cost         \$2,520.00         \$0.00         \$810.00         \$1,460.00         \$2,960.00         \$4,500.00         \$2,44           DIRECT EXPENSES           Photocopies BW (11"x17")         200         sheets @         \$0.20         / sheet         >           Photocopies BW (8,5"x11")         1000         sheets @         \$0.15         / sheet         >           Photocopies Color (15"x17")         100 sheets @         \$1.50         / sheet         >         >           Photocopies Color (5.5"x11")         sheets @         \$0.50         / sheet         >         >				\$150.00 \$150.00 \$0.00
Total - Labor Cost         \$2,520.00         \$0.00         \$810.00         \$1,360.00         \$2,960.00         \$4,500.00         \$2,44           DIRECT EXPENSES				\$150.00 \$150.00

Hazardous Materials Database Search	1 report \$425.00 / each	\$425.00
Subtotal - Other Direct Expenses		\$1,353.00
GRAND TOTAL		\$19,639.25

Exhibit D - FEE SCHEDULE SUB-PROVIDER: HDR ENGINEERING, INC. (HDR) Estimate of Engineering Services Budget								nool Road (		-		
HDR Engineering, Inc.	No. of Sheets	Project Manager \$259.00	Senior Engineer \$217.00	Project Engineer \$173.00	Design Engineer \$155.00	EIT \$113.00	Sr. Enginee Specialist \$119.00	rSr. Engineer Tech \$104.00	Engineer Tech \$93.00	Admin./ Clerical \$90.00	Total Hours	Total Labor Cost
FC 110 Route and Design Studies; Geotechnical Investigation			<u> </u>		<u> </u>		1			ļ ·		
A. Data Collection and Field Reconnaissance												4
Secure and review available misc. data     Secure and review site plans (existing & proposed)				8							8	\$1,384.00 \$1,384.00
FC - 110 Subtotal - Labor Hrs.	0	0	0	16	0	0	0	0	0	0	16	\$2,768.00
FC 120 Environmental Documentation							1	1		1		I
FC - 120 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 130 ROW Data/Utilities	I			1		1				1	1	1
FC - 130 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 140 Project Management and Administration			I		I		I		I	I		<b>I</b>
A. Prepare Invoices and Monthly Progress Reports (12 Mo.)		4								6	10	\$1,576.00
B. Develop and maintain work schedule C. Prepare for and attend City meetings (up to 2)		4					<u> </u>				0 4	\$0.00 \$1,036.00
D. Project file maintenance (12 Mo.)			40								0	\$0.00
E. Implement and execute QAQC plan (schematic, 60%, 90% and Fir	nal)		12								12	\$2,604.00
FC - 140 Subtotal - Labor Hrs.	0	8	12	0	0	0	0	0	0	6	26	\$5,216.00
FC 150 Field Surveying and Photogrammetry			I	1	I.	I	1 1		I	I	I	1
FC - 150 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 160 Roadway Design	ļ			ļ								
A. Geometric Design (Geometric Layout) 1. Develop horizontal alignments											0	\$0.00
2. Develop notizontal alignments											0	\$0.00
3. Develop typical sections											0	\$0.00 \$0.00
4. Develop 3D model (design cross sections)     5. Establish proposed ROW limits     0. Prepare and tempe Secontence Layout (Signarmanimation											0	\$0.00
C. Prepare and Terme Geometric Layout (Signal/Information		4		8							12	\$2,420.00
FC - 160 Subtotal - Labor Hrs.	0	4	0	8	0	0	0	0	0	0	12	\$2,420.00
FC 161 Drainage					l		1					
C. Culvert Layouts												
1. Preliminary Cross Culvert Layouts     2. Preliminary outfall channel layouts											0	\$0.00 \$0.00
3. Miscellaneous Structural Details			20								20	\$4,340.00
