CONTRACT AMENDMENT

No. 323-001

Rancier Avenue Replacement and Streetscaping Improvement Project

This Amendment shall be part of the City of Killeen Rancier Avenue Replacement and Streetscaping Improvement Project Professional Services Agreement. This Contract was entered into on December 14, 2022. The change in the fee structure is as follows:

JUSTIFICATION:

On December 14, 2022, a Professional Services Agreement (PSA) was executed with BGE, Inc. for a not to exceed amount of $813,453.73. The scope included schematic design service for the Rancier Avenue reconstruction. PSA Amendment No. 1, the consultant requested $35,169.00 for Supplemental Traffic Analysis. PSA Amendment No. 2 the consultant requested $2,037,006.37 for the 30% plans. PSA Amendment No. 3 is a $7,396,410.95 proposal to respond to the request for Engineering design to 100%. The scope of work is defined in Exhibits B-3 & D-3 (Attached).

This Amendment is subject to annual appropriation by the Killeen City Council. If sufficient funds are not appropriated for any subsequent fiscal year, the City may terminate this Agreement upon written notice to the Contractor, without penalty or further obligation. Estimated annual disbursements: FY 2026 - $3,800,000; FY 2027 - $3,100,000; and FY 2028 - $496,410.95.

Scope of Services	Phase	Present Contract Amount (Original thru Amendment #2	Proposed Amendment #3	Proposed Contract Amount (Original thru Amendment #3)
Schematic Design	1	$813,453.73		
Traffic Analysis Supplemental	2	$848,622.73		
30% Plans	3	$2,885,629.10		
100% Plans	4		$7,396,410.95	$10,282,040.05
	Total	$2,885,629.10	$7,396,410.95	$10,282,040.05

BGE, Inc.

By: Brian D. Rice

Signature: Brian D Rice

Title: Director

Date: 10/10/2025

City of Killeen

By: Kent Cagle

Signature: _____

Title: City Manager

Date: _____

EXHIBIT B-3
ENGINEERING SERVICE

BGE, Inc. (ENGINEER) will provide staff to support the City of Killeen (Owner) with general construction and engineering support services for the Rancier Avenue project from Fort Hood Street to N 38th Street. The project will convert one mile of corridor from four-lane to two-lane with intermittent left turn lanes, and 1.5 miles from four-lane to a two-lane section with center turn lanes including full depth pavement. The project includes design and construction of six to ten-foot buffered sidewalks and dedicated bike lanes, installation of landscaping and hardscape, upgrade traffic and pedestrian signals, installation of roadway and sidewalk illumination, upgrade storm drainage, relocate and upgrade existing water and wastewater lines, and relocate dry utilities from overhead to underground between Fort Hood St and 10th Street. Utilities will remain overhead from 10th Street to N 38th Street.

The work to be performed by the ENGINEER under this contract consists of providing engineering services required for the preparation of plans, specifications, and estimates (PS&E) and related documents, as requested by the Owner. These services may include, but are not limited to, preparing roadway design, hydrologic and hydraulic design, storm sewer design, water and wastewater utility design, duct bank design, landscaping design, survey and ROW mapping, environmental, public involvement, and subsurface utility engineering investigation, geotechnical data collection, and right-of-way acquisition services.

This scope of work pertains to advance the PS&E elements of this project from 30% to 100% milestone. The scope and fee assume a project management and design duration of up to 24 months. The ENGINEER shall perform all work and prepare all deliverables in accordance with the latest version of the City of Killeen criteria.

The ENGINEER shall perform quality control and quality assurance (QA/QC) on all deliverables associated with this project.

The ENGINEER shall provide traffic control in accordance with the Texas Manual on Uniform Traffic Control Devices (TMUTCD) when performing onsite activities associated with this contract.

ENVIRONMENTAL COMPLIANCE (Function Code 120)

This project is projected to be locally sponsored by the City of Killeen and is not on the Texas Department of Transportation (TxDOT) system; however, Federal Highway Administration (FHWA) funds administered by the Killen-Temple Metropolitan Planning Organization (KT MPO), are anticipated. Therefore, the project will be subject to TxDOT review and NEPA requirements per 23 U.S.C 327 and a Memorandum of Understanding (MOU) dated July 17, 2025, and executed by FHWA and TxDOT. The project is anticipated to be environmentally cleared through TxDOT as a Categorical Exclusion (CE) for the entire limits of the new proposed right-of-way (ROW).

As the project is anticipated to be a locally sponsored project subject to TxDOT's environmental review procedures, an Advanced Funding Agreement (AFA) between TxDOT and the City of Killeen has been executed. In addition, the project has been assigned a Control-Section-Job numbers (CSJs). Environmental compliance documentation will be updated in TxDOT's format and according to current TxDOT guidance found in TxDOT's Environmental Compliance Toolkits.

1. TxDOT Categorical Exclusion

Proposed improvements to Rancier Avenue will require environmental approval. The TxDOT Waco District will be responsible for review and approval of environmental documentation. This scope of Services is based on TxDOT's current published TxDOT CE guidance in the TxDOT Environmental Toolkits. The ENGINEER will update TxDOT's Work Plan Development (WPD) Section I – Project Definition, WPD Section II – Work Plan Development, and supporting project area maps. These documents will be submitted to the TxDOT Waco District for review and approval.

Deliverables:

A. Update Draft and Final WPD Section I and WPD Section II

B. Update Draft and Final Project Area Maps

2. Archeological Studies

The ENGINEER will update the Archeological Background Study per the TxDOT Environmental Toolkit and submit to the TxDOT Waco District for review and approval. The Background Study shall be updated by a professional archeologist as defined in 13 TAC 26.5(52)(B). Background studies comprise a review of existing data, including – but not limited to – the Texas Archeological Sites Atlas, geologic maps, soil maps, aerial photographs, and historic maps. Based on this review, the ENGINEER will identify if there are any locations that may require field investigation to evaluate the project's effects on archeological resources. As the proposed project would occur within a highly developed urban area, a need for additional archeological investigations is not anticipated.

