PROFESSIONAL SERVICES AGREEMENT
FOR
IMMANUEL ROAD IMPROVEMENTS PROJECT

STATE OF TEXAS §
§
COUNTY OF TRAVIS §

This Agreement is entered into by and between the City of Pflugerville, a Texas Municipal Corporation ("City"), acting by and through its City Manager, and Rodriguez Transportation Group, Inc. ("Consultant"), both of which may be referred to herein singularly as "Party" or collectively as the "Parties."

The Parties hereto severally and collectively agree, and by the execution hereof are bound, to the mutual obligations herein contained and to the performance and accomplishment of the tasks hereinafter described.

I. DEFINITIONS

As used in this Agreement, the following terms shall have meanings as set out below:

"City" is defined in the preamble of this Agreement and includes its successors and assigns.

"Consultant" is defined in the preamble of this Agreement and includes its successors.

"City Manager" shall mean the City Manager and/or his designee.

II. TERM

2.1 This agreement shall become effective upon execution by the City and shall remain in effect until satisfactory completion of the Scope of Work unless terminated as provided for in this Agreement.

2.2 If funding for the entire Agreement is not appropriated at the time this Agreement is entered into, City retains the right to terminate this Agreement at the expiration of each of City's budget periods, and any subsequent contract period is subject to and contingent upon such appropriation.

III. SCOPE OF SERVICES

Consultant agrees to provide the services described in this Article III entitled Scope of Services in exchange for the compensation described in Article IV. Compensation. Scope of Services are detailed in Exhibit A which are incorporated by reference as if written and copied herein.

All work performed by Consultant hereunder shall be performed to the satisfaction of the City Manager. The determination made by City Manager shall be final, binding and conclusive on all Parties hereto. City shall be under no obligation to pay for any work performed by Consultant, which is not satisfactory to City Manager. City shall have the right to terminate this Agreement, in accordance with Article VII. Termination, in whole or in part, should Consultant's work not be satisfactory to City Manager; however, City shall have no obligation to terminate and

may withhold payment for any unsatisfactory work, as stated herein, even should City elect not to terminate.

IV. COMPENSATION TO CONSULTANT

4.1 In consideration of Consultant's performance in a satisfactory and efficient manner, as determined solely by City Manager, of all services and activities set forth in this Agreement, City agrees to pay Consultant an amount not to exceed One million, ninety six thousand, six hundred twenty three dollars and thirty six cents ($1,096,623.36) as total compensation, to be paid to Consultant as further detailed in Exhibit B.

4.2 No additional fees or expenses of Consultant shall be charged by Consultant nor be payable by City. The parties hereby agree that all compensable expenses of Consultant have been provided for in the total payment to Consultant as specified in section 4.1 above. Total payments to Consultant cannot exceed that amount set forth in section 4.1 above, without prior approval and agreement of all parties, evidenced in writing and approved by the City.

4.3 Final acceptance of work products and services require written approval by City. The approval official shall be the City Manager. Payment will be made to Consultant following written approval of the final work products and services by the City Manager. City shall not be obligated or liable under this Agreement to any party, other than Consultant, for the payment of any monies or the provision of any goods or services.

V. OWNERSHIP OF DOCUMENTS

5.1 Any and all writings, documents or information in whatsoever form and character produced by Consultant pursuant to the provisions of this Agreement is the exclusive property of City**;** and no such writing, document or information shall be the subject of any copyright or proprietary claim by Consultant**.**

5.2 Consultant understands and acknowledges that as the exclusive owner of any and all such writings, documents and information, City has the right to use all such writings, documents and information as City desires, without restriction. Any use of such writings, documents and information on extensions of this project or on any other project without specific adaptation by Consultant shall be at the City's sole risk and without liability to the Consultant.

VI. RECORDS RETENTION

6.1 Consultant and its subcontractors, if any, shall properly, accurately and completely maintain all documents, papers, and records, and other evidence pertaining to the services rendered hereunder (hereafter referred to as "documents"), and shall make such materials available to the City at their respective offices, at all reasonable times and as often as City may deem necessary during the Agreement period, including any extension or renewal hereof, and the record retention period established herein, for purposes of audit, inspection, examination, and making excerpts or copies of same by City and any of its authorized representatives.

6.2 Consultant shall retain any and all documents produced as a result of services provided hereunder for a period of four (4) years (hereafter referred to as "retention period") from the date of termination of the Agreement. If, at the end of the retention period, there is litigation or other questions arising from, involving or concerning this documentation or the services provided hereunder, Consultant shall retain the records until the resolution of such litigation or other such

questions. Consultant acknowledges and agrees that City shall have access to any and all such documents at any and all times, as deemed necessary by City**,** during said retention period. City may, at its election, require Consultant to return said documents to City prior to or at the conclusion of said retention.

6.3 Consultant shall notify City**,** immediately, in the event Consultant receives any requests for information from a third party, which pertain to the documentation and records referenced herein. Consultant understands and agrees that City will process and handle all such requests.

VII. TERMINATION

7.1 For purposes of this Agreement, "termination" of this Agreement shall mean termination by expiration of the Agreement term as stated in Article II. Term, or earlier termination pursuant to any of the provisions hereof.

7.2 *Termination Without Cause.* This Agreement may be terminated by either Party upon 15 calendar days' written notice, which notice shall be provided in accordance with Article VIII. Notice.

7.3 *Termination For Cause*. Upon written notice, which notice shall be provided in accordance with Article VIII. Notice, City may terminate this Agreement as of the date provided in the notice, in whole or in part, upon the occurrence of one (1) or more of the following events, each of which shall constitute an Event for Cause under this Agreement:

7.3.1 The sale, transfer, pledge, conveyance or assignment of this Agreement without prior approval, as provided in Article XII. Assignment and Subcontracting.

7.4 *Defaults With Opportunity for Cure.* Should Consultant default in the performance of this Agreement in a manner stated in this section 7.4 below, same shall be considered an event of default. City shall deliver written notice of said default specifying such matter(s) in default. Consultant shall have fifteen (15) calendar days after receipt of the written notice, in accordance with Article VIII. Notice, to cure such default. If Consultant fails to cure the default within such fifteen-day cure period, City shall have the right, without further notice, to terminate this Agreement in whole or in part as City deems appropriate, and to contract with another consultant to complete the work required in this Agreement. City shall also have the right to offset the cost of said new Agreement with a new consultant against Consultant's future or unpaid invoice(s), subject to the duty on the part of City to mitigate its losses to the extent required by law.

7.4.1 Bankruptcy or selling substantially all of company's assets
7.4.2 Failing to perform or failing to comply with any covenant herein required
7.4.3 Performing unsatisfactorily

7.5 *Termination By Law.* If any state or federal law or regulation is enacted or promulgated which prohibits the performance of any of the duties herein, or, if any law is interpreted to prohibit such performance, this Agreement shall automatically terminate as of the effective date of such prohibition.

7.6 Regardless of how this Agreement is terminated, Consultant shall affect an orderly transfer to City or to such person(s) or firm(s) as the City may designate, at no additional cost to City, all completed or partially completed documents, papers, records, charts, reports, and any

other materials or information produced as a result of or pertaining to the services rendered by Consultant**,** or provided to Consultant**,** hereunder, regardless of storage medium, if so requested by City, or shall otherwise be retained by Consultant in accordance with Article VI. Records Retention. Any record transfer shall be completed within thirty (30) calendar days of a written request by City and shall be completed at Consultant's sole cost and expense. Payment of compensation due or to become due to Consultant is conditioned upon delivery of all such documents, if requested.

7.7 Within forty-five (45) calendar days of the effective date of completion, or termination or expiration of this Agreement, Consultant shall submit to City its claims, in detail, for the monies owed by City for services performed under this Agreement through the effective date of termination. Failure by Consultant to submit its claims within said forty-five (45) calendar days shall negate any liability on the part of City and constitute a **Waiver** by Consultant of any and all right or claims to collect monies that Consultant may rightfully be otherwise entitled to for services performed pursuant to this Agreement.

7.8 Upon the effective date of expiration or termination of this Agreement, Consultant shall cease all operations of work being performed by Consultant or any of its subcontractors pursuant to this Agreement.

7.9 *Termination not sole remedy.* In no event shall City's action of terminating this Agreement, whether for cause or otherwise, be deemed an election of City's remedies, nor shall such termination limit, in any way, at law or at equity, City's right to seek damages from or otherwise pursue Consultant for any default hereunder or other action.

VIII. NOTICE

Except where the terms of this Agreement expressly provide otherwise, any election, notice or communication required or permitted to be given under this Agreement shall be in writing and deemed to have been duly given if and when delivered personally (with receipt acknowledged), or three (3) days after depositing same in the U.S. mail, first class, with proper postage prepaid, or upon receipt if sending the same by certified mail, return receipt requested, or upon receipt when sent by a commercial courier service (such as Federal Express or DHL Worldwide Express) for expedited delivery to be confirmed in writing by such courier, at the addresses set forth below or to such other address as either Party may from time to time designate in writing.

If intended for City, to:

City of Pflugerville
Attn: Patricia Davis, P.E.
City Engineer
P.O. Box 589
Pflugerville, Texas 78691

If intended for Consultant, to:

Rodriguez Transportation Group, Inc.
Attn: David Krizan, P.E.
Project Manager
11211 Taylor Draper Lane, Suite 100
Austin, Texas 78759

IX. INSURANCE

9.1 Prior to the commencement of any work under this Agreement, Consultant shall furnish copies of all required endorsements and an original completed Certificate(s) of Insurance to the City, which shall be clearly labeled "Immanuel Road Improvements Project" in the Description of Operations block of the Certificate. The original Certificate(s) shall be completed by an agent and signed by a person authorized by that insurer to bind coverage on its behalf. The City will not accept Memorandum of Insurance or Binders as proof of insurance. The original certificate(s) or form must have the agent's original signature, including the signer's company affiliation, title and phone number, and be mailed, with copies of all applicable endorsements, directly from the insurer's authorized representative to the City. The City shall have no duty to pay or perform under this Agreement until such certificate and endorsements have been received and approved by the City. No officer or employee, other than the City Attorney, shall have authority to waive this requirement.

9.2 The City reserves the right to review the insurance requirements of this Article during the effective period of this Agreement and any extension or renewal hereof and to modify insurance coverages and their limits when deemed necessary and prudent by City Attorney based upon changes in statutory law, court decisions, or circumstances surrounding this Agreement. In no instance will City allow modification whereupon City may incur increased risk.

9.3 A Consultant's financial integrity is of interest to the City; therefore, subject to Consultant's right to maintain reasonable deductibles in such amounts as are approved by the City, Consultant shall obtain and maintain in full force and effect for the duration of this Agreement, and any extension hereof, at Consultant's sole expense, insurance coverage written on an occurrence basis, by companies authorized and admitted to do business in the State of Texas and with an A.M Best's rating of no less than A- (VII), in the following types and for an amount not less than the amount listed below:

City of Pflugerville

Insurance Requirements

Consultant performing work on City property or public right-of-way for the City of Pflugerville shall provide the City a certificate of insurance evidencing the coverage provisions identified herein. Consultant shall provide the City evidence that all subcontractors performing work on the project have the same types and amounts of coverage as required herein or that the subcontractors are included under the contractor's policy. The City, at its own discretion, may require a certified copy of the policy.

All insurance companies and coverage must be authorized by the Texas Department of Insurance to transact business in the State of Texas and must be acceptable to the City of Pflugerville.

Listed below are the types and amounts of insurance required. The City reserves the right to amend or require additional types and amounts of coverage or provisions depending on the nature of the work.

Type of Insurance	Amount of Insurance	Provisions
Commercial General (Public) Liability to include coverage for: Premises/Operations Products/ Completed Operations Independent Contractors Personal Injury Contractual Liability	1,000,000 per occurrence, 2,000,000 general aggregate Or 2,000,000 combined single coverage limit	City to be listed as additional insured and provide 30 days' notice of cancellation or material change in coverage City to be provided a waiver of subrogation City prefers that insurer be rated B+V1 or higher by A.M. Best or A or higher by Standard & Poors
Business Auto Liability	1,000,000 combined single limit	City to be provided a waiver of subrogation
Workers' Compensation & Employers Liability	Statutory Limits 1,000,000 each accident	City to be provided a waiver of subrogation
Professional Liability	1,000,000	

Questions regarding this insurance should be directed to the City of Pflugerville (512) 990-6100 A contract will not be issued without evidence of Insurance. City will only accept the ACORD 25 or ISO certificate of insurance forms.

9.4 The City shall be entitled, upon request and without expense, to receive copies of the policies, declaration page and all endorsements thereto as they apply to the limits required by the City, and may require the deletion, revision, or modification of particular policy terms, conditions, limitations or exclusions (except where policy provisions are established by law or regulation binding upon either of the Parties hereto or the underwriter of any such policies). Consultant shall be required to comply with any such requests and shall submit a copy of the replacement certificate of insurance to City at the address provided below within 10 days of the requested change. Consultant shall pay any costs incurred resulting from said changes.

City of Pflugerville
Capital Improvement Program
P.O. Box 589
Pflugerville, Texas 78691-0589

9.5 Consultant agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following provisions:

- Name the City, its officers, officials, employees, volunteers, and elected representatives as ***additional insured by endorsement under terms satisfactory to the City***, as respects operations and activities of, or on behalf of, the named insured performed under contract with the City, with the exception of the workers' compensation and professional liability policies;

- Provide for an endorsement that the "other insurance" clause shall not apply to the City of Pflugerville where the City is an additional insured shown on the policy;

- Workers' compensation and employers' liability policies will provide a waiver of subrogation in favor of the City.