FC - 161 Subtotal - Labor Hrs.	0	0	20	0	0	0	0	0	0	0	20	\$4,340.00
FC 162 Signing, Pavement Markings, Signals and Illumination												
A. Signing and Pavement Markings B. Signals (4 signals and 4 temp signals - 3 phases each) C. Illumination	46	8		105		210		420			0 743	\$0.00 \$87,647.00
1. Illumination Layouts	46			2	184						186	\$28,866.00
2. Electrical Circuit Plan	2			2	16		1				18	\$2,826.00
3. Power Source Identification				4	8						12	\$1,932.00
FC - 162 Subtotal - Labor Hrs.	94	8	0	113	208	210	0	420	0	0	959	\$121,271.00
FC 163 Miscellaneous												
E. Quanities/Summary Sheets			4			8					12	\$1,772.00
F. Standards, Specifications and Estimate (60%, 90%, Final) G. Preparation of Bid Documents/Review Bids			4			8					12 0	\$1,772.00 \$0.00
FC - 163 Subtotal - Labor Hrs.	0	0	8	0	0	16	0	0	0	0	24	\$3,544.00
TOTAL SHEETS	0											
Total - Labor Hours		20	40	137	208	226	0	420	0	6	1057	
Total - Labor Cost		\$5,180.00	\$8,680.00	\$23,701.00	\$32,240.00	\$25,538.00	\$0.00	\$43,680.00	\$0.00	\$540.00		\$139,559.00
DIRECT EXPENSES												
Photocopies BW (11"x17") Photocopies BW (16.5"x11")					sheets @		/ sheet					\$60.00
Photocopies BW (8.5"x11") Photocopies Color (11"x17")				200	sheets @ sheets @		/ sheet / sheet					\$30.00 \$0.00
Photocopies Color (8.5"x11")					sheets @	\$0.75	/ sheet					\$0.00
Mileage Overnight Mail - Letter Size					miles @ Deliveries @		/ mile / each					\$27.50 \$28.00
Overnight Mail - Oversize Box					Deliveries @		/ each					\$50.00
Subtotal - Other Direct Expenses												\$195.50
GRAND TOTAL												\$139,754.50

Exhibit D - FEE SCHEDULE SUBPROVIDER: INLAND GEODETICS, LLC Estimate of Engineering Services Budget							City of Ro Gattis Sch		(Segment 3	3)			
Inland Geodetics, LLC	No. of Sheets	Project Manager	Licensed Land Sur.	R.P.L.S.	GPS Technician	Survey Technician	2-Person Crew	3-Person Crew	GPS Field Oper.	Add. Crew Member	Admin./ Clerical	Total Hours	Total Labor Cost
FC 110 Route and Design Studies; Geotechnical Investigation		\$140.00	\$150.00	\$135.00	\$95.00	\$98.00	\$142.00	\$165.00	\$120.00	\$48.00	\$54.00		
					1						<u> </u>		
FC - 110 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 120 Environmental Documentation													
FC - 120 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 130 ROW Data/Utilities		1	I		I		I	I	I	1		1	
A. Right-of-Way Map 1. Prepare base map of existing ROW/parcel boundaries		4		16		54						74	\$8,012.00
2. Review design data to confirm existing/proposed ROW B. Prepare ROW Plan Set		2		4		4						10	\$1,212.00
Secure title abstracts for affected parcels (31 by others)     Perform tile review of acquisition parcels		2		80 16		64 120					12 8	0 158 148	\$0.00 \$18,000.00 \$14,912.00
Generate ROW plan set and reconcile to parcels     C. Boundary Surveying and Parcel Preparation     L. Locate property corners and confirm existing ROW limits		4		32		32	48		24		4	148	\$17,928.00
2. Prepare property schematic of the overall project 3. ROW documents (31 parcels)		8		72		496	16		16		8	0 616	\$0.00 \$64,072.00
4. Establish monuments on the proposed ROW				6		16	40		32		8	102	\$12,330.00
FC - 130 Subtotal - Labor Hrs.	0	24	0	226	0	786	104	0	72	0	40	1252	\$136,466.00
FC 140 Project Management and Administration		t.	1				1	1		t.	-	t.	