Deliverables:

A. Updated Draft and Final Archeological Background Study

3. Historical Studies

The proposed project is within an aging part of the City of Killeen, new ROW is anticipated and structures 50 years of age or older are anticipated along the project limits. It is anticipated that the THC and TxDOT will require a Historical Resource Project Coordination Request (PCR) and possibly a Historical Studies Research Design and Historic Resources Reconnaissance Survey to identify historic resources that may be

impacted by the proposed project and to assess potential impacts to historic properties, if identified.

The ENGINEER will update the Historical Studies PCR per the TxDOT Environmental Toolkit and submit to the TxDOT Waco District for review and approval. This task includes data collection, exhibits and documentation using the TxDOT format standards.

TxDOT Waco District will be responsible for coordination with the THC per the 2013 MOU between TxDOT and the THC.

Deliverables:

A. Update Draft and Final Historical Studies PCR

4. Threatened and Endangered Species

The ENGINEER shall update the habitat assessment and biological resources summary utilizing TxDOT's Species Analysis Summary and Species Analysis Form according to current guidance in the TxDOT Environmental Toolkits to document compliance with applicable state and federal requirements. U.S. Fish and Wildlife Service or Texas Parks and Wildlife Department coordination is not anticipated.

Deliverables:

A. Update Draft and Final Species Analysis Summary

B. Update Draft and Final Species Analysis Form

5. Water Resources

Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act regulate activities with the potential to impact Navigational Waters and Waters of the U.S., including wetlands. Regulatory oversight of Section 10/Section 404 is within the purview of the U.S. Army Corps of Engineers (USACE) and impacts to USACE jurisdictional waters require USACE authorization. Based on the proposed design, it is anticipated that if jurisdictional waters are present, the project would qualify for a Nationwide Permit (NWP) #14, and impacts to jurisdictional waters would fall below the thresholds requiring USACE notification. The ENGINEER shall update surface water analysis documenting the presence or absence of jurisdictional waters and potential impacts to those waters by the proposed project. The ENGINEER shall document the results and compliance with the conditions of NWP 14 on a Surface Water Analysis Form and Section 404/10 Impacts Table according to current TxDOT guidance in the Environmental Compliance Toolkits.

Deliverables:

A. Update Draft and Final Surface Water Analysis Form, Draft and Final Section 404/10 Impacts Table

6. Hazardous Materials

It is anticipated that the proposed project would require work outside of the existing Rancier Avenue ROW; therefore, TxDOT guidelines require preparation of a Hazardous Materials Initial Site Assessment (ISA). The ENGINEER shall update the ISA for potential hazardous materials that may impact the proposed project according to current TxDOT guidance in the Environmental Compliance Toolkits. Should the findings of the ISA conclude that additional investigation, special considerations, or other commitments are required during future stages of project development, the ENGINEER shall review those findings and commitments with TxDOT prior to completing the hazardous materials discussion for the environmental document.

Deliverables:

A. Update Draft and Final Hazardous Materials ISA

PUBLIC INVOLVEMENT (Function Code 121)

1. TxDOT Public Involvement

The ENGINEER shall perform Public Involvement Activities according to current guidelines in TxDOT's Environmental Compliance Toolkits and communicate the results to the TxDOT Waco District to be documented into ECOS. It is anticipated that the proposed project will require a public hearing , using TxDOT's current template on the Environmental Compliance Toolkit. The ENGINEER will update and maintain a mailing list of all affected property owners based on current Bell County Appraisal District data. The ENGINEER will provide documentation of the public hearing and any comments received according to current TxDOT guidelines and provide documentation to the TxDOT Waco District.

Deliverables:

A. Conduct In-person Public Hearing

2. Additional Public Involvement

At the request of the City, the ENGINEER will update the public engagement plan and provide general public outreach and engagement throughout the project. A database will be updated which includes nearby property owners and residents, businesses, churches, educational/community organizations, elected/public officials, and any interested individuals. ENGINEER will identify and reach out to key stakeholders and community groups (HOAs, etc.) that may be interested and will collect email addresses for email updates. - Finally, email updates will be sent out to keep the public updated on the project progress.

A. **Public Engagement Plan –** The ENGINEER will plan, schedule, conduct and facilitate one (1) public hearing to share project information with and collect

feedback from citizens and stakeholders as determined by the City and the team. The hearing will be held at a time decided by the City, and will include a virtual attendance option. Tasks may include, but not limited to: calling and/or visiting potential meeting sites; reserving meeting space; announcing the hearings by distributing meeting information and coordinating with attendees; holding and participating in hearing rehearsals; facilitating meetings; presentation development and providing a summary report of the hearing including public input received. The ENGINEER will develop hearing materials and provide Spanish translation as needed. The ENGINEER will create a pre-recorded public meeting with project materials (e.g., fact sheets, exhibits) to be hosted on the online project portal.

B. **Coordinate Hearing Announcements and Promotions –** The ENGINEER will organize and conduct a public hearing at a time and place determined through coordination between the ENGINEER and the City. Notices of the public hearing will be provided to key stakeholders identified during development of the public engagement plan.

C. **Develop Materials, Web Content and Final Electronic Copies –**The ENGINEER will update, host and maintain the existing online project information portal to provide the public with project information and an opportunity to provide feedback. The online portal will contain links to a pre-recorded virtual public hearing, to run concurrently with the in-person public hearing. An opportunity to comment on the virtual public hearing will be provided through the portal for a period of time to be specified through coordination between the ENGINEER and City.