- Provide thirty (30) calendar days advance written notice directly to City of any suspension, cancellation, non-renewal or material change in coverage, and not less than ten (10) calendar days advance notice for nonpayment of premium.

9.6 Within five (5) calendar days of a suspension, cancellation or non-renewal of coverage, Consultant shall provide a replacement Certificate of Insurance and applicable endorsements to City. City shall have the option to suspend Consultant's performance should there be a lapse in coverage at any time during this Agreement. Failure to provide and to maintain the required insurance shall constitute a material breach of this Agreement.

9.7 In addition to any other remedies the City may have upon Consultant's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Consultant to stop work hereunder, and/or withhold any payment(s) which become due to Consultant hereunder until Consultant demonstrates compliance with the requirements hereof.

9.8 Nothing herein contained shall be construed as limiting in any way the extent to which Consultant may be held responsible for payments of damages to persons or property resulting from Consultant's or its subcontractors' performance of the work covered under this Agreement.

9.9 It is agreed that, excepting Professional Liability, Consultant's insurance shall be deemed primary and non-contributory with respect to any insurance or self-insurance carried by the City of Pflugerville for liability arising out of operations under this Agreement.

9.10 It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this Agreement.

9.11 Consultant and any of its Subcontractors are responsible for all damage to their own equipment and/or property.

X. INDEMNIFICATION

10.1 CONSULTANT covenants and agrees to INDEMNIFY and HOLD HARMLESS, the CITY and the elected officials, employees, officers, directors, volunteers and representatives of the CITY, individually and collectively, from and against any and all costs, claims, liens, damages, losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, or liability for damages caused by or resulting from an act of negligence, intentional tort, intellectual property infringement, or failure to pay a subcontractor or supplier committed by the CONSULTANT or the CONSULTANT's agent, CONSULTANT under contract, or another entity over which the CONSULTANT exercises control. Such acts may include personal or bodily injury, death and property damage, made upon the CITY directly or indirectly arising out of, resulting from or related to CONSULTANT'S activities under this Agreement, including any negligent or intentional acts or omissions of CONSULTANT, any agent, officer, director, representative, employee,

consultant or subcontractor of CONSULTANT, and their respective officers, agents employees, directors and representatives while in the exercise of the rights or performance of the duties under this Agreement. The indemnity provided for in this paragraph shall not apply to any liability resulting from the negligence of CITY, its elected officials, employees, officers, directors, volunteers and representatives, in instances where such negligence causes personal injury, death, or property damage. In no event shall the indemnification obligation extend beyond the date with when the institution of legal or equitable proceedings for the professional negligence would be barred by any applicable statute of repose or statute of limitations.

10.2 The provisions of this INDEMNITY are solely for the benefit of the Parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity. CONSULTANT shall advise the CITY in writing within 24 hours of any claim or demand against the CITY or CONSULTANT known to CONSULTANT related to or arising out of CONSULTANT's activities under this AGREEMENT.

10.3 Duty to Defend – Consultant covenants and agrees to hold a DUTY TO DEFEND the CITY and the elected officials, employees, officers, directors, volunteers and representatives of the CITY, individually and collectively, from and against any and all claims, liens, proceedings, actions or causes of action, other than claims based wholly or partly on the negligence of, fault of, or breach of contract by the CITY, the CITY'S agent, the CITY'S employee or other entity, excluding the CONSULTANT or the CONSULTANT'S agent, employee or sub-consultant, over which the CITY exercises control. CONSULTANT is required under this provision and fully satisfies this provision by naming the CITY and those representatives listed above as additional insured under the CONSULTANT'S general liability insurance policy and providing any defense provided by the policy upon demand by CITY.

10.4 CONSULTANT is required to perform services to the City under the standard of care provided for in Texas Local Government Code § 271.904 (d)(1-2).

10.5 Employee Litigation – In any and all claims against any Party indemnified hereunder by any employee of CONSULTANT, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation herein provided shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONSULTANT or any subcontractor under worker's compensation or other employee benefit acts.

10.6 Force Majeure - City agrees that the CONSULTANT is not responsible for damages arising from any circumstances such as strikes or other labor disputes; severe weather disruptions, natural disasters, fire or other acts of God; riots, war or other emergencies; or failure of any third party governmental agency to act in timely manner not caused or contributed to by CONSULTANT.

XI. ASSIGNMENT AND SUBCONTRACTING

11.1 Consultant shall supply qualified personnel as may be necessary to complete the work to be performed under this Agreement. Persons retained to perform work pursuant to this Agreement shall be the employees or subcontractors of Consultant. Consultant, its employees or its subcontractors shall perform all necessary work.

11.2 It is City's understanding and this Agreement is made in reliance thereon, that Consultant intends to use the following subcontractors in the performance of this Agreement: Corsair Consulting, Cox|McLain Environmental Consulting, Inland Geodetics, K Friese and Associates, SE3, Texas Transportation Solutions and T2 Utility Engineers. Any deviation from this subcontractor list, whether in the form of deletions, additions or substitutions shall be approved by City prior to the provision of any services by said subcontractor.

11.3 Any work or services approved for subcontracting hereunder shall be subcontracted only by written contract and, unless specific waiver is granted in writing by the City, shall be subject by its terms to each and every provision of this Agreement. Compliance by subcontractors with this Agreement shall be the responsibility of Consultant. City shall in no event be obligated to any third party, including any subcontractor of Consultant**,** for performance of services or payment of fees. Any references in this Agreement to an assignee, transferee, or subcontractor, indicate only such an entity as has been approved by the City.

11.4 Except as otherwise stated herein, Consultant may not sell, assign, pledge, transfer or convey any interest in this Agreement, nor delegate the performance of any duties hereunder, by transfer, by subcontracting or any other means, without the consent of the City Council, as evidenced by passage of an ordinance. As a condition of such consent, if such consent is granted, Consultant shall remain liable for completion of the services outlined in this Agreement in the event of default by the successor Consultant, assignee, transferee or subcontractor.

11.5 Any attempt to transfer, pledge or otherwise assign this Agreement without said written approval, shall be void ab initio and shall confer no rights upon any third person. Should Consultant assign, transfer, convey, delegate, or otherwise dispose of any part of all or any part of its right, title or interest in this Agreement, City may, at its option, cancel this Agreement and all rights, titles and interest of Consultant shall thereupon cease and terminate, in accordance with Article VII. Termination, notwithstanding any other remedy available to City under this Agreement. The violation of this provision by Consultant shall in no event release Consultant from any obligation under the terms of this Agreement, nor shall it relieve or release Consultant from the payment of any damages to City, which City sustains as a result of such violation.

XII. INDEPENDENT CONTRACTOR

Consultant covenants and agrees that he or she is an independent contractor and not an officer, agent, servant or employee of City; that Consultant shall have exclusive control of and exclusive right to control the details of the work performed hereunder and all persons performing same, and shall be responsible for the acts and omissions of its officers, agents, employees, contractors, subcontractors and consultants; that the doctrine of respondent superior shall not apply as between City and Consultant, its officers, agents, employees, contractors, subcontractors and consultants, and nothing herein shall be construed as creating the relationship of employer-employee, principal-agent, partners or joint ventures between City and Consultant. The Parties hereto understand and agree that the City shall not be liable for any claims which may be asserted by any third party occurring in connection with the services to be performed by the Consultant under this Agreement and that the Consultant has no authority to bind the City.

XIII. CONFLICT OF INTEREST

13.1 Consultant acknowledges that it is informed that the Charter of the City of Pflugerville and its Ethics Code prohibit a City officer or employee, as those terms are defined in Section 11.06 of the Ethics Code, from having a financial interest in any contract with the City or any City agency such as city owned utilities. An officer or employee has a "prohibited financial interest" in a contract with the City or in the sale to the City of land, materials, supplies or service, if any of the following individual(s) or entities is a Party to the contract or sale: a City officer or employee; his parent, child or spouse; a business entity in which the officer or employee, or his parent, child or spouse owns ten (10) percent or more of the voting stock or shares of the business entity, or ten (10) percent or more of the fair market value of the business entity; a business entity in which any individual or entity above listed is a subcontractor on a City contract, a partner or a parent or subsidiary business entity.

13.2 Pursuant to the subsection above, Consultant warrants and certifies, and this Agreement is made in reliance thereon, that it, its officers, employees and agents are neither officers nor employees of the City. Consultant further warrants and certifies that it will comply with the City's Ethics Code.

13.3 Certificate of Interested Parties (TEC Form 1295). For contracts needing City Council approval, or any subsequent changes thereto requiring City Council approval, the City may not accept or enter into a contract until it has received from the Consultant a completed, signed, and notarized TEC Form 1295 complete with a certificate number assigned by the Texas Ethics Commission ("TEC"), pursuant to Texas Government Code § 2252.908 and the rules promulgated thereunder by the TEC. The Consultant understands that failure to provide said form complete with a certificate number assigned by the TEC may prohibit the City from entering into this Agreement. Pursuant to the rules prescribed by the TEC, the TEC Form 1295 must be completed online through the TEC's website, assigned a certificate number, printed, signed and notarized, and provided to the City. The TEC Form 1295 must be provided to the City prior to the award of the contract. The City does not have the ability to verify the information included in a TEC Form 1295, and does not have an obligation or undertake responsibility for advising Consultant with respect to the proper completion of the TEC Form 1295.

XIV. AMENDMENTS

Except where the terms of this Agreement expressly provide otherwise, any alterations, additions, or deletions to the terms hereof, shall be effected by amendment, in writing, executed by both City and Consultant, and, if applicable, subject to formal approval by the City Council.

XV. SEVERABILITY

If any clause or provision of this Agreement is held invalid, illegal or unenforceable under present or future federal, state or local laws, including but not limited to the City Charter, City Code, or ordinances of the City of Pflugerville, Texas, then and in that event it is the intention of the Parties hereto that such invalidity, illegality or unenforceability shall not affect any other clause or provision hereof and that the remainder of this Agreement shall be construed as if such invalid, illegal or unenforceable clause or provision was never contained herein; it is also the intention of the Parties hereto that in lieu of each clause or provision of this Agreement that is invalid, illegal, or unenforceable, there be added as a part of the Agreement a clause or provision as similar in

terms to such invalid, illegal or unenforceable clause or provision as may be possible, legal, valid and enforceable.

XVI. LICENSES/CERTIFICATIONS

Consultant warrants and certifies that Consultant and any other person designated to provide services hereunder has the requisite training, license and/or certification to provide said services, and meets all competence standards promulgated by all other authoritative bodies, as applicable to the services provided herein.

XVII. COMPLIANCE

Consultant shall provide and perform all services required under this Agreement in compliance with all applicable federal, state and local laws, rules and regulations.

XVIII. NONWAIVER OF PERFORMANCE

Unless otherwise specifically provided for in this Agreement, a waiver by either Party of a breach of any of the terms, conditions, covenants or guarantees of this Agreement shall not be construed or held to be a waiver of any succeeding or preceding breach of the same or any other term, condition, covenant or guarantee herein contained. Further, any failure of either Party to insist in any one or more cases upon the strict performance of any of the covenants of this Agreement, or to exercise any option herein contained, shall in no event be construed as a waiver or relinquishment for the future of such covenant or option. In fact, no waiver, change, modification or discharge by either Party hereto of any provision of this Agreement shall be deemed to have been made or shall be effective unless expressed in writing and signed by the Party to be charged. In case of City, such changes must be approved by the City Council, as described in Article XVI. Amendments. No act or omission by a Party shall in any manner impair or prejudice any right, power, privilege, or remedy available to that Party hereunder or by law or in equity, such rights, powers, privileges, or remedies to be always specifically preserved hereby.

XIX. LAW APPLICABLE

19.1 **THIS AGREEMENT SHALL BE CONSTRUED UNDER AND IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND ALL OBLIGATIONS OF THE PARTIES CREATED HEREUNDER ARE PERFORMABLE IN TRAVIS COUNTY, TEXAS.**

19.2 Venue for any legal action or proceeding brought or maintained, directly or indirectly, as a result of this Agreement shall be heard and determined in a court of competent jurisdiction in Travis County, Texas.

XX. LEGAL AUTHORITY

The signer of this Agreement for Consultant represents, warrants, assures and guarantees that he has full legal authority to execute this Agreement on behalf of Consultant and to bind Consultant to all of the terms, conditions, provisions and obligations herein contained.

XXI. PARTIES BOUND

This Agreement shall be binding on and inure to the benefit of the Parties hereto and their respective heirs, executors, administrators, legal representatives, and successors and assigns, except as otherwise expressly provided for herein.

XXII. CAPTIONS

The captions contained in this Agreement are for convenience of reference only, and in no way limit or enlarge the terms and/or conditions of this Agreement.

XXIII. INCORPORATION OF EXHIBITS

Each of the Exhibits listed below is an essential part of the Agreement, which governs the rights and duties of the Parties, and shall be incorporated herein for all purposes:

Exhibit "A" - Scope of Services, including Project Description/Scope of Services; Fee Summary for Professional Services and Proposed Project Schedule

XXIV. ENTIRE AGREEMENT

This Agreement, together with its authorizing ordinance and its exhibits, if any, constitute the final and entire agreement between the Parties hereto and contain all of the terms and conditions agreed upon. No other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind the Parties hereto, unless same be in writing, dated subsequent to the date hereto, and duly executed by the Parties, in accordance with Article XIV. Amendments.

XXV. MISCELLANEOUS CITY CODE PROVISIONS

25.1 **Representations and Warranties by Consultant.** If Consultant is a corporation, partnership or a limited liability company, Consultant warrants, represents, covenants, and agrees that it is duly organized, validly existing and in good standing under the laws of the state of its incorporation or organization and is duly authorized and in good standing to conduct business in the State of Texas.