A. Prepare Invoices and Monthly Progress Reports (8 Mo.) B. Develop and maintain work schedule		2		16							40	42	\$2,440.00 \$2,160.00
C. Prepare for and attend City meetings (up to 4) D. Project file maintenance		8										8	\$1,120.00 \$0.00
E. Implement and execute QAQC plan				4								4	\$540.00
FC - 140 Subtotal - Labor Hrs.	0	10	0	20	0	0	0	0	0	0	40	70	\$6,260.00
FC 150 Field Surveying and Photogrammetry									•				
A. Field Surveying 1. Project Control				2		4	24	16	4		1	51	\$7,244.00
2. Project Control Sheets 3. Datum Ties				2		12			6			14 6	\$1,446.00 \$720.00
4. Field Surveys 5. Field survey (drainages channels)		2		6 4		8	48 8	32	32 4		4 2	132 22	\$18,026.00 \$2,656.00
6. Field surveys (existing concrete weir)     7. Secure right of entry		2				1 4	4				12	5 18	\$666.00 \$1,320.00
8. Tie visible utilities and develop DGN file (3,000 LF) 9. Tie potholes (10) separate trip						1	16 8		4 16			21 24	\$2,850.00 \$3,056.00
10. Profile existing drainage facilities 11. Provide traffic control for survey activities		2		2		4	8		8		2	20 8	\$2,488.00 \$942.00
12. Tie soil boring locations B. Digital Planimetric Mapping (DGN) and DTM									4			4	\$480.00
1. Planimetric (DGN) file 2. DTM File		4		2		24 64	8		4		2	32 84	\$3,210.00 \$9,048.00
FC - 150 Subtotal - Labor Hrs.	0	10	0	26	0	126	126	48	82	0	23	441	\$54,152.00
FC 160 Roadway Design	1	г	1	і Г	н Г	н	1	1	1	г	т <u> </u>	г	
FC - 160 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 161 Drainage				1	I				I				
FC - 161 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 162 Signing, Pavement Markings, Signals and Illumination	1	T	1	T		I	1	1	1	T		T	
FC - 162 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 163 Miscellaneous		I		1	1	l				I		I	
			ļ	<b></b>	<u> </u>		ļ	ļ	ļ		<u> </u>		
FC - 163 Subtotal - Labor Hrs. TOTAL SHEETS	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00
Total - Labor Hours	Ū	44	0	272	0	912	230	48	154	0	103	1763	
Total - Labor Cost		\$6,160.00	\$0.00	\$36,720.00	\$0.00	\$89,376.00	\$32,660.00		\$18,480.00	\$0.00	\$5,562.00		\$196,878.00
DIRECT EXPENSES													
Photocopies BW (11"x17") Photocopies BW (8.5"x11")					sheets @ sheets @		/ sheet / sheet						\$48.00 \$48.00
Photocopies Color (11"x17")					sheets @	\$1.50	/ sheet						\$81.00
Photocopies Color (8.5"x11") Mileage				164	sheets @ miles @	\$0.75 \$0.55	/ sheet / mile						\$0.00 \$90.20
Overnight Mail - Letter Size Overnight Mail - Oversize Box					Deliveries @ Deliveries @	\$14.00	/ each						\$560.00 \$0.00
FIELD INVESTIGATION													
GPS Field Operator & Vehicle & GPS Receiver				Ope	erator plus @ Receiver @	\$105.00							\$0.00 \$0.00
GPS Receiver (unmanned) All Terain Vehicle					ATV @	\$15.00 \$55.00	/ day						\$0.00
Additional Vehicle				8	Vehicle @	\$60.00	/ day						\$480.00
Subtotal - Other Direct Expenses													\$1,307.20
GRAND TOTAL													\$198,185.20
	•												

Exhibit D - FEE SCHEDULE SUBPROVIDER: K FRIESE & ASSOCIATES, INC. (K Estimate of Engineering Services Budget	FA)							iool Road (	Segment 3	3)		
K Friese & Associates, Inc.	No. of Sheets	Principal \$250.00	QA/QC Manager \$240.00	Project Manager \$169.95	Project Engineer \$110.00	EIT \$103.00	CADD Technician \$77.25	Admin/ Clerical \$77.25	\$0.00	\$0.00	Total Hours	Total Labor Cost
FC 110 Route and Design Studies; Geotechnical Investigation		\$250.00	\$240.00	\$109.95	\$110.00	\$103.00	\$11.25	\$11.25	\$0.00	\$0.00		L
A. Data Collection and Field Reconnaissance							1			1		
Secure and review available misc. data     Secure and review site plans (ovicting & proposed)				2	8 8	12					10 22	\$1,219.90 \$2,455.90
Secure and review site plans (existing & proposed)     Secure and review available flood plain information				-		12					0	\$0.00
<ol> <li>Conduct field reconnaissance and photographic record</li> <li>Develop design critieria (roadway and drainage)</li> </ol>				2	8						10 0	\$1,219.90 \$0.00