D. **Develop Post Public Hearing Documentation -** The ENGINEER will develop a public hearing documentation that includes a cover sheet, the sign-in sheets for all attendees, a copy of all comments received during the public hearing and subsequent 15-day comment period, both written and dictated, any mailed notices, flyers, mailing list, website notice, and documentation of additional outreach methods, photographs or pdfs of all boards and exhibits, presentations and general photos of the hearing proceedings, and written transcripts for any video presentations. Deliverables:

A. Update Public Engagement Plan, including maintenance of stakeholder database throughout the project in Excel format

B. Coordinate meeting announcements, for email updates and promotion such as letters, email notices, signage, media releases, posting, etc.

C. Develop materials, web content (to be shared on City's website) and final electronic copies (fact sheet, exhibits)

D. Update materials development and final electronic copies (fact sheet, exhibits)

E. Develop and facilitate one virtual public hearing (to be hosted on the online project portal) with in-person option

F. Coordinate hearing announcements and promotion such as letters, email notices, signage, media releases, posting, etc.

G. Provide post public hearing documentation

UTILITY INVESTIGATION AND ADJUSTMENT COORDINATION (Function Code 130)

1. Utility Engineering Investigation

The ENGINEER's subconsultant, The Rios Group, will perform Subsurface Utility Engineering (SUE) services for this project in general accordance with the recommended practices and procedures described in ASCE publication ASCE/UESI/CI 38-22 "Standard Guideline for Investigating and Documenting Existing Utilities".

The scope of this proposal includes additional QLB and QLA SUE services to include:

QLB SUE services within the limits of the Rancier Avenue project. QLB SUE services provided will be inclusive of QLC and QLD. The limits extend an additional 4000 LF along Rancier Avenue to investigate newly installed utilities in these areas. The following areas are specifically excluded from the scope of work of this proposal: private property, proposed ROW, QLB on utilities previously investigated by TRG.

This scope of work also includes up to twenty (20) QLA SUE test holes at a location that will be provided by the Utility Coordinator following a review of the QLB SUE information.

Deliverables

A. A utility file in CAD format depicting all SUE data documented on the project.

B. A summary sheet of all test hole coordinate data and depth information.

C. 8.5" x 11" Test Hole Data Forms for all test hole locations completed. These forms will be signed and sealed by a Professional Engineer and delivered to the Owner in electronic PDF form.

D. 11" x 17" SUE Plan Sheets depicting all SUE data documented on the project. These plans will be signed and sealed by a Professional Engineer and delivered to the Owner in electronic PDF form.

E. A Utility Report containing metadata (e.g. scope of work, work limits, dates of performance, survey control, etc.), information about the Utility Investigation not otherwise conveyed in other project deliverables, and recommendations to address data deficiencies.

2. Utility Adjustment Coordination

Utility Adjustment Coordination includes communicating, coordinating, and conducting meetings with any one, combination, or all of the following: individual utility companies, Local Public Agencies (LPAs), City Project Manager, City Utility Staff. Utility coordination duties include, but are not limited to: assisting in preparing utility agreement assemblies including utility agreements, utility reimbursable billings, joint use agreements, and assisting utility companies with utility permit submittals.

The Utility Coordinator shall perform utility adjustment coordination for approximately ten (10) utilities as listed below:

- Atmos Gas
- Bell County WCID No. 1
- Brightspeed
- Spectrum
- Oncor Electric Distribution
    - Underground Network Design
    - Aerial Design Services
- City of Killeen Water and Wastewater
- Millennium Telcom LLC dba OneSource Communication
- Unite Private Networks LLC
- Killeen ISD

A. **Utility Coordination -** The Utility Coordinator will perform utility coordination and liaison activities with involved utility owners, their consultants, and the Owner to achieve timely project notifications. In conjunction with formal coordination meetings, the Utility Coordinator will create meeting minutes, create, and update the utility conflict matrix, create action item log, perform document control, and assist with conflict analysis and resolution.

The Utility Coordinator will coordinate utility related activities with the Owner, or its designee, to facilitate the orderly progress and timely completion of the City's design phase. The Utility Coordinator is responsible for the following:

i. Initial Project Meeting: Attend an initial meeting and on-site visits (when appropriate) to develop familiarity with existing conditions and project requirements and prepare a written report of the meeting

ii. The Utility Coordinator shall provide initial project notification letters to all affected utility companies, owners and other concerned parties, if needed.

iii. External Communications. The Utility Coordinator will coordinate all activities with the Owner, its contractors, representatives and stakeholders, as authorized by the Owner

iv. Progress Meetings. The Utility Coordinator will implement a schedule of periodic meetings and milestone meetings with each utility company and Owner or Owner's representatives for coordination purposes. The Utility Coordinator will notify the Owner at least five (5) business days in advance of each meeting. The Utility Coordinator will provide and produce meeting minutes of all meetings with said utility companies, Owners, or Owners' representatives within seven (7) business days. The frequency of these meetings must be appropriate to the matters under discussion with each utility owner.

a. Milestone Meetings: The Utility Coordinator will hold four (4) milestone meetings including 30%, 60%, 90% and 100%. These meetings will be used to discuss project design updates with utilities and the Owner.

b. Shared Duct Bank Meetings: The Utility Coordinator will hold group and individual meetings anticipated to utilize the proposed telecom duct bank. These meetings will be to discuss project updates including project schedules, joint trench design, etc. This will consist of the initial project kick-off meeting and monthly meetings for the duration of the project (assumed up to 26 months).

c. Individual Utility Meetings: The Utility Coordinator will hold individual monthly utility meetings as needed. It is assumed that five (5) utilities will require individual monthly meetings for a duration of 18 months, totaling 90 meetings.

d. Progress Meetings: The Utility Coordinator will meet with the Owner and design consultants, periodically to coordinate the work effort and resolve problems. The Utility Coordinator will also prepare a written report of all progress meetings and provide the report to the Owner. It is assumed that there will be a total of

up to 24 monthly progress meetings. During the progress meetings, the Engineer must review:

i. Activities completed since the last meeting

ii. Problems encountered

iii. Late activities

iv. Activities required by the next progress meeting

v. Solutions for unresolved and/or anticipated problems

vi. Information or items required from other agencies/consultants

As required, the Utility Coordinator will coordinate with the local utility committees and councils to present a footprint of the Owner's projects with represented utility companies and owners. The Utility Coordinator will also coordinate with any other utility committees which might include county, city, or other officials, as needed.