25.2 **Franchise Tax Certification.** A corporate or limited liability company Consultant certifies that it is not currently delinquent in the payment of any Franchise Taxes due under Chapter 171 of the *Texas Tax Code*, or that the corporation or limited liability company is exempt from the payment of such taxes, or that the corporation or limited liability company is an out-of-state corporation or limited liability company that is not subject to the Texas Franchise Tax, whichever is applicable.

25.3 **Eligibility Certification.** Consultant certifies that the individual or business entity named in the Agreement is not ineligible to receive payments under the Agreement and acknowledges that the Agreement may be terminated and payment withheld if this certification is inaccurate.

25.4 **Payment of Debt or Delinquency to the State or Political Subdivision of the State.** Pursuant to Chapter 38, *City of Pflugerville Code of Ordinances*, Consultant agrees that any payments owing to Consultant under the Agreement may be applied directly toward any debt or delinquency that Consultant owes the City of Pflugerville, State of Texas or any political subdivision of the State of Texas regardless of when it arises, until such debt or delinquency is paid in full.

25.5 **Texas Family Code Child Support Certification.** Consultant certifies that they are not delinquent in child support obligations and therefore is not ineligible to receive payments under the Agreement and acknowledges that the Agreement may be terminated and payment may be withheld if this certification is inaccurate.

25.6 **Texas Government Code Mandatory Provision**. The City of Pflugerville may not enter into a contract with a company for goods and services unless the contract contains a written verification from the company that it; (i) does not boycott Israel; and (ii) will not boycott Israel during the term of the contract. (Texas Government Code, Chapter 2271.002) by accepting this rider, the Consultant hereby verifies that it does not boycott Israel, and agrees that, during the term of this agreement, will not boycott Israel as that term is defined in the Texas Government Code, Section 808.001, as amended. Further, the Consultant hereby certifies that it is not a company identified under Texas Government Code, Section 2252.152 as a company engaged in business with Iran, Sudan, or Foreign Terrorist Organization.

EXECUTED and **AGREED** to as of the dates indicated below.

CITY OF PFLUGERVILLE		**RODRIGUEZ TRANSPORTATION GROUP, INC.**	
		Robert Carrillo, P.E.	
(Signature)		*(Signature)*	
Printed Name:	Sereniah Breland	Printed Name:	Robert Carrillo, P.E.
Title:	City Manager	Title:	Vice President
Date:		Date:	07/15/2021

APPROVED AS TO FORM:

Charles E. Zech
City Attorney
DENTON NAVARRO ROCHA BERNAL & ZECH, P.C.

EXHIBIT A

ENGINEERING (SCOPE OF SERVICES)

Project Limits: Immanuel Road, from Pecan Street (FM 1825) to Wells Branch Parkway.

Project Length: 5,700' (1.08 Miles)

The following will be used as the basis for the preparation of a geometric schematic and subsequent preparation of plans, specifications, and estimate (PS&E) to reconstruct Immanuel Road to a three-lane urban section. The proposed improvements include curb and gutter, intersection improvements, street lighting, underground storm sewer and designated pedestrian facilities.

The geometric schematic, following data collection and environment studies, will be developed to establish the ROW/easement requirements, preliminary cost estimate and other design parameters. 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 Pflugerville (the City) staff or their designated representative (GEC), and local municipal agencies throughout the duration of the project. 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.

C. Detailed Plan Sheet Preparation. The Engineer shall provide detailed plan sheets in accordance with a Go-By plan set. The Go-By, that defines the plan sheet requirements, may be provided by the City or the Engineer and will be agreed to by both.

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; Geotechnical Investigations

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 proposed developments along proposed route.
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 that may impact the proposed design effort (ex. utility markers, fence gates, special features, etc.).

B. Design Criteria. The Engineer shall develop the design criteria based on controlling factors specified by the City and in accordance with the latest version of the Engineering Design Manual. The Engineer shall document the design criteria by developing a 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 exhibits to illustrate how traffic will be maintained during the various phases of construction. The exhibits 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 estimates using the TxDOT's Average Low Bid Unit Price and any other readily available data. The preliminary cost estimates 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. Other issues as identified by the City

F. Geotechnical Borings, Investigations and Pavement Design: The Engineer shall conduct field investigations laboratory testing and prepare the 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 identify the existing pavement structure with proposed borings (5 total).
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 (10 total), obtaining boring samples at 500-foot intervals (according to City's Pavement Design Criteria Manual) from Pecan Street to Wells Branch Parkway.
    - 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 include this information 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 in accordance to subsurface requirements per Pavement Design Criteria Manual. 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.
    - Perform testing to determine the recommended amount of lime or cement required to treat or stabilize the subgrade soils for the new pavement. Pavement design alternatives will consider whether or not to include subgrade stabilization and benefits for each or determination of soil replacement. Develop up to four (4) recommendations for flexible and rigid pavements in accordance with the City of Pflugerville Pavement Design Criteria Manual.
4. Perform Bridge Borings
    - Supplement existing borings and boring logs (if available) at the existing bridges at

Gilleland Creek as necessary to complete the bridge design for the project. Perform borings (2 total) for the new or widened bridges following the schematic design. Bridge borings shall be drilled to a minimum depth of 50 feet below top of existing ground.

- Analyze subsurface conditions and Texas Cone Penetrometer Test results for each bridge location.
- Develop recommendations for suitable foundation type, allowable bearing and skin friction resistance in the soil profile encountered, and minimum required penetration depths for each bridge location. Prepare final tip elevations recommendations as they relate to possible axial design loads.
- Perform laboratory testing to include: USCS Soil Classification, Atterberg limits, particle size analysis (D50 and D95), moisture content, and unconfined compression tests.
- For each bent and abutment prepare soil parameters and other necessary data so that the structural engineer can determine point-of-fixity. Also, included necessary data for lateral analysis of drilled shafts.
- Identify potential drilled shaft construction problems related to groundwater, caving soils, very hard rock layers, or karst features.

5. Prepare Geotechnical report to include the summary of field investigations, laboratory testing results, recommended pavement design, recommendations for retaining wall and bridge foundations.

Geotechnical effort related to the design of retaining walls is not included and is reserved for a Professional Service Supplemental Agreement (PSSA) if needed following the schematic effort.

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), and the City of Pflugerville. The intention of the Environmental Services is to attain necessary clearance letters and approvals to proceed with the construction of the proposed project.

Preliminary project review indicates that right-of-way acquisitions will not be required north of Dove Haven Drive. Therefore, no acquisitions are anticipated from Bohls Park, the City of Pflugerville Recreation Center, the Pecan Creek Greenway or other adjacent public facilities. Furthermore, the Pflugerville Little League Fields north of Pigeon Forge Road are understood to be accessible by fee and registration and are not considered to be a publicly owned park or recreation facility. Given the assumptions and understanding above, project acquisitions are not anticipated to require documentation of compliance with Chapter 26 of the Texas Parks and Wildlife Code. Therefore, no public hearing or associated notifications are anticipated.

The results of the studies described below will be presented in an Environmental Technical Memorandum along with applicable supporting data and agency coordination documents.

A. Data Collection Process:

1. Data Collection & Field Reconnaissance: Resource specialist will collect readily available environmental information relative to the project area from the appropriate local, state, and federal agencies. This information will be supplemented with field investigations, as described below.

B. Hazardous Materials Risk Assessment

1. 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.
2. A Hazardous Materials Risk Assessment shall be completed, based on the regulatory records review and field reconnaissance conducted during the data collection process. This assessment will identify potential hazardous material sites that may be impacted by the proposed project. Findings will be presented in the Environmental Technical Memorandum.

C. Section 404 Clean Water Act Compliance

1. A delineation of potential waters of the U.S. will be conducted in the project area and summarized in the Environmental Technical Memorandum. Specific impacts of the project on waters of the U.S. will be determined, and measures to minimize the impacts will be identified. The report will discuss applicable Section 404 options in accordance with the current permits and conditions.

For the purposes of this scope & fee, it is assumed that the project will not require USACE authorization through either a non-reporting Nationwide Permit, a Nationwide Permit with Pre-Construction Notification, or an Individual Permit to the to the USACE (i.e. impacts to the jurisdictional features will be entirely avoided).

D. Endangered Species Act Compliance

1. An analysis of the project's effects on state and federally listed threatened and endangered species will be conducted and presented in the Environmental Technical Memorandum. The analysis will include any measures that would be required to ensure 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 and that no agency coordination (e.g. TPWD or USFWS) would be required.

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, at the survey level of effort consistent with the TAC. 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.

The following assumptions have been made based on an initial project review and the likely outcome of the survey:

- No federal funding or permitting 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.

F. Public Engagement

The Engineer shall provide the following services:

1. Stakeholder Engagement: Services will include stakeholder engagement as well as coordination with private/commercial developments, residential neighborhoods, City Council, and agency coordination. A total of four (4) meetings will be supported by providing exhibits, preparing for the meetings and participating in the meetings.
2. Public Meeting: One (1) Public Meeting will be held. The intention of the Public Involvement Services is to work closely with City to provide property owners, residents, local business owners and the community updates on the project as they become available and incorporate input from stakeholders.

- Prepare power point presentation/exhibits and speech/speaking points if necessary for the meetings.
- Prepare meeting handouts, agenda, name tags, sign-in sheets, comment forms, and a fact sheet for the meeting.

- Provide staff member(s) at the meetings to facilitate sign in, gather comments and document the contents of the meeting through photography.
- Provide meeting materials to the City's Public Information Officer Communications Team/Group for inclusion into a meeting summary (at the City's discretion). Materials will include:
  - Copies of notification efforts
  - Copies of the sign-in sheets
  - Copies of comment received, and
  - Photo documentation
- A summary of public involvement activities will be included in the Public Meeting Summary Report, developed for each public meeting. Response to comments and meeting documentation is assumed to be the responsibility of the City's Public Involvement Officer.

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. Compliance with the City's Engineer Design Manual (Miscellaneous Guidelines) is required.

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 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-of-entry and shall provide justification for such action during the preliminary design stage. ROW Justification Exhibits (RJE) shall be prepared as needed. 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 (except for the intersections as defined below). 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, Manville Water Supply Corporation, Southwest Water Company, 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 for the project. The limits of QL-B data shall match the topographic survey limits as defined under FC 150. Gather QL-A data at 10 locations, locations of QL-A will be determined after the 30% Submittal. (Right-of-way permitting and maintenance of traffic for lane closures are not anticipated. If required, these services will be included in a Professional Services Supplemental Agreement (PSSA).

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 front property corners and confirm the existing ROW configuration.
2. Perform sufficient deed research and boundary analysis to prepare a ROW base map/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 documents for acquisition and dedication to the City of Pflugerville. Deliverables will consist of a metes and bounds description and accompanying survey plan for each parcel (4 parcels (max)). Estimated ROW acquisition requirements are located south of Pigeon Forge Road.
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 in accordance with the City's Engineering Design Manual (latest edition) requirements.
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 that includes the status of work performed through the end of the previous month.

B. Develop and maintain a detailed project schedule to track project conformance to Exhibit C, Design Schedule, for each work authorization. The schedule submittals shall be hard copy and electronic format and updated monthly along with each invoice submittal.

C. The Engineer will attend a Project Kick-Off meeting with the City and GEC. The Engineer will prepare and distribute meeting minutes within three (3) business days of the meeting.

D. Meet on a scheduled basis (bi-monthly) with the City to review project progress (6 Maximum). The Engineer will prepare and distribute meeting minutes within three (3) business days of each meeting.

E. Prepare, distribute, and file both written and electronic correspondence to include meeting agendas, meeting minutes, project memos, project status reports, white papers, etc.).

F. Implement and execute QAQC plan for each milestone submittal (Schematic (30%), 75% and Final).

G. Attend Comment Resolution Meetings following the (Schematic (30%) and 75% submittals with meeting minutes within three (3) business days after each meeting.

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 generate a 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) and survey control layout sheets to become part of the Final Construction Contract Documents.
   - 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. Perform topographic survey of the site. Topographic elements, within the existing ROW include but not limited to surface features such as pavement edges, concrete curb, driveways, sidewalks and ramps, handrails, fences, street signs, trees, ground boxes, fire hydrants, valves, utility poles and mailboxes. Survey limits along Immanuel Road should extend 20-feet (min.) beyond the existing ROW (where accessible). At the project limits, the survey shall extend 200-feet (min) north of Pecan St. and south of Wells Branch Parkway. Survey limits along Pecan St. and Wells Branch Parkway should extend 600-feet (min) from the centerline of Immanuel Road. Survey limits for seven (7) internal

intersecting streets should extend 150 feet from the centerline of Immanuel Road (or as needed to establish drainage patterns). Driveway ties should be based on proposed ROW limits. Identified and tag all trees (within the survey limits) with trunk diameter eight inches or greater per most current City of Pflugerville Tree Ordinance).

5. At Gilleland Creek, provide four (4) channel cross sections (2 upstream and 2 downstream) of Immanuel Road. Cross sections shall not exceed 100 feet intervals and shall be taken at right angles to the channels. Channel cross sections shall extend to Pecan St., to the north, and the back property fence lines (where applicable) to the south, and a minimum distance of 500 feet from the creek bed elsewhere. Cross section data shall include flow line of the channel, top of slope and toe of slope information. The existing two (2) bridges shall be surveyed to include bridge deck, armor joints, abutments, bent caps, low chords, and guardrail.
6. 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. The City will provide a ROW agent to provide right-of-entry support (if needed).
7. 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.
8. 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.
9. 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.
10. Tie down soil boring locations by station, offset and surface elevation.