C. Develop preliminary sequence of construction exhibit D. Develop preliminary cost estimate											0	\$0.00 \$0.00
E. Prepare for and attend DCC meeting				6							6	\$1,019.70
F. Geotech & Pavement Design (Support Only)											0	\$0.00
FC - 110 Subtotal - Labor Hrs.	0	0	0	12	24	12	0	0	0	0	48	\$5,915.40
FC 120 Environmental Documentation											<b></b>	<u> </u>
FC - 120 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 130 ROW Data/Utilities			1	1	1	1						1
FC - 130 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 140 Project Management and Administration												
A. Prepare Invoices and Monthly Progress Reports (12 Mo.)				6				6			12	\$1,483.20
B. Develop and maintain work schedule     C. Prepare for and attend City meetings (up to 6)											0	\$0.00 \$0.00
D. Project file maintenance (12 Mo.)											0	\$0.00
E. Implement and execute QAQC plan (schematic, 60%, 90% and Fin	nal)		16	4				-			20	\$4,519.80
FC - 140 Subtotal - Labor Hrs.	0	0	16	10	0	0	0	6	0	0	32	\$6,003.00
FC 150 Field Surveying and Photogrammetry												
FC - 150 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 160 Roadway Design												
		(	1	1	1	1	1	(	(	1	r –	
FC - 160 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 161 Drainage			1	1	1							
FC - 161 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 162 Signing, Pavement Markings, Signals and Illumination						I						I
FC - 162 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 163 Miscellaneous						1	T			T	r	
C. Water/Wastewater 1. Attend coordination meetings (up to 6)				18							18	\$3,059.10
2. Route/Size Coordination     3. Existing Service Connections				8		16					8 20	\$1,359.60 \$2,327.80
4. Construction Drawings			9	66	72	16 100	80				327	\$37,776.70
5. Technical Specifications D. Utility Coordination				4	8						12	\$1,559.80
1. Prepare Existing Utility Layouts											0	\$0.00
<ol> <li>Identify potential utility conflicts and develop log (support only)</li> <li>Attend utility coordination meetings (up to 12)</li> </ol>	$\square$			8	12	16					36 0	\$4,327.60 \$0.00
4. Coordinate with City to establish utility assignments (support only	)			8							8	\$1,359.60
E. Quanities/Summary Sheets F. Standards, Specifications and Estimate (60%, 90%, Final)	- ]			1	4	8					13 9	\$1,433.95 \$1,021.95
G. Preparation of Bid Documents/Review Bids											0	\$0.00
FC - 163 Subtotal - Labor Hrs. TOTAL SHEETS	0	0	9	118	100	144	80	0	0	0	451	\$54,226.10
Total - Labor Hours	U	0	25	440	40.1	450		^	0	0	504	
i otal - Labor Hours Total - Labor Cost		0 \$0.00	25 \$6,000.00	140 \$23,793.00	124 \$13,640.00	156 \$16,068.00	80 \$6,180.00	6 \$463.50	0 \$0.00	\$0.00	531	\$66,144.50
DIRECT EXPENSES			•	•	•	•	•			•	•	
Photocopies BW (11"'x17")					sheets @		/ sheet					\$0.00
Photocopies BW (8.5"x11") Photocopies Color (11"x17")	<u> </u>				sheets @ sheets @		/ sheet / sheet					\$0.00 \$0.00
Photocopies Color (8.5"x11")					sheets @	\$0.75	/ sheet					\$0.00
Mileage Overnight Mail - Letter Size	<u> </u>			750	miles @ Deliveries @		/ mile / each					\$412.50 \$0.00
Overnight Mail - Oversize Box					Deliveries @		/ each					\$0.00
Subtotal - Other Direct Expenses												\$412.50
												\$66,557.00

I = [I = [I = I = I = I = I = I = I = I	Exhibit D - FEE SCHEDULE SUBPROVIDER: NANCY LEDBETTER & ASSOCIAT Estimate of Engineering Services Budget	ES, INC	C. (NLA)					City of Ro Gattis Sch	und Rock nool Road (	Segment 3	)		
PE 19 hous and Salay Bauks. Societies Inserting International Decementation       Image: Part of the Part of t	Nancy Ledbetter & Associates		Manager	Lead	Specialist	Specialist	Designer						
PC : 10 Advance - Lake res         PO         PO <th< th=""><th>FC 110 Route and Design Studies: Geotechnical Investigation</th><th> </th><th>\$175.00</th><th>\$156.00</th><th>\$116.00</th><th>\$94.00</th><th>\$84.00</th><th>\$0.00</th><th>\$0.00</th><th>\$0.00</th><th>\$0.00</th><th></th><th>I</th></th<>	FC 110 Route and Design Studies: Geotechnical Investigation		\$175.00	\$156.00	\$116.00	\$94.00	\$84.00	\$0.00	\$0.00	\$0.00	\$0.00		I