The Utility Coordinator must provide the Owner and all affected utility companies and owners with a contact list, Utility Conflict Matrix (UCM), and utility conflict layout for each project with information such as:

a. Owner's name

b. Contact person

c. Telephone numbers

d. Emergency contact number

e. Email addresses, and

f. Pertinent information concerning their respective affected utilities and facilities, including but not limited to: size, number of poles, material and other information that readily identifies the utilities company's facilities.

The Utility Coordinator is responsible for updating the UCM and utility conflict layout throughout the project and at each milestone.

The Utility Coordinator must advise utility companies and owners of the general characteristics of the Project and provide an illustration of the project footprint for mark-up of the utility facility locations that occupy the project area by distributing the SUE plan sheets or project layout sheets.

The Utility Coordinator shall coordinate which utilities will conflict with roadway construction and make the utility company aware of those conflicts.

B. Utility Agreements for Utility Adjustments

The Utility Coordinator must coordinate with utility owners on the identified conflicts with proposed construction and ensure the Owner's rules and regulations are addressed. The Utility Coordinator must assist the utility companies in the preparation of required agreements associated with, but not limited to cost estimates, plans, disposition of existing facilities and schedule.

Utility Agreement Assemblies are assumed for two (2) utilities. Those utilities are Atmos MidTex and Oncor Electric.

i. Utility Agreement Assemblies: A packaged agreement consisting of a Utility Joint Use Acknowledgement, Standard Utility Agreements, plans, proof of property, schedule of work, Buy America compliance Mill Test Reports (MTRs) or Certifications

a. Utility Agreements: If a utility is located within an easement, the utility company might have a compensable interest. The utility company must furnish a copy of their easement to the Utility Coordinator. The Utility Coordinator will determine whether or not a compensable interest exists. The Utility Coordinator will review plans to determine compliance with Owner rules and ensure the proposal will not conflict with roadway construction. The Utility Coordinator will review the cost estimate to confirm all listed items and quantities are clearly defined in the plan set. The Utility Coordinator will submit a copy of the easement(s), plans and estimate to the Owner via letter of recommendation.

b. Escrow Agreements: If it is determined that the utility will be adjusted as part of the roadway contract, the Owner's project manager must be notified immediately.

ii. The Utility Coordinator will determine which utilities will be installed by agreement between the utility and the Owner. The Utility Coordinator will coordinate utility agreements, determine the necessity of any escrow agreements, and forward these documents to the Owner for final approval.

C. Coordination of Engineering Activities

i. The Utility Coordinator will maintain a utility conflict layout utilizing the Existing Utility Layout. The Utility Coordinator will utilize the layout of existing utilities as prepared, if available, and of the following:

a. Facilities in conflict with the proposed project that are to be relocated.

b. Facilities to be removed or abandoned in place.

c. Facilities to remain in service and in place because of roadway design adjustments and meeting the current rules and regulations.

d. If there are additional facilities not shown in the SUE documents which require relocation, the Utility Coordinator will coordinate this information with the Owner immediately upon discovery.

ii. Review of Utility's Proposed Adjustments:

a. Evaluate Alternatives: The Utility Coordinator will evaluate alternatives in the adjustment of utilities balancing the needs of both the Owner and the Utility

b. Review Estimates and Schedules: The Utility Coordinator will, with the assistance of the Owner, review the utility adjustment estimates for reasonableness of cost and the timely scheduling of the adjustment.

c. The Utility Coordinator will review plans, Buy America materials, and proposed location data.

d. The Utility Coordinator will confirm that utility owners are reviewing updates for the project design development so that the utility owners are reviewing the most current plants, quality and accuracy of utility adjustment data as it pertains to the plans. The responsibility for compliance, quality and accuracy of utility adjustment plans will remain with the utility company.

iii. The Utility Coordinator will:

a. Confirm all facility conflicts have been resolved

b. Confirm all stakeholders have concurred with the various alignments, including the undergrounding of their overhead assets (where applicable)

c. Coordinate with the utility companies to develop the sequence of construction for all utility relocation work. The Utility Coordinator will provide in the schedules provided by the

utility to the ENGINEER to incorporate into the Traffic Control Plan and notes.

d. Determine which utilities will be built as part of the contract.

iv. The Utility Coordinator shall coordinate, and/or review PS&E for all utilities included in the construction contract.

v. Utility Coordinator will coordinate the status of ROW acquisitions with the utilities to assist with scheduling accommodations.

Deliverables

A. Utility Conflict Matrix, including the identification of utility conflicts and resolutions

B. CAD-compatible file showing all existing utility conflicts and relocations

WATER AND WASTEWATER UTILITY ENGINEERING (Function Code 131)

The ENGINEER shall maintain a utility layout in in a CAD-compatible software to be used by the Owner. This layout shall include existing utilities which are to remain in place or be abandoned, and adjusted utilities. This layout will be utilized to monitor and evaluate alternatives. The ENGINEER will utilize the layout of existing utilities as prepared, if available, and make a determination of the following:

- Facilities in conflict with the proposed project that are to be relocated.
- Facilities to be abandoned in place or removed.
- Facilities to remain in service and in place.