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.

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.

Development of the geometric schematic layout will include the effort required to evaluate the following two (2) conceptual alternatives:

- Existing truss bridge to remain in place (unmodified). Bridge carrying traffic will be widened or reconstructed.
- Existing truss bridge to be removed/relocated. Bridge carry traffic will be widened or reconstructed. This alternative will include recommended design modifications to the existing trail system. *(Detailed design effort for the existing trail system, beyond the Geometric Design phase, will be reserved for PSSA following the schematic effort. Any structural, abatement, and construction sequencing efforts required to remove the truss bridge will also be reserved for PSSA following the schematic effort. This includes removing and storing the truss bridge or removing, rehabilitating, and reusing the truss bridge.)*

The Layouts shall also include the following features: existing/proposed horizontal and vertical alignment and profile grade line, existing/proposed ROW, proposed bridge limits, cross culverts, typical sections (with existing and proposed pavement structure), signals, guard rail, limits of retaining walls and water surface elevations at stream crossings for various rainfall frequencies, etc. Trail system modifications (where applicable), existing major subsurface and

surface utilities shall also 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.

B. Roadway Plans. Following completion and approval of the geometric schematic layout, the Engineer shall:

Determine the appropriate pavement section for the preliminary proposed roadway model in accordance with the City's Pavement Design Criteria Manual.

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 (width of travel lanes and directional arrows, width of shoulders, curb offsets, ROW width, CL, profile grade line, pavement structure, side slopes, sodding limits, retaining walls, station limits, bridge sections (separate), sidewalk (locations and widths), vertical barriers, median (center turn lane) widths, etc.
3. Plan and Profile
4. Intersection/Driveway Details
5. Others (HAL Data, Removal Layouts, Misc. Roadway Details)
6. Update design cross sections at 50-foot increments, intersection, and driveway locations.
7. Calculate quantities for all items and prepare quantity summary sheets (75% and Final submittals).

FC 161 – Drainage

A. Drainage Report. The Engineer shall use data from as-built plans and FEMA maps to locate drainage outfall(s). The Engineer shall conduct a Preliminary Drainage Study to determine proposed culvert sizes, design flows, and water surface elevations for use in the design of roadway geometry and to 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, 25 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. The hydrologic and hydraulic analysis will be based on the City of Pflugerville's Engineering Design Manual including use of the latest Atlas 14 rainfall data.

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, Storm Drain)
3. Storm Drain Plan/Profile
4. Storm Drain Profiles
5. Inlets: runoff, spread, and inlet computations for each inlet. Inlet hydraulics will be calculated using Rational Method. Calculated flow rates and related input must be indicated on a Runoff and Inlet Computation Sheet
6. Others (Misc. Drainage Details)
7. Storm Water Pollution Prevention Plan/Temp. Erosion Sediment Control Plan
8. Permanent Erosion Control Plan (including energy dissipation/erosion protection measure where applicable)
9. Calculate quantities and prepare summary sheet for all storm drains (75% and Final submittals)

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 and Profiles: New culverts; culvert replacement.
2. Culvert Computations
3. Outfall channels
4. Calculate quantities and prepare summary sheet for all culverts (75% and Final submittals)

D. Bridge Hydrologic and Hydraulic Analysis. The Engineer shall prepare a hydrologic and hydraulic analysis and report of the existing and proposed bridge geometries. The report will include studies of offsite and onsite drainage and floodplain impacts and document the potential impacts associated with the project. The intent of the report is to provide sufficient information for the City reviewers to determine the acceptability of floodplain changes, verify additional dada needs, confirm requirements for additional agency submittals (e.g. FEMA, USCAE) and verify the preferred approach for possible span bridge construction. The Engineer will utilize HEC-HMS and HEC-RAS to prepare these computations and the City's effective models will be used for this analysis. A scour analysis will be prepared using the methodology described in the latest TxDOT Geotechnical Manual. The maximum potential scour depth will be computed from contraction and local pier scour for the proposed bridge. Effort will include development of the following:

1. Bridge Hydraulic Data Sheet
2. Scour Analysis
3. Bridge Scour Data Sheet

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. Signing and Pavement Markings Quantity Summaries are included in this effort (75% and Final submittals).

B. **Signals.** The Engineer shall develop temporary and permanent signal layouts and details at the following intersections: E. Pecan Street, Oxford Drive, and Wells Branch Parkway. The temporary signals assume a three-phase traffic control plan and temporary signal layouts will be prepared for each phase. Effort will include development of the following:
   1. Collect turning movement counts at the above intersections between the hours of 7 am and 7 pm on Tuesday, Wednesday or Thursday when school is in session.
   2. Existing Conditions Layout
   3. Proposed Traffic Signal Layout
   4. Signal Phasing and Wiring Charts
   5. Proposed Traffic Signal Elevations
   6. Traffic Signal Quantity Summaries (75% and Final submittals)

C. **Illumination.** The Engineer shall use standard details where practical. Effort will include development of the following:
   1. Illumination Layouts – The Engineer will design continuous street lighting in accordance with the City's Engineering Design Manual 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 City and confirm with franchise utility in identifying the power source.
   4. Illumination Quantity Summaries (75% and Final submittals)

FC 163 – Miscellaneous

Miscellaneous tasks include: retaining wall layouts, TCP, utility conflict identification, and the final assembly of the construction plans, specifications and estimate. The Engineer shall provide the following services:

A. **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

B. **Utility Conflict Identification** – The Engineer shall review existing Utility Layout and identify potential utility conflicts. The Engineer shall coordinate with the City's assigned

utility coordinator and provide details and exhibits as needed to facilitate the utility relocation effort.

C. **Lead Base Paint and Asbestos Containing Materials (ACM) Survey –** The Engineer shall secure services needed to conduct presence and absence surveys for hazardous materials (specifically lead based paint and ACM) on the two existing bridges at Gilleland Creek. A report will be generated summarizing the results of the survey. *Services required to mitigate the presence of lead paint and/or ACM are not included in this scope and will be added to the Professional Services Supplemental Agreement (PSSA) following completion of the schematic effort*.

D. **Quantities/Summary Sheets** - Updated retaining wall and TCP summary sheets should be provided at the 75% and Final submittals.

E. **Standards, Specifications and Estimate** – Updated estimates should be provided at the 75% and Final submittals.

F. **Water/Wastewater** – The intent of Items 1 and 2 listed below is to secure sufficient data, during the initial planning phase, to established proposed utility/storm drain assignments and to secure sufficient data to identify project needs following the schematic effort. Detailed water/wastewater relocation plans are not included in this initial scope and is reserved for Professional Services Supplemental Agreement (PSSA) following the schematic effort.

1. 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 service 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.
2. Route/Size Coordination – The Engineer will meet with City staff to determine the desired location and size of any proposed relocated facilities. It is assumed the City will provide the required design flows for the water and wastewater facilities.

Effort related to the design of retaining walls is not included and is reserved for a Professional Service Supplemental Agreement (PSSA) if needed following the schematic effort.

FC 170 – Bridge Design

The Engineer shall provide the following services:

A. Bridge Condition Surveys

1. Prepare a bridge condition survey of the existing "roadway" bridge, scheduled to be widened or replaced. The following is a summary of tasks to be provided:
   - Site Visit (perform/document visual observation, take and inventory photographs)
   - Prepare and submit Draft Bridge Condition Survey. Limited to photographic documentation and description of observed areas needing attention.

- Prepare and submit Final Bridge Condition Survey

2. Prepare a bridge condition survey of the existing "truss" bridge and a construction sequencing plan for relocation. The following is a summary of task to be provided:
   - Site Visit (perform/document visual observation, take and inventory photographs). Limited to photographic documentation and description of observed areas needing attention.
   - Prepare and submit Draft Bridge Condition Survey
   - Prepare and submit Final Bridge Condition Survey
   - Prepare and submit construction sequencing plan for the relocation of the pedestrian structure.

B. Bridge Type and Cost Report

1. Prepare a report that documents the analyses comparing costs for each bridge alternative evaluated during the Geometric Design effort defined in FC 160. The cost comparison will include bridge lengths and widths versus pavement/embankment/retaining walls and will include the recommended configuration.

C. Bridge Design

1. Bridge Layout: Prepare a bridge layout plan sheet for the bridge replacement/ widening. The Engineer shall determine the location of each soil boring needed for foundation design in accordance with the *Geotechnical Manual*.

   The Engineer shall submit each preliminary bridge layout early in the plan preparation process to obtain approval from the State. The Engineer shall comply with all relevant sections of the latest edition of the State's *LRFD Bridge Design Manual, Bridge Project Development Manual, Bridge Detailing Guide, and AASHTO LRFD Bridge Design Specifications.* Each bridge layout sheet must include bridge typical sections, structural dimensions, abutment and bent locations, superstructure and substructure types, and any pertinent information from the Bridge Detailing Guide layout checklists. The Engineer shall locate and plot all soil borings and utilities and, for staged construction, indicate limits of existing bridge for removal and reconstruction.

2. Bridge Detail Summary: Prepare total bridge quantities, estimates, and summary sheet for the bridge replacement or widening.
3. Bridge Replacement or Widening Structural Details: Prepare the structural design and develop detailed structural drawings for all required details in compliance with the State's *LRFD Bridge Design Manual, Bridge Detailing Guide and AASHTO LRFD Bridge Design Specifications*.

   Bridges will utilize TxDOT's published bridge standards.

   Additionally, the Engineer shall:
   - Perform calculations for design of the substructure.
   - Perform calculations for bridge slab design if required.
   - Perform calculations for bridge superstructure design.

- Prepare plan sheets for abutment and bent design and additional details.
- Prepare framing plan and slab plan sheets.
- Compute and prepare tables for bearing seat elevations.
- For prestressed concrete superstructure, design beams and prepare beam design tables.
- Prepare special provisions and special specifications in accordance to the above-listed manuals and guidelines.
- Prepare any additional required details specific to the project.
- Prepare Riprap Layout and Details for the bridge site.

FC 180 – Bid Phase and Construction Phase Services

The Engineer shall provide the following services:

A. Bid Phase Services

1. Provide bidding support services including attending a pre-bid and bid opening meetings, assistance with responding to bidder questions, preparing addenda, tabulating and evaluating bids (including reference checks) and providing recommendation for award.
2. Furnish a set of final conformed construction contract documents including plan sheets, project manual and SWPPP to the awarded contractor including all addenda.

B. Construction Phase Services

1. Review and approval of shop drawings, forming details and equipment submittals.

Shop drawings requiring review may include, but shall not be limited to, the following items:

Description	Comment
Temporary Special Shoring	
Prestressed Concrete Beams	
Railing	Curved rails mostly
Sealed Expansion Joints	
Concrete Box Culverts	Alternate designs only
Reinforced Concrete Pipe	(Jack and Bore only)
Pre-Cast Junction Boxes and Inlets	
Roadway Illumination Support	(Non-std only)
Aluminum Signs	(Non-std only)
Small Roadside Sign Assemblies	(Non-std only)

Traffic Signal Pole Assemblies (Steel)	(Non-std only)

The following procedures shall be used for the shop drawing reviews:

I. Review the drawings for conformity to the plans, specifications, and special provisions, as well as conformity to any subsidiary standards or criteria referred to by the plans, specifications, or special provisions.

II. If the drawing is found to be in conformity, or an alternate design is adequate and acceptable, the drawing shall be marked "No Exceptions Taken" with signature, date and statement that "Review is only for general conformance with the design concept of the contract documents. Markings or comments shall not be construed as relieving the Contractor from compliance with the project plans and specifications, nor departures therefrom. The Contractor remains solely responsible for details and accuracy, for confirming and correlating all quantities and dimensions, for selecting fabrication processes, for techniques of assembly, for safety and for satisfactory performance of his work."

III. If there are only minor corrections, the incorrect information shall be crossed out and the correct information will be written next to the crossed-out information. All the redlines shall be done in indelible red ink. The submittal shall be returned marked "Make Correction as Noted" and no re-submittal shall be required.

IV. If the corrections are more significant and the Engineer does not concur with the information on the drawings, then the submittal shall be returned marked "Revise and Resubmit." The Drawings must then be resubmitted for a second review.

V. If the drawings are found not to be in conformity, the drawings shall be marked "Rejected See Remarks." An explanation of why the submittal was disapproved will be provided in enough detail for the Contractor to be able to make the corrections for re-submittal.

VI. A cover letter will be returned with the reviewed drawings containing:
- A description of the submittal
- If the design reviewed was an alternate design, a notation declaring that an alternate design was presented and what criteria were used to determine if the alternate design is adequate and acceptable.
- If the submittal was not accepted without exception, an explanation of the exceptions will be included.

The process as identified in steps 1-6 may be modified as directed by the City.

Equipment requiring review includes, but shall not be limited to, the following items:

Description	Comment
Roadway Illumination Assemblies	(Non-std only)
Installation of Highway Traffic Signals	Signal Controller

The procedures used for the equipment submittal reviews we be identical to the procedures for shop drawing review, as previously defined.