C 30 Monomental         Monomental         Monomental         Monomental	rc 110 Route and Design Studies, Geolechnical Investigation	1	1	1	1	1	1	1	1	1	1	1	[
A the definition Process Review ONM         Image: Second Proces	FC - 110 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
I A a contract a low control to be determined from a base of the set of the	FC 120 Environmental Documentation												
6         1         1         1         1         1         1         0	A. Data Collection Process (Review Only)												\$0.00
	B. Hazardous Materials Initial Site Assessment (Review Only) C. Section 404 Clean Water Act Compliance (Review Only)												\$0.00
	D. Endangered Species Act Compliance (Review Only)											0	\$0.00
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	E. Texas Antiquities Code Compliance (Review Only)		4		16								
$\begin{split} \begin begin b$	G. Property Owners Meetings (up to 2)												
Source         Source<	1. Notifications for web (draft and final) H. Public Meetings (up to 2)		2		4		4					10	\$1,150.00
	1. Staffing												\$940.00
4. Algeb Reserva Journey for an affer all         I         0				8	20	10	20						\$7,588.00 \$7,980.00
Underset bes 10         I         0	4. Public Meeting Summary (draft and final)		10	8	24	8	4					54	\$6,870.00
PC - 120 Subject - Labor H         0         55         16         16         96         77         77         70         00         00         00         300         SSSB8.00           C 130 SOM DataUlation         0<	I. Website Updates (up to 3)												\$4,407.00
FC 103 ROM DataNullies         FC 103 ROM DataNullies<		0		40				0	0	0	0		
IC - 130 Subtoral - Labor Hz.         IO         IO <thio< th="">         IO         IO         &lt;</thio<>		0	54	16	96	72	72	U	0	U	U	310	<del>م32,898.00</del>
FC 140 Project Mangement and Administration     I     I     I     I     I     I     I     I       A Project Mangement and Administration     A Project Mangement Mandema Stroking     10	FC 130 ROW Data/Utilities												
A. Program functional models index (Signate Signate Sig	FC - 130 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
8. Overlaps for and minital work shedule       0 <td>FC 140 Project Management and Administration</td> <td></td> <td> </td> <td></td> <td></td> <td></td> <td> </td> <td></td> <td> </td> <td> </td> <td>I</td> <td></td> <td>L</td>	FC 140 Project Management and Administration										I		L
C. Progen for and aften C. C. measure up of and aften C. C. measure up OAQC pan         4         5         5         4         5	A. Prepare Invoices and Monthly Progress Reports (8 Mo.)	1	10			10	1		1	1	1	20	\$2,690.00
D. Project Handmanne         B         M         B         M         B         M	B. Develop and maintain work schedule												\$0.00
E. Implement and exactle GAQC plan         Image: Base of the state of the st						8							
Image: Constraint of the state of			0			0							\$0.00
Image: Constraint of the state of													
FC - 150 Subtotal - Labor Hrs.         0 <th< td=""><td>FC - 140 Subtotal - Labor Hrs.</td><td>0</td><td>22</td><td>0</td><td>0</td><td>18</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>40</td><td>\$5,542.00</td></th<>	FC - 140 Subtotal - Labor Hrs.	0	22	0	0	18	0	0	0	0	0	40	\$5,542.00
FC 160 Roadway Design         FC - 160 Subtotal - Labor Hrs.         0 </td <td>FC 150 Field Surveying and Photogrammetry</td> <td>1</td> <td>1</td> <td>I</td> <td>T</td> <td>г</td> <td>1</td> <td>г</td> <td>1</td> <td>1</td> <td>1</td> <td></td> <td>r </td>	FC 150 Field Surveying and Photogrammetry	1	1	I	T	г	1	г	1	1	1		r 