The ENGINEER shall be responsible for determining if there are additional facilities, not shown in the SUE documents, which require relocation. The ENGINEER shall coordinate this information with the Owner immediately upon discovery.

A. Water and Wastewater Design – The ENGINEER will design the relocation of water and wastewater lines and appurtenances as required for the reconstruction of Rancier Avenue. The locations of these facilities to be relocated will be determined during the roadway preliminary design. The following assumptions provide the extent of design to be performed within the project limits.

a. Water Utilities:

i. Relocation of up to 15,000 LF of water line, including the relocation and/or adjustment of up to 30 valves.

ii. Relocation and reconnection of up to 150 service connections (long or short)

iii. Placement or relocation of fire hydrants every 300 feet where no existing fire hydrants exist (up to 20)

iv. Development of irrigation-specific sleeve layouts for irrigation service

v. Coordination with Landscape Architecture team to place up to eight (8) meters with backflow prevention

vi. Coordination of up to eight (8) hydrant tests

b. Wastewater Utilities:

i. Relocation of up to 2,700 LF gravity wastewater line and associated manholes

ii. Adjustment of up to 20 manholes to grade

Deliverables

A. Plans, Specifications and Cost Estimate at the 60%, 90% and 100% intervals

DUCT BANK DESIGN (Function Code 132)

There are presently four (4) telecommunication owners within the Project Limits that are mostly attached to Oncor poles. There are also a few hundred linear feet of underground telecommunication assets. For undergrounding to occur and allow for future providers (including the City's IT), the project proposes two 6,000 LF 9-4" telecommunication duct banks that will be located on the north and south sides of Rancier. When the duct spaces are constructed, telecommunication owners will need to pull-through their fiber assets through these duct spaces and perform splicing at the proposed 75 access points (handholes) for eventual servicing to the private properties. BGE will provide the following services for telecommunication duct bank design:

A. Duct Bank Design:

a. Underground Telecommunication Relocation Coordination – The ENGINEER will manage the design and consolidation of overhead aerial telecommunication facilities into an underground duct space as required for the reconstruction for Rancier Avenue. The location of this facility will be determined during the roadway

preliminary design. The following assumptions provide the extent of design to be performed within the project limits:

i. There will be up to two joint telecommunication duct banks for Rancier Avenue. Approximately 12,500 LF of overhead telecommunication assets will be coordinated and relocated into an underground space.

ii. All applicable telecommunication utility providers within Project Limits will elect to participate in the joint duct bank coordination for purposes of relocating their overhead or underground assets into the proposed joint duct bank via pull-through construction

iii. The telecommunication utility providers will be responsible for managing the splicing of their assets that service commercial and residential facilities. The telecommunication utility providers will be responsible for designing the services of broadband to their respective commercial and residential customers.

iv. The ENGINEER will design up to 75 access points to accommodate street crossing and telecommunication asset accessibility appurtenances.

v. The ENGINEER will design the duct bank to include 2-3" conduits for ITS.

b. Overhead Telecommunication Relocation Coordination – The ENGINEER will coordinate approximately 6,000 LF of pole re-alignments.

i. The ENGINEER to design up to 35 riser facilities as the proposed telecommunication underground alignment transitions to existing aerial alignments at street crossings.

Deliverables

A. Plans, Specifications and Cost Estimate at the 60%, 90% and 100% intervals

ELECTRIC UTILITY PRELIMINARY ENGINEERING REPORT AND CIVIL INFRASTRUCTURE DESIGN (Function Code 133)

Oncor currently provides electrical service to properties along Rancier from overhead electric facilities. As part of the improvements for this project, approximately 6,000 LF of Oncor assets will need to be consolidated into an underground duct space (separate from telecommunication) within the Urban Segment of the corridor. As utility coordination discussions with Oncor have occurred, Oncor has requested the following:

- Up to 60 single phase padmounted transformers, one for each of the approximate 60 businesses along Rancier between Fort Hood and E 10th Street. Each transformer

is located on private property, requires an approximate 4-ft x 4-ft concrete pad and requires a 340 square foot easement area for access and maintenance activities.

- One switch gear vault to service up to six single-phase transformers (up to 10 total). Each switch gear is located on private property, is approximately 10.5-ft by 7-ft and requires a 550 square foot easement area for access and maintenance activities.

- Up to 10 "secondaries" or handholes for other access points to the duct bank structure

See Figure 1 for an example visual on private ROW.