2. Attend Pre-Con meeting with the City and the awarded contractor. Prepare meeting minutes.
3. Attend monthly status meeting with the City and Contractor. Prepare meeting minutes.
4. Make periodic site visits (up to 15 visits) to the site to observe as an experienced and qualified design professional the progress and quality of work, and to determine in general if the work is proceeding in accordance with the plans and specifications and submit brief, monthly written reports related to such visits.
5. Receive and review certificates of inspections, testing (field laboratory and materials testing) and recommend to the City special inspection or testing when deemed necessary to ensure materials, products, assemblages and equipment conform to the design concept and the specifications.
6. Responding to request for information (RFIs), answering general questions, providing clarification and other project related tasks. The Engineer shall be available to respond to RFIs related to the plans and specification as needed throughout the duration of construction. The Engineer will document each RFI in sufficient detail, formulate a response and submit a written version of the response to the City.
7. Provide minor re-design effort required to address RFI or to facilitate construction activities. The Engineer shall be available to prepare Change Orders, Alternate Designs or Additional Design Details as directed by the City throughout the duration of construction. The Engineer will document each Change Order, Alternate Design or Additional Design Details in sufficient detail to allow the processing of the design refinement. The Engineer shall submit signed and sealed PDF drawing of revised/new plan sheets and include quantity revisions.
8. Review monthly pay estimates and recommend approval or other appropriate action on such estimates.
9. Perform with the City representative(s) a final inspection of the project to observe any apparent defects in the completed construction with regard to conformance with the design concept and intent of the specifications.
10. Request and incorporate “record drawings” from the contractor into As-Built for City’s permanent file.

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 two (2) 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 Report (in accordance with Geotechnical Roadway Report)
6. Preliminary Construction Cost Estimate
7. Preliminary Bridge Condition Survey
8. Preliminary Supporting Documents: Design Summary Form, Design Cross Sections, Existing Utility Layout, Potential Utility Conflicts, Environmental Technical Memorandum, etc.

30% Submittal (Final Geometric Schematic/ROW Limits)

Upon addressing the review comments, the Engineer will provide the City with all required items, included two (2) paper copies and one (1) pdf copy of the items below.

1. Final Geometric Schematic
2. Final Property Schematic/Draft ROW Plan Set with tabulation.
3. Final Sequence of Construction Layouts (preliminary traffic control plans with narrative)
4. Preliminary Bridge Layout
5. Pre-Final Drainage Report
6. Pre-Final Geotech Report (in accordance with Geotechnical Roadway Report)
7. Updated Supporting Documents: Cost Estimate, Design Summary Form, Design Cross Sections, Environmental Technical Memorandum, Existing Utility Layout, Potential Utility Conflicts, Preliminary Design and Construction Timeline, Review Comment Resolution Log, etc.

75% Submittal (PS&E)

The Engineer will provide the City with all required items, included two (2) paper copies and one (1) pdf copy of the items below.

1. Responses to 30% review comments
2. Updated Plans w/ standards
3. Utility tracking report
4. Final ROW Plan Set, Drainage Report and Geotech Report
5. Updated Supporting Documents: Draft Project Manual; Cost Estimate, Design Summary Form, Design Cross Sections, Environmental Technical Memorandum, Existing Utility Layouts, Utility Conflict Summary, Design and Construction Timeline, Review Comment Resolution Log, Draft General Notes, Special Specification/Provisions, etc.
6. Draft SWPPP for construction

Final Submittal (PS&E)

The Engineer will provide the City with all required items, included two (2) paper copies and one (1) pdf copy of the items below.

1. Responses to 75% review comments
2. Final Plans w/ standards
3. Final ROW Plan Set
4. Final Supporting Documents: Project Manual; Cost Estimate, Design Summary Form, Design Cross Sections, Environmental Technical Memorandum, Existing Utility Layouts, Utility Conflict Summary, Construction Timeline, General Notes, Special Specification/Provisions, Bid Forms, etc.
5. SWPPP for construction

Exhibit B
Fee Schedule

RODRIGUEZ TRANSPORTATION GROUP, Inc. | **City of Pflugerville**
Estimate of Engineering Services Budget | **Immanuel Road**

Task	Rodriguez Transportation Group, Inc.	Corsair Consulting LLC	Cox|McLain Environmental Consulting	Inland Geodetics	K Friese & Associates	SE3, LLC	Texas Transportation Solutions, Inc.	T2 Utility Engineers, Inc.	Total Cost
FC 110 Route and Design Studies; Geotechnical Investigation	$ 27,844.00	$ 20,827.42	$ -	$ -	$ 3,000.00	$ 2,440.00	$ 15,272.00	$ -	$ 69,383.42
FC 120 Environmental Documentation	$ 14,686.00	$ -	$ 18,055.00	$ -	$ -	$ -	$ -	$ -	$ 32,741.00
FC 130 Right of Way Data/Utilities	$ 6,558.00	$ -	$ -	$ 50,888.80	$ -	$ -	$ -	$ 16,342.00	$ 73,788.80
FC 140 Project Management and Administration	$ 64,151.00	$ 1,436.65	$ 2,670.00	$ 5,246.23	$ 5,045.00	$ 13,775.00	$ 25,423.00	$ 1,075.00	$ 118,821.88
FC 150 Field Surveying and Photogrammetry	$ 7,164.00	$ -	$ -	$ 65,427.74	$ -	$ -	$ -	$ -	$ 72,591.74
FC 160 Roadway Design	$ 132,874.00	$ -	$ -	$ -	$ -	$ -	$ 12,280.00	$ -	$ 145,154.00
FC 161 Drainage	$ 125,064.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 125,064.00
FC 162 Signing, Pavement Markings, Signals and Illumination	$ 18,360.00	$ -	$ -	$ -	$ -	$ 112,246.00	$ -	$ -	$ 130,606.00
FC 163 Miscellaneous	$ 55,458.00	$ -	$ -	$ -	$ 4,090.00	$ -	$ -	$ -	$ 59,548.00
FC 170 Bridge Design	$ -	$ -	$ -	$ -	$ -	$ -	$ 121,600.00	$ -	$ 121,600.00
FC 180 Bid and Construction Phase Services	$ 40,920.00	$ -	$ -	$ -	$ -	$ -	$ 8,860.00	$ -	$ 49,780.00
Subtotal - Labor	**$ 493,079.00**	**$ 22,264.07**	**$ 20,725.00**	**$ 121,562.77**	**$ 12,135.00**	**$ 128,461.00**	**$ 183,435.00**	**$ 17,417.00**	**$ 999,078.84**
Subtotal - Other Direct Expenses	$ 6,200.00	$ 38,098.00	$ 1,508.50	$ -	$ 168.00	$ 443.52	$ 436.50	$ 50,690.00	$ 97,544.52
GRAND TOTAL	**$ 499,279.00**	**$ 60,362.07**	**$ 22,233.50**	**$ 121,562.77**	**$ 12,303.00**	**$ 128,904.52**	**$ 183,871.50**	**$ 68,107.00**	**$ 1,096,623.36**
Percent of Total Contract	45.5%	5.5%	2.0%	11.1%	1.1%	11.8%	16.8%	6.2%	100.0%

Exhibit B - FEE SCHEDULE
Rodriguez Transportation Group, Inc. (RTG)
Estimate of Engineering Services Budget

City of Pflugerville
Immanuel Road

Rodriguez Transportation Group, Inc.	No. of Sheets	Project Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Engineer Specialist	Senior Engineer Tech	Engineer Tech	Admin /Clerical	Total Hours	Total Labor Cost
		$240.00	$222.00	$159.00	$138.00	$115.00	$165.00	$121.00	$92.00	$69.00		
FC 110 Route and Design Studies; Geotechnical Investigation												
A. Data Collection and Field Reconnaissance												
1. Secure and review available misc. data		4	2	2					2		10	$ 1,906.00
2. Secure and review proposed development site plans		0	4	0		4			4		12	$ 1,716.00
3. Secure and review available flood plain information			4								4	$ 888.00
4. Conduct field reconnaissance and photographic record		4	4	0		0					8	$ 1,848.00
B. Develop design critieria (roadway and drainage)		4	4								8	$ 1,848.00
C. Develop preliminary sequence of construction exhibit		4			40		24	24			92	$ 13,344.00
D. Develop preliminary cost estimate		2	2	2			8				14	$ 2,562.00
E. Prepare for and attend DCC meeting		6	2	0							8	$ 1,884.00
F. Geotech & Pavement Design (Review Only)												
5. Prepare Geotechnical Report		4	4								8	$ 1,848.00
FC - 110 Subtotal - Labor Hrs.	**-**	**28.0**	**26.0**	**4.0**	**40.0**	**4.0**	**32.0**	**24.0**	**6.0**	**-**	**164.0**	**$ 27,844.00**
FC 120 Environmental Documentation												
C. Section 404 Clean Water Act Compliance												
1. Section 404 Clean Water Act Compliance			2								2	$ 444.00
F. Public Engagement												
1. Stakeholder Engagement (up to 4 meetings)		16	8	6				12			42	$ 8,022.00
2. Public Meetings (1 meeting)		8	8	4				8	10		38	$ 6,220.00
FC - 120 Subtotal - Labor Hrs.	**-**	**24.0**	**18.0**	**10.0**	**-**	**-**	**-**	**20.0**	**10.0**	**-**	**82.0**	**$ 14,686.00**
FC 130 ROW Data/Utilities												
A. Right-of-Way Map (Support Only)												
1. Review design data to confirm existing/proposed ROW		4		6							10	$ 1,914.00
B. Utility Locations (Support Only)												
6. Gather QL-A (20 locations) and QL-B Data		4		4							8	$ 1,596.00
C. Boundary Surveying and Parcel Preparation (Support Only)												
1. Locate property corners and confirm existing ROW limits			4	4							8	$ 1,524.00
2. Prepare ROW base map/property schematic of the overall project			4	4							8	$ 1,524.00
3. ROW documents (4 parcels)											-	$ -
4. Establish monuments on the proposed ROW											-	$ -
5. Prepare and submit ROW Plan Set											-	$ -
FC - 130 Subtotal - Labor Hrs.	**-**	**8.0**	**8.0**	**18.0**	**-**	**-**	**-**	**-**	**-**	**-**	**34.0**	**$ 6,558.00**
FC 140 Project Management and Administration												
A. Prepare Invoices and Monthly Progress Reports (15 Mo.)		15								15	30	$ 4,635.00
B. Develop and maintain project schedule		6		12							18	$ 3,348.00
C. Prepare for and attend Project Kick-Off meetings		8	4	4				8			24	$ 4,412.00
D. Prepare for and attend City meetings (up to 6)		18	10	8							36	$ 7,812.00
E. Project file maintenance (15 Mo.)		15		15						15	45	$ 7,020.00
F. Implement & execute QAQC plan (Schematic (30%), 75% and Final)		30	60				60				150	$ 30,420.00
G. Attend Comments Resolution Mtngs (Schematic (30%), 75%)		16	12								28	$ 6,504.00
FC - 140 Subtotal - Labor Hrs.	**-**	**108.0**	**86.0**	**39.0**	**-**	**-**	**60.0**	**8.0**	**-**	**30.0**	**331.0**	**$ 64,151.00**
FC 150 Field Surveying and Photogrammetry												
A. Field Surveying (Support Only)												
6. Secure right of entry		4	4							12	20	$ 2,676.00
B. Digital Planimetric Mapping (DGN) and DTM (Review Only)												
1. Planimetric (DGN) file		2	2				8				12	$ 2,244.00
2. DTM File		2	2				8				12	$ 2,244.00
FC - 150 Subtotal - Labor Hrs.	**-**	**8.0**	**8.0**	**-**	**-**	**-**	**16.0**	**-**	**-**	**12.0**	**44.0**	**$ 7,164.00**