FC - 160 Subtotal - Labor Hrs.         0 <th< td=""><td>FC - 150 Subtotal - Labor Hrs.</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>\$0.00</td></th<>	FC - 150 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 161 Drainage         FC - 161 Subiotal - Labor Hrs.         0 <td>FC 160 Roadway Design</td> <td> </td> <td></td>	FC 160 Roadway Design												
FC 161 Drainage         FC - 161 Subiotal - Labor Hrs.         0 <td></td> <td> </td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td> </td>					1								
FC - 161 Subtotal - Labor Hrs.         0 <th< td=""><td>FC - 160 Subtotal - Labor Hrs.</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>\$0.00</td></th<>	FC - 160 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC 162 Signing, Pavement Markings, Signals and Illumination         Image: Control of the state of the	FC 161 Drainage												L
FC - 162 Subtotal - Labor Hrs.         0 <th< td=""><td>FC - 161 Subtotal - Labor Hrs.</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>\$0.00</td></th<>	FC - 161 Subtotal - Labor Hrs.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
FC - 162 Subtotal - Labor Hrs.         0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>													
FC - 163 Subtotal - Labor Hrs.         0 <th< td=""><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>\$0.00</td></th<>		0	0	0	0	0	0	0	0	0	0	0	\$0.00
TOTAL SHEETS         0         76         16         96         90         72         0         0         0         350           Total - Labor Hours         \$13,300.00         \$2,496.00         \$11,136.00         \$6,048.00         \$0.00         <	FC 163 Miscellaneous												l
TOTAL SHEETS         0         76         16         96         90         72         0         0         0         350           Total - Labor Hours         \$13,300.00         \$2,496.00         \$11,136.00         \$6,048.00         \$0.00         <	EC. 462 Subiated Laboration	0	0	0	0	0	0	0	0	0	0	0	\$0.00
Total - Labor Cost         \$13,300.00         \$2,496.00         \$11,136.00         \$8,600.00         \$0.00			U	U	U	U	U	U	U	U	U	U	\$0.00
Total - Labor Cost         \$13,300.00         \$2,496.00         \$11,136.00         \$8,600.00         \$0.00	Total - Labor Hours		76	16	96	90	72	0	0	0	0	350	
Photocopies BW (11*77)         150 sheets @         \$0.20 / sheet         \$30.00           Photocopies Color (15*X17)         250 sheets @         \$0.15 / sheet         \$37.50           Photocopies Color (15*X17)         0.00 sheets @         \$0.15 / sheet         \$600.00           Photocopies Color (15*X17)         0.00 sheets @         \$0.75 / sheet         \$600.00           Photocopies Color (15*X17)         800 sheets @         \$0.76 / sheet         \$600.00           Willeage         200 miles @         \$10.00 / each         \$00.00           Overnight Mail - Letter Size         Deliveries @         \$14.00 / each         \$00.00           Overnight Mail - Oversize Box         Deliveries @         \$14.00 / each         \$00.00           Translator (English to Spanish, other language as appropriate, or Sign Language)         2         \$400.00         / event         \$300.00           Written Translation Services         2000 words @         \$0.15 / document         \$300.00         \$300.00           Subtotal - Other Direct Expenses         2         \$400.00         / event         \$320.00													\$41,440.00
Photocopies BW (8.5*X1*)         250 sheets @         \$0.15 / sheet         \$37.50           Photocopies Color (11*X17')         400 sheets @         \$1.50 / sheet         \$600.00           Mileage         000 sheets @         \$0.75 / sheet         \$600.00           Overnight Mail - Letter Size         000 sheets @         \$0.55 / mile         \$50.00           Overnight Mail - Oversize Box         Deliveries @         \$50.00 / each         \$00.00           Translator (English to Spanish, other language as appropriate, or Sign Language)         \$400.00 words @         \$0.15 / document         \$800.00           Written Translation Services         2000 words @         \$0.15 / document         \$300.00           Subtotal - Other Direct Expenses         2000 words @         \$0.15 / document         \$2,477.50	DIRECT EXPENSES												