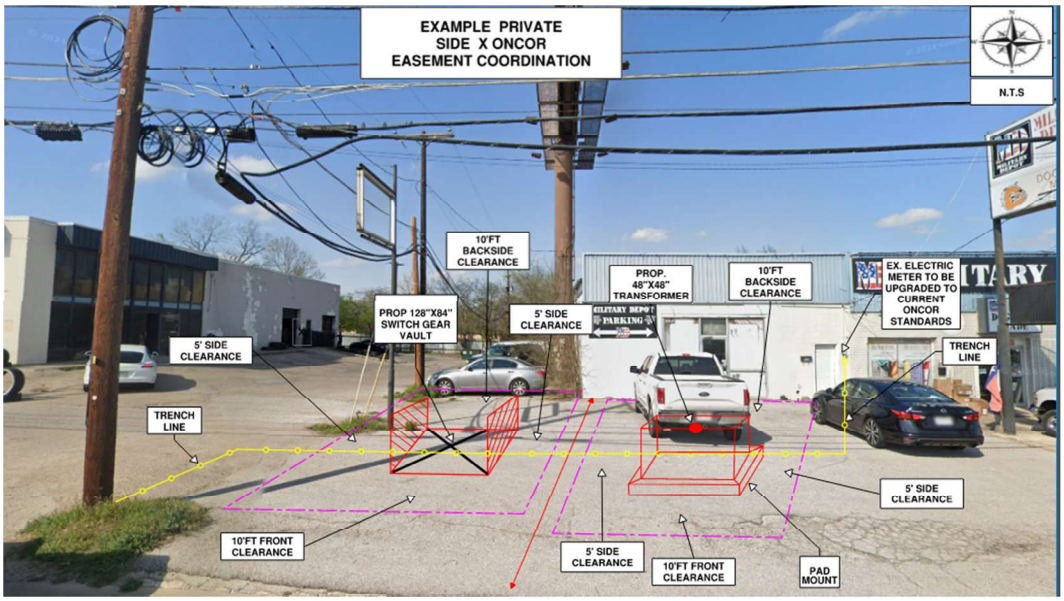

Figure 1: Example Private Side X Oncor Easement Coordination

It is known that Oncor has previously entered into easement agreements with private properties for each electric service connection but it is presently unknown what extents and where each easement is located for each property. It is also known that each property is currently metered by Oncor but it is presently unknown if each metered connection requires an upgrade to transition into the new underground electric delivery system.

As this project advances past its 30% design stage, numerous unknowns must be studied to determine the design and extent of costs associated with this consolidation of Oncor's overhead assets into underground. BGE proposes to prepare a Preliminary Engineering Report (PER) to evaluate the infrastructure costs and coordinate a Memorandum of Understanding (MOU) between the City and Oncor to determine cost-sharing opportunities. BGE also proposes to design the civil infrastructure for Oncor within the proposed ROW to the 100% design stage. BGE has estimated the cost for the 6,000 LF of electric duct space, the 60 concrete pads needed for phase one transformers and the ten switch gears and has formulated the design fee for this scope item based on 8% of this construction cost. This cost excludes wiring, transformers, and general electrical

engineering that scope assumes Oncor will provide. BGE notes that the PER and MOU may impact the extents of design work required. Further description of each scope item associated with Rancier's electric utility is as follows:

A. Electric Delivery Preliminary Engineering Report

   a. BGE will coordinate with Oncor to evaluate and understand the electric delivery at each parcel (Up to 60 parcels) that is impacted by undergrounding, including the following:

      i. Exhibition of each existing Oncor easement. Scope assumes Oncor will research and provide information on their existing easements located on private properties along Rancier.

      ii. Preliminary placement of transformers and/or switch gears, including the delineation of proposed, or additional Oncor easements to accommodate this new infrastructure

   b. Assessment of each existing electric meter per property. BGE will also evaluate side streets parallel to Rancier, to determine if overhead electric delivery can be maintained to properties but re-directed from a backlot source.

   c. As electric delivery, switch gear placement, transformer placement, and Oncor easements are understood, BGE will evaluate the proposed infrastructure improvements for Rancier and advance design the plan view of the underground duct spaces, secondary handholes up to the 30% design interval, including a cost estimate. This report will also include per-parcel exhibits communicating where transformers and/or switch gears could be placed and what easements need to be acquired.

B. Memorandum of Understanding

   a. BGE will support the development of a memorandum of understanding between Oncor and the City to communicate total costs and coordinate which entity will be responsible in paying for what infrastructure or easements.

C. Electric Civil Infrastructure Design

   a. Underground Electric Relocation Coordination – The ENGINEER will manage the design and consolidation of overhead aerial Oncor facilities into an underground duct space as required for the reconstruction for Rancier Avenue. The location of this facility will be determined during the PER. Oncor assets will be designed to Oncor's DCS-5 Specifications. The following assumptions provide the extent of design to be performed within the project limits:

i. There will be one 9-4" electric duct bank for Rancier Avenue urban segment. Approximately 6,000 LF of overhead electric assets will be coordinated and relocated into an underground space.

ii. Oncor will participate in undergrounding their assets into this dedicated duct space.

iii. Oncor will be responsible for wiring, de-energization plans, meter upgrades, providing single phase transformers, and general electric engineering required in managing the servicing of their customers as their assets are upgraded and transitioned to underground.

iv. The ENGINEER will design up to 20 manholes along the duct bank alignment.

Deliverables

A. One preliminary engineering report incorporating the items discussed in this Section, including plans and cost estimate of civil infrastructure up to the 30% interval the Memorandum of Understanding as an appendix.

B. Plans, Specifications and Cost Estimate at the 60%, 90% and 100% interval

RIGHT-OF-WAY ACQUISITION (Function Code 134)

1. Right-of-Way Acquisition Services

The ENGINEER'S subconsultant, Dianna Tinkler, will perform the following services:

- Prepare monthly status report for parcel acquisition as requested by City
- Participate in monthly project review meetings as determined by City, as needed
- Prepare owner contact list for project
- Order title commitments for each parcel
- Parcel files for acquisitions will be kept in ROW provider's office
- Maintain parcel files including correspondence and negotiator's log with property owner

- Maintain record of parcel payment amounts
- Maintain parcel files with original documentation related to the purchase of the real property or property interest.
- The ENGINEER will require surveyor to update parcel sketches as needed to show encumbrances listed in the title commitment
- Upon receipt of approved field note descriptions from the City, prepare letter of intent to acquire to property owner and provide landowner's bill of rights by Certified Mail-Return Receipt Requested (CMRRR)
- Analyze preliminary title report to determine potential title problems and propose methods to cure title deficiencies
- Completed appraisals will be reviewed by review appraiser with recommended appraised values approved by City prior to making initial offers
- Prepare initial offer letter, purchase contract, instrument of conveyance
- Field note description, written offer, purchase contract, instrument of conveyance, appraisal report, Landowner's Bill of Rights, Information about Brokerage Services and Consumer Protection Notice will be mailed to property owner by CMRRR
- Contact each property owner to meet and discuss the written offer, if practical
- Initiate and receive various phone calls throughout initial offer
- Prepare general correspondence to property owner
- Provide property owner questions/concerns with ENGINEER and City to resolve property owner questions/concerns
- Attend maximum of three (3) meetings with property owner during initial offer phase
- Submit any written counteroffer from property owner to City including supporting documentation, and recommendation with regard to counteroffer
- Secure necessary signed instruments upon acceptance of the offer by property owner for the closing.
- Provide purchase contract executed by the property owner to City for City's execution.