Rodriguez Transportation Group, Inc.	No. of Sheets	Project Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Engineer Specialist	Senior Engineer Tech	Engineer Tech	Admin /Clerical	Total Hours	Total Labor Cost
		$240.00	$222.00	$159.00	$138.00	$115.00	$165.00	$121.00	$92.00	$69.00		
FC 160 Roadway Design												
A. Geometric Design (Geometric Schematic Layout)												
1. Develop conceptual horizontal alignments		4		8							12	$ 2,232.00
2. Develop and refine vertical profiles		4	8		12						24	$ 4,392.00
3. Develop (2) conceptual typical sections		2		4	12	18					36	$ 4,842.00
4. Develop (2) conceptual design cross sections		4	18				120				142	$ 24,756.00
5. Establish proposed ROW limits		4	4								8	$ 1,848.00
6. Prepare and refine Geometric Layout		4	12			24	40				80	$ 12,984.00
B. Roadway Plans												
1. Title-Index Sheets/Project Layouts	5	2			2	2			24		30	$ 3,194.00
2. Typical Sections (plus Utility)	5	2		24	24				24		74	$ 9,816.00
3. Plan & Profile	18	8	40	60	60	0			80		248	$ 35,980.00
4. Intersection/Driveway Details	10	8	20	0	40	40			40		148	$ 20,160.00
5. Others (HAL Data, Removal Layouts, Misc Rdwy Details)	8	2	4	8	32	0			32		78	$ 10,000.00
7. Calculate quantities and prepare roadway summary sheets	2		4	6	6				0		16	$ 2,670.00
FC - 160 Subtotal - Labor Hrs.	**48**	**44.0**	**110.0**	**110.0**	**188.0**	**84.0**	**160.0**	**-**	**200.0**	**-**	**896.0**	**$ 132,874.00**
FC 161 Drainage												
A. Drainage Report												
1. Drainage Report		4	6	16	40						66	$ 10,356.00
B. Culvert and Storm Drain Design												
1a. On-site Drainage Area Maps	10	2	10	16	20	32					80	$ 11,684.00
1b. Off-site Drainage Area Maps	2	1	8	16		32					57	$ 8,240.00
2a. Hydraulic Computations (Runoff, Inlet & Storm Sewer)		1	6	8	16	24					55	$ 7,812.00
2c. Hydraulic Computations (Channels)		1	2	6	8	12					29	$ 4,122.00
3. Storm Drain Plan/Profile	18	2	8	12	24	50					96	$ 13,226.00
4. Storm Drain Profiles	4	1	4	8	12	16					41	$ 5,896.00
5. Runoff and Inlet Computation Sheets	8	2	4	8	16	24					54	$ 7,608.00
6. Others (Misc. Drainage Details)	6	0.5	2	4	8	12					27	$ 3,684.00
7. SW3P/Temp. Erosion Sediment Control Plan	10	1	2	6	12	32					53	$ 6,974.00
8. Permanent Erosion Sediment Control Plan	10	1	2	4	8	20					35	$ 4,724.00
9. Calculate quantites and prepare storm drain summary sheets	2	1	2	4		8					15	$ 2,240.00
C. Culvert Layouts and Detailing of Drainage Features												
1. Cross Culvert Layouts (4 Culverts)	4	2	8	10	16	40					76	$ 10,654.00
2. Hydraulic Computations (Culverts)	4	1	6	8	12	24					51	$ 7,260.00
3. Preliminary outfall channel layouts	2	1	2	6	8	16					33	$ 4,582.00
4. Calculate quantities and prepare culvert summary sheets	1	1	2	4		8					15	$ 2,240.00
D. Bridge Hydrologic and Hydraulic Analysis												
1. Bridge Hydraulic Data Sheet	1	1	4	8	12	20					45	$ 6,356.00
2. Scour Analysis		2	4	8	16						30	$ 4,848.00
3. Bridge Scour Data Sheet	1	1	2	6		8					17	$ 2,558.00
FC - 161 Subtotal - Labor Hrs.	**83**	**26.5**	**84.0**	**158.0**	**228.0**	**378.0**	**-**	**-**	**-**	**-**	**874.5**	**$ 125,064.00**
FC 162 Signing, Pavement Markings, Signals and Illumination												
A. Signing and Pavement Markings	10	4	0	40	40				60		144	$ 18,360.00
											-	
FC - 162 Subtotal - Labor Hrs.	**10**	**4.0**	**-**	**40.0**	**40.0**	**-**	**-**	**-**	**60.0**	**-**	**144.0**	**$ 18,360.00**
FC 163 Miscellaneous												
A. Traffic Control Plan												
1. Narrative Sequence of Construction	2		4	4		6					14	$ 2,214.00
2. Typical Sections	2			4		8			4		16	$ 1,924.00
3. Traffic Control Plan (2 phases + advance warning signs)	18		24	0		80	40		80		224	$ 28,488.00
4. Detour Layouts	2		4	0		8			12		24	$ 2,912.00
5. Safety Review Meeting		4	4								8	$ 1,848.00
6. Construction Schedule			4	16							20	$ 3,432.00
B. Utility Conflict Identification			4	12							16	$ 2,796.00
C. Lead Base Paint and Asbestos Containing Material Survey (Review Only)		2									2	$ 480.00

Rodriguez Transportation Group, Inc.	No. of Sheets	Project Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Engineer Specialist	Senior Engineer Tech	Engineer Tech	Admin /Clerical	Total Hours	Total Labor Cost
		$240.00	$222.00	$159.00	$138.00	$115.00	$165.00	$121.00	$92.00	$69.00		
D. Quantities/Summary Sheets				16	40						56	$ 8,064.00
E. Standards, Specifications and Estimate (75% and Final)							20				20	$ 3,300.00
F. Water/Wastewater												
1. Identify existing service connections											-	$ -
2. Route/Size Coordination											-	$ -
											-	
FC - 163 Subtotal - Labor Hrs.	**24**	**6.0**	**44.0**	**52.0**	**40.0**	**102.0**	**60.0**	**-**	**96.0**	**-**	**400.0**	**$ 55,458.00**
FC 180 Bid Phase and Construction Phase Services												
A. Bid Phase Services												
1. Bid Support Services		4	4								8	$ 1,848.00
2. Provide Final Construction Contract Documents			4								4	$ 888.00
B. Construction Phase Services												
2. Attend Pre-Con meeting and prepare meeting minutes		4									4	$ 960.00
3. Attend monthly status meetings and prepare meeting minutes (up to 15)		15									15	$ 3,600.00
4. Attend site visits (up to 15)		15	8								23	$ 5,376.00
5. Review certificates of inspections, testing			4								4	$ 888.00
6. Respond to RFIs		24									24	$ 5,760.00
7. Provide minor re-design effort				24							24	$ 3,816.00
8. Review monthly pay estimates		18									18	$ 4,320.00
9. Perform final inspection with City staff		8									8	$ 1,920.00
10. Develop "As-Built" plans			24		24			24			72	$ 11,544.00
FC - 180 Subtotal - Labor Hrs.	**-**	**88.0**	**44.0**	**24.0**	**24.0**	**-**	**-**	**24.0**	**-**	**-**	**204.0**	**$ 40,920.00**
TOTAL SHEETS	**165**											
Total - Labor Hours		**344.5**	**428.0**	**455.0**	**560.0**	**568.0**	**328.0**	**76.0**	**372.0**	**42.0**	**3,173.5**	
Total - Labor Cost		**$ 82,680.00**	**$ 95,016.00**	**$ 72,345.00**	**$ 77,280.00**	**$ 65,320.00**	**$ 54,120.00**	**$ 9,196.00**	**$ 34,224.00**	**$ 2,898.00**		**$ 493,079.00**
DIRECT EXPENSES				**QUANTITY**	**UNIT**	**UNIT COST**						
13-hour Turning Movement Count Major Intersection				2.00	per intersection	$1,200.00						$ 2,400.00
13-hour Turning Movement Count Major Intersection				1.00	per intersection	$800.00						$ 800.00
Lead Base Paint and Asbestos Containing Material Survey				1.00	each	$3,000.00						$ 3,000.00
Subtotal - Other Direct Expenses												**$ 6,200.00**
GRAND TOTAL												**$ 499,279.00**

Exhibit B - FEE SCHEDULE
Corsair Consulting (CC)
Estimate of Engineering Services Budget

City of Pflugerville
Immanuel Road

Corsair Consulting	No. of Sheets	Senior Project Manager	Project Engineer	EIT	Admin /Clerical	Total Hours	Total Labor Cost
		$229.09	$146.36	$95.45	$58.24		
FC 110 Route and Design Studies; Geotechnical Investigation							
A. Data Collection and Field Reconnaissance							
4. Conduct field reconnaissance and photographic record			5			5	$ 731.80
F. Geotech & Pavement Design							
1. Identify existing pavement structure (5 borings)				10		10	$ 954.50
2. Review available data; conduct field visit and attend (1) meeting						-	$ -
3. Secure pavement design borings and laboratory testing (10 borings)				10		10	$ 954.50
4. Secure bridge borings and develop foundation recommendations (2 borings)				30		30	$ 2,863.50
5. Prepare Geotechnical Report		8	40	80		128	$ 15,323.12
FC - 110 Subtotal - Labor Hrs.	**-**	**8.0**	**45.0**	**130.0**	**-**	**183.0**	**$ 20,827.42**
FC 140 Project Management and Administration							
A. Prepare Invoices and Monthly Progress Reports (5 Mo.)		5			5	10	$ 1,436.65
FC - 140 Subtotal - Labor Hrs.	**-**	**5.0**	**-**	**-**	**5.0**	**10.0**	**$ 1,436.65**
Total - Labor Hours		**13.0**	**45.0**	**130.0**	**5.0**	**193.0**	
Total - Labor Cost		**$ 2,978.17**	**$ 6,586.20**	**$ 12,408.50**	**$ 291.20**		**$ 22,264.07**
1.0 FIELD SERVICES			**QUANTITY**	**UNIT**	**UNIT COST**		
1.1 Geotechnical Services							
1.1.1 Mobilization and demobilization, per mobilization			2.00	each	$ 450.00		$ 900.00
1.1.1.1 Drill truck, water truck and crew			150.00	mile	$ 8.00		$ 1,200.00
1.1.3.1 Drilling and sampling with 3-inch, thin-walled tube sampler, continous to 10.0 ft, 5.0 ft intervals thereafter			100.00	foot	$ 25.00		$ 2,500.00
1.1.3.2 Continuous drilling and sampling with 3-inch, thin-walled tube sampler or split-spoon sampler			100.00	foot	$ 39.00		$ 3,900.00
1.1.5 TxDOT cone penetration tests			20.00	each	$ 34.00		$ 680.00
1.1.9 Houly charges for boring layout, excessive time spent gaining access to boring locations, backfilling boreholes, cleaning up site, installing piezometers, and for other reasons beyond our control			4.00	hour	$ 245.00		$ 980.00
1.1.13 Traffic control			4.00	day	$ 2,800.00		$ 11,200.00
1.1.20 Mileage			250.00	mile	$ 0.60		$ 150.00
2.0 LABORATORY TESTING							
2.1 Soil							
2.1.3 Natural Moisture Content			70.00	each	$ 19.00		$ 1,330.00
2.1.5 Atterberg Limits (Liquid and Plastic Limits) (TEX-104-E, TEX-105-E, TEX-106-E)			80.00	each	$ 75.00		$ 6,000.00
2.1.6 Percent Passing No. 200 Sieve (TEX-111-E)			80.00	each	$ 50.00		$ 4,000.00
2.1.8 Moisture Density Relationship (ASTM D 698), (ASTM D 1557), (TEX-113-E), (TEX-114-E)			2.00	each	$ 275.00		$ 550.00
2.1.12 Soluble Sulfates (TEX-145-E)			10.00	each	$ 90.00		$ 900.00
2.1.13 Soil pH (TEX-128-E)			10.00	each	$ 70.00		$ 700.00
2.1.14 Soil-Lime pH Series (6 points, TEX-121-E, Part III)			2.00	set	$ 750.00		$ 1,500.00
2.1.16 Pressure Swell Test			4.00	each	$ 175.00		$ 700.00
2.1.20 Unconfined Compression Test, Soil			6.00	each	$ 65.00		$ 390.00
2.1.23 Consolidation Test, 7-load Increments				each	$ 850.00		$ -
2.1.28 Box Resistivity of Soils (TEX-129-E)			2.00	each	$ 115.00		$ 230.00
2.1.29 Swell or Settlement Potential-Cohesive Soil (ASTM D 4546)				each	$ 275.00		$ -
2.1.31 Organic Content (ASTM D 2974)			4.00	each	$ 72.00		$ 288.00
Subtotal - Other Direct Expenses							**$ 38,098.00**
GRAND TOTAL							**$ 60,362.07**

Exhibit B - FEE SCHEDULE
Cox|McLain Environmental Consulting Inc. (CMEC)
Estimate of Engineering Services Budget

City of Pflugerville
Immanuel Road

Cox|McLain Environmental Consulting	No. of Sheets	Envir Project Manager	Envir Planner IV	Envir Planner I/II	Envir Scientist IV	Envir Scientist III	Envir Scientist I/II / Field Technician	Senior Arch. Historian / Arch. Principal	Admin /Clerical	Senior GIS Operator	GIS Operator	Total Hours	Total Labor Cost
		$170.00	$100.00	$70.00	$120.00	$85.00	$70.00	$115.00	$65.00	$105.00	$80.00		
FC 120 Environmental Documentation													
A. Data Collection Process		2		4		8	8			1	4	27	$ 2,285.00
B. Hazardous Materials Initial Site Assessmen													
1. Perform regulatory records review						4						4	$ 340.00
2. Complete Hazardous Materials Risk Assessmen					1	8	8			1	2	20	$ 1,625.00
C. Section 404 Clean Water Act Compliance		1			3	12	8			1	4	29	$ 2,535.00
D. Endangered Species Act Compliance		1			4	6	4			1	2	18	$ 1,705.00
E. Texas Antiquities Code Compliance													
1. Background database search for known archeological site						1	4	1			2	8	$ 640.00
2. Prepare project initiation letter and Texas Antiquities Permint applicatio		1				4	12	4		1	2	24	$ 2,075.00
3. Conduct cultural resource pedestrian survey						2	8	8			2	20	$ 1,810.00
4. Prepare intensive survey repor		1				6	8	4		1	2	22	$ 1,965.00
5. Submit data to Texas Historical Commissior								1				1	$ 115.00
F. Public Engagemen													
1. Stakeholder Engagement (up to 4 meetings			4	8							4	16	$ 1,280.00
2. Public Meetings (1 meeting		1	2	8	1	2	2				4		$ 1,680.00
FC - 120 Subtotal - Labor Hrs.	**-**	**7**	**6**	**20**	**9**	**53**	**62**	**18**	**-**	**6**	**28**	**189**	**$ 18,055.00**
FC 140 Project Management and Administration													
A. Prepare Invoices and Monthly Progress Reports (5 Mo.)									12			12	$ 780.00
C. Prepare for and attend Project Kick-Off meetings					4		2					6	$ 620.00
D. Prepare for and attend City meetings (up to 5)						10	6					16	$ 1,270.00
FC - 140 Subtotal - Labor Hrs.	**-**	**-**	**-**	**-**	**4**	**10**	**8**	**-**	**12**	**-**	**-**	**34**	**$ 2,670.00**
TOTAL SHEETS	**-**												
Total - Labor Hours		**7**	**6**	**20**	**13**	**63**	**70**	**18**	**12**	**6**	**28**	**223**	
Total - Labor Cost		**$ 1,190.00**	**$ 600.00**	**$ 1,400.00**	**$ 1,560.00**	**$ 5,355.00**	**$ 4,900.00**	**$ 2,070.00**	**$ 780.00**	**$ 630.00**	**$ 2,240.00**		**$ 20,725.00**
DIRECT EXPENSES			**QUANTITY**	**UNIT**	**UNIT COST**								
Photocopies BW (11"x17")			50	sheet	$0.20								$ 10.00
Photocopies BW (8.5"x11")			50	sheet	$0.15								$ 7.50
Photocopies Color (11"x17")			100	sheet	$1.50								$ 150.00
Photocopies Color (8.5"x11")			100	sheet	$0.75								$ 75.00
Hazardous Materials Database Search			1	each	$650.00								$ 650.00
CAS Curation Drawer (records only)			2	inch	$260.00								$ 520.00
TARL Archeological Site Form			1	each	$96.00								$ 96.00
Subtotal - Other Direct Expenses													**$ 1,508.50**
GRAND TOTAL													**$ 22,233.50**