Photocopies Color (11"x17")         400 sheets @         \$1.50 / sheet         \$600.00           Photocopies Color (8.5"x11")         800 sheets @         \$0.75 / sheet         \$600.00           Mileage         200 mile @         \$0.55 / mile         \$600.00           Overnight Mail - Letter Size         Deliveries @         \$14.00 / each         \$00.00           Overnight Mail - Letter Size         Deliveries @         \$14.00 / each         \$00.00           Overnight Mail - Letter Size         Deliveries @         \$14.00 / each         \$00.00           Translator (English to Spanish, other language as appropriate, or Sign Language)         2         \$400.00 / event         \$800.00           Written Translation Services         2000 words @         \$0.15 / document         \$300.00           Subtotal - Other Direct Expenses													\$30.00
Photocopies Color (8.5'x11')         800 sheets @         \$0.75         / sheet         \$600.00           Mileage         200 miles @         \$0.55         / mile         \$100.00           Overnight Mail - Letter Size         Deliveries @         \$14.00         / each         \$00.00           Overnight Mail - Oversize Box         Deliveries @         \$50.00         / each         \$00.00           Translator (English to Spanish, other language as appropriate, or Sign Language)         \$400.00         / event         \$800.00           Written Translation Services         2000 words @         \$0.15         / document         \$300.00           Subtotal - Other Direct Expenses         2000 words @         \$0.15         / document         \$20.75	Photocopies Biv (8.5 x11 ) Photocopies Color (11"x17")												\$37.50 \$600.00
Overnight Mail - Letter Size     Deliveries @     \$14,00 / each     \$0.00       Overnight Mail - Versize Box     Deliveries @     \$50,00 / each     \$0.00       Translator (English to Spanish, other language as appropriate, or Sign Language)     2     \$400,00 / event     \$800,00       Written Translation Services     2000 words @     \$0.15 / document     \$800,00       Subtotal - Other Direct Expenses	Photocopies Color (8.5"x11")				800	sheets @	\$0.75	/ sheet					\$600.00
Oversight Mail - Oversize Box     Deliveries @ \$50.00 / each     \$0.00       Translator (English to Spanish, other language as appropriate, or Sign Language)     2     \$400.00 / event     \$800.00       Written Translation Services     2000 words @     \$0.15 / document     \$300.00       Subtotal - Other Direct Expenses     \$2000 words @     \$0.15 / document     \$2000 words @					200								
Translator (English to Spanish, other language as appropriate, or Sign Language)     2     \$400.00     /event     \$800.00       Written Translation Services     2000 words @     \$0.15     /document     \$300.00       Subtotal - Other Direct Expenses       Subtotal - Other Direct Expenses													\$0.00
Sign Language) Written Translation Services 2000 words @ \$0.15 /document \$300.00 Subtotal - Other Direct Expenses \$2,477.50	Translator (English to Spanish, other language as appropriate, or				2								\$800.00
	Sign Language) Written Translation Services												\$300.00
GPAND TOTAL \$42.047.50	Subtotal - Other Direct Expenses												\$2,477.50
SA3 97 50	GRAND TOTAL												\$43,917.50

## EXHIBIT E

Certificates of Insurance

Attached Behind This Page

		Client#: 1602	10		RODF	RITRA				
	A <i>CORD</i> <sub>™</sub> CE	RTIFIC	ATE OF LIAB	ILITY INSI	JRANC	CE		M/DD/YYYY)		
			_					5/2017		
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.										
IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).										
-	DUCER	•	,	CONTACT NAME:	ONTACT AME:					
	I Southwest			PHONE (A/C, No, Ext): 713 490-4600 FAX (A/C, No): 713-490-4700						
	1 Katy Freeway, Suite 500 uston, TX 77024		E-MAIL ADDRESS:							
	3 490-4600			INSURER(S) AFFORDING COVERAGE NAIC						
INSU				DECE				25674 25658		
INGC	Rodriguez Transpor	tation Group,	Inc.	INSURER B : Travelers Indemnity Company				32603		
	11211 Taylor Drape	r Lane #100		INSURER C : Berkley Insurance Company INSURER D :				02000		
	Austin, TX 78759									
				INSURER F :						
CO	VERAGES	CERTIFICAT	E NUMBER:	REVISION NUMBER:						
IN Cl	IDICATED. NOTWITHSTANDING A ERTIFICATE MAY BE ISSUED OF XCLUSIONS AND CONDITIONS O	NY REQUIREME MAY PERTAIN,	ENT, TERM OR CONDITION O THE INSURANCE AFFORDE ES. LIMITS SHOWN MAY HAV BRI	AVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS ED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, VE BEEN REDUCED BY PAID CLAIMS. POLICY EFF POLICY EFF POLICY EFF POLICY EFF POLICY EXP LIMITS						
Α	X COMMERCIAL GENERAL LIABIL		6800J802146			EACH OCCURRENCE	\$2,00	0,000		
	CLAIMS-MADE X OCCI	JR				DAMAGE TO RENTED PREMISES (Ea occurrence)	\$1,00	0,000		
						MED EXP (Any one person)	\$5,00			
						PERSONAL & ADV INJURY	\$2,00			
	GEN'L AGGREGATE LIMIT APPLIES PE	R:				GENERAL AGGREGATE	\$4,00	,		
		c				PRODUCTS - COMP/OP AGG	\$ <b>4,00</b>	0,000		
В	OTHER: AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS X HIRED AUTOS X HIRED AUTOS X AUTOS		BA8F923935	05/10/2017	05/10/2018	OMBINED SINGLE LIMIT     \$1,000,000       Ea accident)     \$1,000,000       ODILY INJURY (Per person)     \$       ODILY INJURY (Per accident)     \$       ROPERTY DAMAGE     \$		0,000		
_							\$			
В	X UMBRELLA LIAB X OCCI		CUP8F92630A	05/10/2017	05/10/2018	EACH OCCURRENCE	\$2,000	,		
		IS-MADE				AGGREGATE	\$2,000	0,000		
в	DED X RETENTION \$1000	0	UB4432T753	05/10/2017	05/10/2018	Y PER OTH	-			
0	AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUT OFFICER/MEMBER EXCLUDED?	VE Y/N	0044021100	00/10/2011	00/10/2010	E.L. EACH ACCIDENT	\$1,000	0.000		
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y N/A				E.L. DISEASE - EA EMPLOYER				
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	\$1,000	0,000		
С	Professional Liab Claims Made & Reported Pol		AEC901784100 Retro:07/22/1996	07/22/2017	07/22/2018	\$2,000,000 per claim \$2,000,000 annl aggr.				
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) RE: Gattis School Road.										
The Gen. Liab. and Auto Liab. policies include an automatic Additional Insured endorsement that provides Additional Insured status to the Certificate Holder only when there is a written contract that requires such status, and only with regard to work performed on behalf of the named insured. All policies provide a Blanket Waiver of Subrogation when required by written contract.										
-	RTIFICATE HOLDER	-	- *	CANCELLATION						
	City Manager City of Round Roo 221 E. Main Street		SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.							
	Round Rock, TX	78664	AUTHORIZED REPRESENTATIVE							
			Jenus E. Joninevan							

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