- Assist the City in the curative work necessary to provide clear title to City, including full and partial releases of liens. Curative title work for parcels with abstracts of judgment, foreclosure, bankruptcy and tax liens will be invoiced as additional services.

- Prepare check request to City for acquisition costs including but not limited to fully executed purchase agreement total price amount, document preparation fee for lender consents/subordination to easement, lender's processing fee, recording fees, escrow fees, and any other applicable closing costs with supporting documentation (HUD Settlement Statement) provided.

- Attend closing with property owner.

- Title company will record original instruments after closing with the County Clerk's Office.

- Prepare final offer letter, documents of conveyance as necessary and mail by CMRRR.

- Attend one (1) meeting with property owner after final offer letter in an attempt to reach agreement in lieu of condemnation.

- Assist the City with securing a Possession and Use Agreement if acceptable with property owner.

- Provide copies of intent to acquire letter, initial offer letter, final offer letter and purchase contract to City condemnation attorney (not included with ENGINEER's contract).

- Provide summaries of project expenses for amounts authorized and paid.

- Prepare project close-out summary and scan recorded instruments and closing documents.

- Deliver file to City as requested: 1) Closed file, 2) Condemnation file.

2. Relocation Assistance Agent

The ENGINEER'S subconsultant, Dianna Tinkler, will perform the following services:

- Initial interview with displace.

- Prepare 90 day notice to vacate letter to displace.

- Provide Relocation Assistance brochure to displace.

- Complete TXDOT Form R96.
- Discuss relocation procedures.
- Coordinate moving estimates with vendors.
- Explain move options to displacee.
- Explain claim procedures to displace.

3. Appraiser

The ENGINEER'S subconsultant, Dianna Tinkler, will perform the following services:

Appraisals developed and reported in compliance with the 2022-2023 Uniform Standards of Professional Practice (USPAP)

Appraisal reports will be written in conformance with Standard Rule 2-2(a) as defined by USPAP as well as applicable TXDOT reporting requirements and guidelines

Appraisal completion date for each appraisal report will be 120 days from receipt of

finalized field note description and a notice to proceed.

4. Review Appraiser

The ENGINEER'S subconsultant, Dianna Tinkler, will perform the following services:

- Appraisal reports will be written in conformance with applicable TXDOT reporting requirements and guidelines.
- Appraisal completion date for each appraisal report will be 45 days from receipt of appraisal report.

A. Coordination for Title, Acquisition Limits: The ENGINEER to coordinate title and acquisition limits for 103 parcels.

PROJECT MANAGEMENT (Function Code 145)

1. Meetings

A. Attend and document up to 24 Progress Meetings at the City of Killeen office or virtual. Engineer to prepare meeting minutes and distribute within 24-hours of the meeting.

2. General Contract Administration

A. Develop monthly invoices and progress reports.

B. Subconsultant coordination and management.

C. Develop and maintain design schedule.

FIELD SURVEYING (Function Code 150)

Surveys provided will be in accordance with the "Texas State Board of Land Surveying" and the applicable City of Killeen regulations.

Survey field notes will be submitted if requested by the City of Killeen.

Verify and compare previously located utility data with current ground conditions. The Surveyor will Contact the One-Call System in advance of performing field surveys to attempt data collection includes ties to location of marked utilities. This task does not always allow for timing of markings with the survey activities. Reasonable attempts to coordinate with utility owners will be made to achieve efficiency in data collection. Historically, results in this task have been marginal and there may cause to seek additional compensation for repeated trips to the project site to complete this effort.

1. Right-of-Way Parcel Map Exhibits (Parcel Descriptions)

Title work will be completed on all properties adjacent to the subject right-of-way in areas that need the right-of-way defined within the project limits. Title work will include, at minimum, owner name, vesting deed information, record information of legal lot, and all easements that affect the tract. Additionally, all record documents referenced in the title work shall be provided to the Surveyor.

For each parcel of land to be acquired, an Exhibit (Property Description) shall be prepared for each parcel or tract consisting of two (2) parts: (1) a metes and bounds description of the property and (2) a parcel plat. Each part of a Property Description will be QA/QC'd and shall be signed and sealed by a RPLS. Scope assumes 103 Parcel Acquisitions.

Once finalized, boundary monumentation will be set to establish the new right-of-way

2. Survey Coordination (103 Parcels)

ENGINEER will coordinate with the surveyor, right of way agent, and Owner to develop parcel exhibits to demonstrate acquisition limits, easement requirements, parcel specific survey notes. These will be used to support the acquisition negotiations and final parcel descriptions for documentation.

ROADWAY DESIGN CONTROLS (Function Code 160)

1. PS&E Development

The ENGINEER to perform the following items for the project:

A. **Geometric Design –** Refine and develop the horizontal alignment; vertical profile; pavement cross slopes; medians, curb and gutter; bike lanes, driveway access, sidewalks, curb walls, parking configuration; that meet acceptable design criteria and minimize the limits of the proposed ROW.

B. **Parcel Access –** Analyze parcel access and operation for up to 70 parcels that are being impacted with the proposed median.

C. **Limits of Proposed ROW –** Analyze the cross sections associated with the desirable design criteria to determine the limits of ROW necessary to accommodate the resultant configuration. Develop an exhibit providing the ROW footprint with the desirable configuration.

D. **Design Cross Sections -** Develop roadway cross sections associated with the proposed horizontal alignment and vertical profile every 50-foot at a minimum stretching across the entire ROW of the Project as necessary for the determination of cut and fill quantities and limits of disturbance in accordance with acceptable design criteria.