Exhibit B - FEE SCHEDULE
Inland Geodetics (IG)
Estimate of Engineering Services Budget

City of Pflugerville
Immanuel Road

Inland Geodetics	No. of Sheets	Registered Professional Land Surveyor	Clerical Support	Senior Project Manager - Survey	Surveyor-In-Training (SIT)	Senior Survey Technician	2 - Person Survey Crew	3 - Person Survey Crew	1 - Person Survey Crew	Total Hours	Total Labor Cost
		$180.66	$76.53	$162.62	$131.19	$131.19	$174.00	$207.00	$122.00		
FC 130 ROW Data/Utilities											
C. Boundary Surveying and Parcel Preparatior											
1. Locate property corners and confirm existing ROW limits		8				32	48	16	32	136	$ 21,211.36
2. Prepare ROW base map/property schematic of the overall projec		16				32				48	$ 7,088.64
3. ROW documents (8 parcels)		10	4		80					94	$ 12,607.92
4. Establish monuments on the proposed ROW		4			4		16			24	$ 4,031.40
5. Prepare and submit ROW Plan Set		8	4		32					44	$ 5,949.48
FC - 130 Subtotal - Labor Hrs.	**-**	**46**	**8**	**-**	**116**	**64**	**64**	**16**	**32**	**346**	**$ 50,888.80**
FC 140 Project Management and Administration											
A. Prepare Invoices and Monthly Progress Reports (5 Mo.)			5	5						10	$ 1,195.75
B. Develop and maintain project schedule				2						2	$ 325.24
C. Prepare for and attend Project Kick-Off meetings				4						4	$ 650.48
D. Prepare for and attend City meetings (up to 6)											$ -
E. Project file maintenance (15 Mo.)											$ -
F. Implement & execute QAQC plan (Schematic (30%), 75% and Final)				6		16				22	$ 3,074.76
FC - 140 Subtotal - Labor Hrs.	**-**	**-**	**5**	**17**	**-**	**16**	**-**	**-**	**-**	**38**	**$ 5,246.23**
FC 150 Field Surveying and Photogrammetry											
A. Field Surveying											
1. Project Control		0	6	6		4	8	16	8	48	$ 7,639.66
2. Project Control Sheets		2				6				8	$ 1,148.46
3. Datum Ties		2		0		2			8	12	$ 1,599.70
4. Field Surveys (topographic		16		0		16	24		64	120	$ 16,973.60
5. Field survey (drainages channels		4					24	8	8	44	$ 7,530.64
6. Secure right of entry			16	8		24				48	$ 5,674.00
7. Tie visible utilities and develop DGN file				2		8			32	42	$ 5,278.76
8. Profile existing drainage facilities		4				8	16			28	$ 4,556.16
9. Provide traffic control for survey activities				2			8			10	$ 1,717.24
10. Tie soil boring locations				2		2			8	12	$ 1,563.62
B. Digital Planimetric Mapping (DGN) and DTM											
1. Planimetric (DGN) file		12	2			24				38	$ 5,469.54
2. DTM File		4	4			40				48	$ 6,276.36
FC - 150 Subtotal - Labor Hrs.	**-**	**44**	**28**	**20**	**-**	**134**	**80**	**24**	**128**	**458**	**$ 65,427.74**
TOTAL SHEETS	**-**										
Total - Labor Hours		**90**	**41**	**37**	**116**	**214**	**144**	**40**	**160**	**842**	
Total - Labor Cost		**$ 16,259.40**	**$ 3,137.73**	**$ 6,016.94**	**$ 15,218.04**	**$ 28,074.66**	**$ 25,056.00**	**$ 8,280.00**	**$ 19,520.00**		**$ 121,562.77**
GRAND TOTAL											**$ 121,562.77**

Exhibit B - FEE SCHEDULE
K Friese and Associates (KFA)
Estimate of Engineering Services Budget

City of Pflugerville
Immanuel Road

K Friese and Associates	No. of Sheets	Senior Project Manager	Quality Manager	Project Engineer	Engineer-In-Training	Senior Engineer Tech	Admin/Clerical	Total Hours	Total Labor Cost
		$250.00	$240.00	$185.00	$125.00	$130.00	$90.00		
FC 110 Route and Design Studies; Geotechnical Investigation									
A. Data Collection and Field Reconnaissance									
1. Secure and review available misc. data		1			4			5	$ 750.00
2. Secure and review proposed development site plans		1			2			3	$ 500.00
4. Conduct field reconnaissance and photographic record		4			6			10	$ 1,750.00
FC - 110 Subtotal - Labor Hrs.	**-**	**6**	**-**	**-**	**12**	**-**	**-**	**18**	**$ 3,000.00**
FC 140 Project Management and Administration									
A. Prepare Invoices and Monthly Progress Reports (3 Mo.)		4					3	7	$ 1,270.00
D. Prepare for and attend City meetings (up to 5)		10			5	5		20	$ 3,775.00
FC - 140 Subtotal - Labor Hrs.	**-**	**14**	**-**	**-**	**5**	**5**	**3**	**27**	**$ 5,045.00**
FC 163 Miscellaneous									
G. Water/Wastewater									
1. Identify existing service connections		2		2	4			8	$ 1,370.00
2. Route/Size Coordination		2	2	4	8			16	$ 2,720.00
FC - 163 Subtotal - Labor Hrs.	**-**	**4**	**2**	**6**	**12**	**-**	**-**	**24**	**$ 4,090.00**
TOTAL SHEETS	**-**								
Total - Labor Hours		**24**	**2**	**6**	**29**	**5**	**3**	**69**	
Total - Labor Cost		**$ 6,000.00**	**$ 480.00**	**$ 1,110.00**	**$ 3,625.00**	**$ 650.00**	**$ 270.00**		**$ 12,135.00**
DIRECT EXPENSES				**QUANTITY**	**UNIT**	**UNIT COST**			
Mileage				300.00	mile	$0.56			$ 168.00
Subtotal - Other Direct Expenses									**$ 168.00**
GRAND TOTAL									**$ 12,303.00**

Exhibit B - FEE SCHEDULE
SE3, LLC (SE3)
Estimate of Engineering Services Budget

City of Pflugerville
Immanuel Road

SE3, LLC	No. of Sheets	Senior Project Manager	Quality Manager	Senior Engineer	Project Engineer	Engineer-In-Training	Senior CAD Operator	Admin /Clerical	Total Hours	Total Labor Cost
		$190.00	$180.00	$140.00	$130.00	$98.00	$95.00	$65.00		
FC 110 Route and Design Studies; Geotechnical Investigation										
A. Data Collection and Field Reconnaissance										
1. Secure and review available misc. data		2		4					6	$ 940.00
4. Conduct field reconnaissance and photographic record		2		8					10	$ 1,500.00
FC - 110 Subtotal - Labor Hrs.	**-**	**4**	**-**	**12**	**-**	**-**	**-**	**-**	**16**	**$ 2,440.00**
FC 140 Project Management and Administration										
A. Prepare Invoices and Monthly Progress Reports (10 Mo.)		5						5	10	$ 1,275.00
D. Prepare for and attend City meetings (up to 5)		10							10	$ 1,900.00
F. Implement & execute QAQC plan (75% and Final)		18	36					2	56	$ 10,030.00
G. Attend Comments Resolution Mtngs (75%)		3							3	$ 570.00
FC - 140 Subtotal - Labor Hrs.	**-**	**36**	**36**	**-**	**-**	**-**	**-**	**7**	**79**	**$ 13,775.00**
FC 162 Signing, Pavement Markings, Signals and Illumination										
A. Signing and Pavement Markings										$ -
B. Signals (Temporary and Permanent)										$ -
1. Collect turning movement counts										$ -
2. Existing Conditions Layout	3	6	0		72	24	60		162	$ 18,552.00
3. Proposed Traffic Signal Layout	6	10	0		92	40	80		222	$ 25,380.00
4. Signal Phasing and Wiring Charts	6	2	0		20	24	20		66	$ 7,232.00
5. Proposed Traffic Signal Elevations	3	6	0		84	24	60		174	$ 20,112.00
6. Calculate quantities and prepare traffic signal summary sheets	1	1	0		2	8	4		15	$ 1,614.00
C. Illumination										
1. Illumination Layouts	6	6	0	24	80	96	40		246	$ 28,108.00
2. Electrical Circuit Plan	2	2	0	4	0	16	20		42	$ 4,408.00
3. Power Source Identification				4	8				12	$ 1,600.00
4. Calculate quantities and prepare illumination summary sheets		2	0	4	0	40	4		50	$ 5,240.00
FC - 162 Subtotal - Labor Hrs.	**27**	**35**	**-**	**36**	**358**	**272**	**288**	**-**	**989**	**$ 112,246.00**
TOTAL SHEETS	**27**									
Total - Labor Hours		**75.0**	**36.0**	**48.0**	**358.0**	**272.0**	**288.0**	**7.0**	**1,084.0**	
Total - Labor Cost		**$ 14,250.00**	**$ 6,480.00**	**$ 6,720.00**	**$ 46,540.00**	**$ 26,656.00**	**$ 27,360.00**	**$ 455.00**		**$ 128,461.00**
DIRECT EXPENSES					**QUANTITY**	**UNIT**	**UNIT COST**			
Mileage					792.00	mile	$0.56			$ 443.52
Subtotal - Other Direct Expenses										**$ 443.52**
GRAND TOTAL										**$ 128,904.52**

Exhibit B - FEE SCHEDULE
Texas Transportation Solutions (TTS)
Estimate of Engineering Services Budget

City of Pflugerville
Immanuel Road

Texas Transportation Solutions	No. of Sheets	Senior Project Manager	Senior Structural Engineer	Structural Engineer	Structural Engineer-In-Training	Sr Structural Engineering Specialist	Engineer Tech	Admin /Clerical	Total Hours	Total Labor Cost
		$240.00	$198.00	$175.00	$115.00	$165.00	$126.00	$90.00		
FC 110 Route and Design Studies; Geotechnical Investigation										
A. Data Collection and Field Reconnaissance										
1. Secure and review available misc. data		4	16						20	$ 4,128.00
4. Conduct field reconnaissance and photographic recor		0	16		16			0	32	$ 5,008.00
D. Develop preliminary cost estimate	2	4	8	16					28	$ 5,344.00
E. Prepare for and attend DCC meeting			4						4	$ 792.00
FC - 110 Subtotal - Labor Hrs.	**2**	**8**	**44**	**16**	**16**	**-**	**-**	**-**	**84**	**$ 15,272.00**
FC 140 Project Management and Administration										
A. Prepare Invoices and Monthly Progress Reports (15 Mo.)		15						15	30	$ 4,950.00
C. Prepare for and attend Project Kick-Off meetings		2	1		1				4	$ 793.00
D. Prepare for and attend City meetings (up to 5)		8							8	$ 1,920.00
F. Implement & execute QAQC plan (Schematic (30%), 75% and Final)		0	80	0		0			80	$ 15,840.00
G. Attend Comments Resolution Mtngs (Schematic (30%), 75%)		8							8	$ 1,920.00
FC - 140 Subtotal - Labor Hrs.	**-**	**33**	**81**	**-**	**1**	**-**	**-**	**15**	**130**	**$ 25,423.00**
FC 160 Roadway Design										
A. Geometric Design (Geometric Schematic Layout)										
3. Develop (2) conceptual typical sections (Bridge Only)	2	4	12		8	8	12		44	$ 7,088.00
6. Prepare and refine Geometric Layout (Bridge Only)	1		4	12	20				36	$ 5,192.00
FC - 160 Subtotal - Labor Hrs.	**3**	**4**	**16**	**12**	**28**	**8**	**12**	**-**	**80**	**$ 12,280.00**
FC 170 Bridge Design										
A. Bridge Condition Surveys										
1. Bridge Condition Survey (roadway bridge		6	16		8			4	34	$ 5,888.00
2. Bridge Condition Survey (truss bridge)/Construction Sequencing Pla		8	24	24	16			8	80	$ 13,432.00
B. Bridge Type and Cost Report (roadway bridge		2	6		12			4	24	$ 3,408.00
C. Bridge Design (roadway bridge)										
1. Bridge Layout	3	6	24	36	20	64	40		190	$ 30,392.00
2. Bridge Details Summary	1	2	6	8	12		4		32	$ 4,952.00
3. Bridge Details (Replacement or Widening	10	24	44	56	64	120	96		404	$ 63,528.00
FC - 170 Subtotal - Labor Hrs.	**14**	**48**	**120**	**124**	**132**	**184**	**140**	**16**	**764**	**$ 121,600.00**
FC 180 Bid Phase and Construction Phase Services										
B. Construction Phase Services										
1. Review shop drawings, forming details and equipment submittal				16					16	$ 2,800.00
2. Attend Pre-Con meeting and prepare meeting minute			4						4	$ 792.00
3. Attend monthly status meetings and prepare meeting minutes (up to 2			4						4	$ 792.00
4. Attend site visits (up to 4)			12						12	$ 2,376.00
6. Respond to RFIs				12					12	$ 2,100.00
FC - 180 Subtotal - Labor Hrs.	**-**	**-**	**20**	**28**	**-**	**-**	**-**	**-**	**48**	**$ 8,860.00**
TOTAL SHEETS	**17**									
Total - Labor Hours		**93**	**281**	**180**	**177**	**192**	**152**	**31**	**1,106**	
Total - Labor Cost		**$ 22,320.00**	**$ 55,638.00**	**$ 31,500.00**	**$ 20,355.00**	**$ 31,680.00**	**$ 19,152.00**	**$ 2,790.00**		**$ 183,435.00**

DIRECT EXPENSES		**QUANTITY**	**UNIT**	**UNIT COST**		
Photocopies BW (11"x17")		200.00	sheet	$0.20		$ 40.00
Photocopies BW (8.5"x11")		400.00	sheet	$0.15		$ 60.00
Photocopies Color (11"x17")		50.00	sheet	$1.50		$ 75.00
Photocopies Color (8.5"x11")		50.00	sheet	$0.75		$ 37.50
Mileage		400.00	mile	$0.56		$ 224.00
Overnight Mail - Letter Size		-	each delivery	$14.00		$ -
Overnight Mail - Oversize Box		-	each delivery	$50.00		$ -
Subtotal - Other Direct Expenses						**$ 436.50**
GRAND TOTAL						**$ 183,871.50**

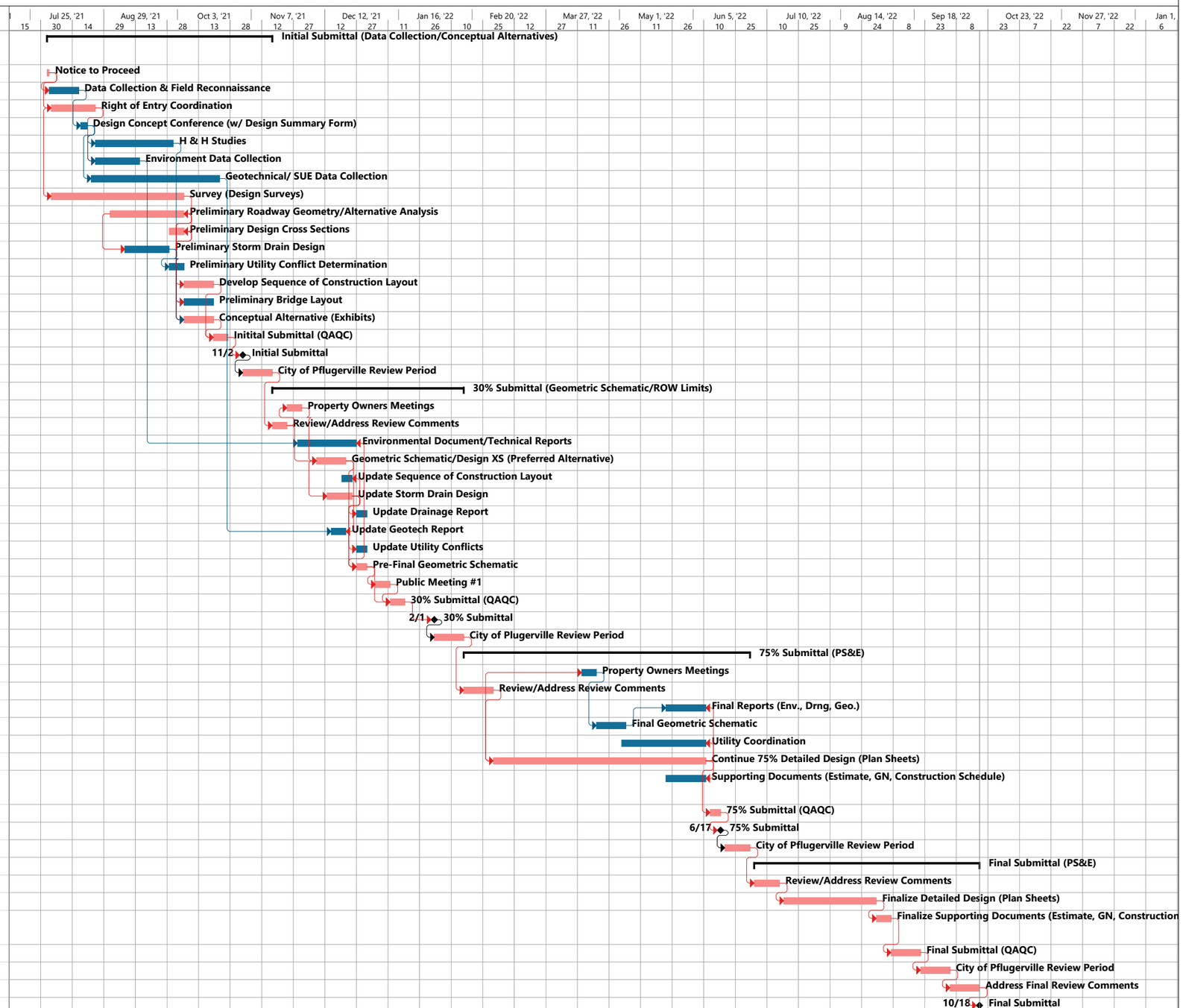
Exhibit B - FEE SCHEDULE
T2 Utility Engineers, Inc. (T2E)
Estimate of Engineering Services Budget

City of Pflugerville
Immanuel Road

T2 Utility Engineers, Inc.	No. of Sheets	Senior Project Manager (T2 Project Manager)	Quality Manager (T2 Survey Manager)	Senior Engineer	Project Engineer	Senior CAD Operator	CADD Operator	Senior Engineer Tech (T2 SUE Supervisor)	Engineer Tech (T2 SUE Field Tech)	Admin /Clerical	Total Hours	Total Labor Cost
		$130.00	$150.00	$275.00	$227.00	$130.00	$100.00	$128.00	$85.00	$85.00		
FC 130 ROW Data/Utilities												
B. Utility Locations												
1. Secure record drawings of all utilities along the corridor		2				2	4				8	$ 920.00
2. Perform in-field visual inspection; record discrepancies w/ record		4			4			16			24	$ 3,476.00
3. Interview utility owners to address discrepancies			4				4	4			12	$ 1,512.00
4. Map utilities			8								8	$ 1,200.00
5. Record all marks on electronic field sketches						4			8		12	$ 1,200.00
6. Gather QL-A (10 locations) and QL-B Data		6		2	12	6	32				58	$ 8,034.00
FC - 130 Subtotal - Labor Hrs.	**-**	**12**	**12**	**2**	**16**	**12**	**40**	**20**	**8**	**-**	**122**	**$ 16,342.00**
FC 140 Project Management and Administration												
A. Prepare Invoices and Monthly Progress Reports (5 Mo.)		5								5	10	$ 1,075.00
FC - 140 Subtotal - Labor Hrs.	**-**	**5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**5**	**10**	**$ 1,075.00**
TOTAL SHEETS	**-**											
Total - Labor Hours		**17**	**12**	**2**	**16**	**12**	**40**	**20**	**8**	**5**	**132**	
Total - Labor Cost		**$ 2,210.00**	**$ 1,800.00**	**$ 550.00**	**$ 3,632.00**	**$ 1,560.00**	**$ 4,000.00**	**$ 2,560.00**	**$ 680.00**	**$ 425.00**		**$ 17,417.00**
EQUIPMENT/OTHER DIRECT RATES												
Utility Designating					164.00	hour	$235.00					$ 38,540.00
QL C and QL D Depicted					-	LF	$0.80					$ -
QL B Achieved and Depicted					-	LF	$1.53					$ -
Utility Locating (QL A Test Hole Excavation)					-	hour	$350.00					$ -
0 to 5 ft. depth					4.00	each	$950.00					$ 3,800.00
5 to 8 ft. depth					4.00	each	$1,250.00					$ 5,000.00
8 to 13 ft. depth					2.00	each	$1,675.00					$ 3,350.00
Subtotal - Other Direct Expenses												**$ 50,690.00**
GRAND TOTAL												**$ 68,107.00**

Exhibit C - Work Schedule

ID	Task Mode	Task Name	Duration	Start	Finish
1		**Initial Submittal (Data Collection/Conceptual Alternatives)**	**77 days**	**Mon 8/2/21**	**Tue 11/16/21**
2		Notice to Proceed	1 day	Mon 8/2/21	Mon 8/2/21
3		Data Collection & Field Reconnaissance	10 days	Tue 8/3/21	Mon 8/16/21
4		Right of Entry Coordination	15 days	Wed 8/4/21	Tue 8/24/21
5		Design Concept Conference (w/ Design Summary Form)	3 days	Wed 8/18/21	Fri 8/20/21
6		H & H Studies	27 days	Wed 8/25/21	Thu 9/30/21
7		Environment Data Collection	15 days	Wed 8/25/21	Tue 9/14/21
8		Geotechnical/ SUE Data Collection	45 days	Mon 8/23/21	Fri 10/22/21
9		Survey (Design Surveys)	45 days	Wed 8/4/21	Tue 10/5/21
10		Preliminary Roadway Geometry/Alternative Analysis	25 days	Wed 9/1/21	Tue 10/5/21
11		Preliminary Design Cross Sections	5 days	Wed 9/29/21	Tue 10/5/21
12		Preliminary Storm Drain Design	15 days	Wed 9/8/21	Tue 9/28/21
13		Preliminary Utility Conflict Determination	5 days	Wed 9/29/21	Tue 10/5/21
14		Develop Sequence of Construction Layout	10 days	Wed 10/6/21	Tue 10/19/21
15		Preliminary Bridge Layout	10 days	Wed 10/6/21	Tue 10/19/21
16		Conceptual Alternative (Exhibits)	10 days	Wed 10/6/21	Tue 10/19/21
17		Initital Submittal (QAQC)	5 days	Wed 10/20/21	Tue 10/26/21
18		Initial Submittal	0 days	Tue 11/2/21	Tue 11/2/21
19		City of Pflugerville Review Period	10 days	Wed 11/3/21	Tue 11/16/21
20		**30% Submittal (Geometric Schematic/ROW Limits)**	**65 days**	**Wed 11/17/21**	**Tue 2/15/22**
21		Property Owners Meetings	5 days	Wed 11/24/21	Tue 11/30/21
22		Review/Address Review Comments	5 days	Wed 11/17/21	Tue 11/23/21
23		Environmental Document/Technical Reports	20 days	Mon 11/29/21	Mon 12/27/21
24		Geometric Schematic/Design XS (Preferred Alternative)	10 days	Wed 12/8/21	Tue 12/21/21
25		Update Sequence of Construction Layout	5 days	Mon 12/20/21	Fri 12/24/21
26		Update Storm Drain Design	10 days	Mon 12/13/21	Fri 12/24/21
27		Update Drainage Report	5 days	Mon 12/27/21	Fri 12/31/21
28		Update Geotech Report	5 days	Wed 12/15/21	Tue 12/21/21
29		Update Utility Conflicts	5 days	Mon 12/27/21	Fri 12/31/21
30		Pre-Final Geometric Schematic	5 days	Mon 12/27/21	Fri 12/31/21
31		Public Meeting #1	5 days	Wed 1/5/22	Tue 1/11/22
32		30% Submittal (QAQC)	5 days	Wed 1/12/22	Tue 1/18/22
33		30% Submittal	0 days	Tue 2/1/22	Tue 2/1/22
34		City of Plugerville Review Period	10 days	Wed 2/2/22	Tue 2/15/22
35		**75% Submittal (PS&E)**	**98 days**	**Wed 2/16/22**	**Fri 7/1/22**
36		Property Owners Meetings	5 days	Wed 4/13/22	Tue 4/19/22
37		Review/Address Review Comments	10 days	Wed 2/16/22	Tue 3/1/22
38		Final Reports (Env., Drng, Geo.)	15 days	Mon 5/23/22	Fri 6/10/22
39		Final Geometric Schematic	10 days	Wed 4/20/22	Tue 5/3/22
40		Utility Coordination	30 days	Mon 5/2/22	Fri 6/10/22
41		Continue 75% Detailed Design (Plan Sheets)	73 days	Wed 3/2/22	Fri 6/10/22
42		Supporting Documents (Estimate, GN, Construction Schedule)	15 days	Mon 5/23/22	Fri 6/10/22
43		75% Submittal (QAQC)	5 days	Mon 6/13/22	Fri 6/17/22
44		75% Submittal	0 days	Fri 6/17/22	Fri 6/17/22
45		City of Pflugerville Review Period	10 days	Mon 6/20/22	Fri 7/1/22
46		**Final Submittal (PS&E)**	**77 days**	**Mon 7/4/22**	**Tue 10/18/22**
47		Review/Address Review Comments	10 days	Mon 7/4/22	Fri 7/15/22
48		Finalize Detailed Design (Plan Sheets)	32 days	Mon 7/18/22	Tue 8/30/22
49		Finalize Supporting Documents (Estimate, GN, Construction Schedule)	5 days	Wed 8/31/22	Tue 9/6/22
50		Final Submittal (QAQC)	10 days	Wed 9/7/22	Tue 9/20/22
51		City of Pflugerville Review Period	10 days	Wed 9/21/22	Tue 10/4/22
52		Address Final Review Comments	10 days	Wed 10/5/22	Tue 10/18/22
53		Final Submittal	0 days	Tue 10/18/22	Tue 10/18/22



Rodriguez Transportion Group, Inc.
Immanuel Road
Date: Thu 7/15/21

Task Summary Critical