E. **Typical Sections –** Prepare existing and proposed typical sections.

F. **Plan & Profile Drawings (1"=50') –** Drawings to include critical base map information, control and benchmark data, proposed roadway improvements including horizontal and vertical roadway geometry, pavement edge geometry, drainage, grading and miscellaneous improvements.

G. **Alignment Data Sheets –** Prepare horizontal and vertical alignment data sheets with the Geopak baseline descriptions.

H. **Earthwork Quantities –** Prepare final cut/fill and general earthwork calculations to support design elements and roadway construction efforts.

I. **Driveway/Side Street Details –** Develop full details for each proposed driveway & minor cross street to ensure each meets design and functional features and

requirements. There are approximately 130 driveways & minor cross streets along Rancier Ave included in this proposed PS&E.

J. **Intersection Details –** Develop full details for each proposed/existing intersection to ensure each meets design and functional features and requirements. Proposed intersections for this PS&E include Rancier Ave at the following streets:

i. Gilmer St

ii. Valley Rd

iii. N College St

iv. 2nd St

v. 4th St

vi. N Gray St

vii. 10th St

viii. Alexander St

ix. WS Young Dr

K. **Removal Plans -** Prepare sheets noting all existing improvements to be removed within the project limits.

L. **Prepare Title Sheet, Project Layout, and Index of Sheets**

DRAINAGE (Function Code 161)

1. PS&E Development

A. **Drainage Area Maps –** The ENGINEER shall finalize the drainage area maps for overall drainage areas contributing to each cross culvert and for internal drainage areas contributing to the local stormwater collection systems. Drainage Area Maps will include Time of Concentration flow path delineations, contours, and points of analysis.

B. **Hydrologic & Hydraulic Calculations –** The ENGINEER shall provide the following services:

i. Calculate external and internal peak discharges using appropriate hydrologic methods. ATLAS-14 rainfall data will be used.

ii. Obtain external and internal drainage area boundaries and hydrologic parameters such as impervious covered areas, and overland flow paths and slopes from appropriate sources including, but not limited to, topographic maps, GIS modeling, construction plans, and existing hydrologic studies. The ENGINEER shall not use existing hydrologic studies without assessing of their validity. If necessary, obtain additional information such as local rainfall from official sites such as airports.

iii. Gather information regarding existing drainage facilities and features from existing plans and other available studies or sources.

iv. Perform hydraulic design and analysis using appropriate hydraulic methods, which may include computer aided models.

v. Develop plan designs, at minimum, for all internal stormwater collection systems.

C. **Culvert Analyses & Design –** The ENGINEER shall provide the following services:

i. Analyze capacity of existing cross culverts.

ii. Analyze impact of culvert extensions.

iii. Determine mitigation for potential impact of extending existing cross culverts.

iv. Prepare construction plans for culvert extensions and/or culvert reconstruction.

D. **Storm Drain Plans –** The ENGINEER shall provide the following services:

i. Determine inlet placement, size, and type meeting City of Killeen drainage criteria.

ii. Determine captured and bypass flows for proposed inlets.

iii. Design lateral and trunk line storm sewer system meeting City of Killeen drainage criteria.

E. **Prepare Quantities and Engineer's Opinion of Construction Costs –** The ENGINEER shall prepare quantities and construction costs estimates for cross culvert and storm sewer improvements at the 60%, 90%, and 100% submittal.

F. Details and Specifications – The ENGINEER shall review and revise as needed City of Killeen and TxDOT standard details and specifications related to drainage

design plans. The ENGINEER shall work with the structural engineer to prepare specialized details related to stormwater infrastructure, if applicable.

G. **Drainage Report –** The ENGINEER shall prepare a drainage report for permit review at the 90% design submittal.

H. **Temporary Construction Phased Storm Drain Plans –** The ENGINEER shall prepare temporary storm drain plans for each construction phase to ensure drainage systems will convey stormwater for the 2-year storm event.

I. **Coordination with Utilities –** The ENGINEER shall coordinate with the utility design engineer and utility coordinator to ensure proposed storm sewer does not conflict with proposed or existing utilities to remain.

J. **Coordination with City of Killeen –** The ENGINEER shall coordinate with the City of Killeen on proposed culvert design mitigation and storm sewer improvements.

Deliverables

A. Drainage Quantities

B. Drainage Area Maps (External and Internal)

C. Hydrologic Data Sheets (External and Internal)

D. Hydraulic Data Sheets (External and Internal)

E. Storm Drain Plan and Profile Sheets

F. Cross Culvert Sheets

G. Drainage Detail Sheets

SIGNING, PAVEMENT MARKINGS AND SIGNALIZATIONS (Function Code 162)

1. PS&E Development

A. **Signing & Pavement Markings –** Prepare signage and pavement marking plan sheets, layouts, and associated details.

B. **Traffic Signal Layouts -** The ENGINEER will prepare traffic signal plans for ten intersections and one pedestrian hybrid beacon along Rancier Avenue in Killeen, Texas. The signals will be designed to Texas Department of Transportation TxDOT standards, and subject to the review and ownership of the City of Killeen. Signal locations:

i. Gilmer St

ii. Valley Rd

iii. N College St

iv. 2nd St

v. 4th St

vi. N Gray St

vii. 8th St

viii. 10th St

ix. Alexander St

x. WS Young Dr

xi. Pedestrian Hybrid Beacon (Approximately 130 feet east of Medical Dr.)

The ENGINEER shall design plans for traffic signal infrastructure improvements for the locations outlined above. Design elements shall include all elements as required by the Reviewer including signal poles, mast arms, signal heads, signage, striping, vehicle detection systems, wiring details, conduits, ground boxes, integrated communications, illumination, and electrical services. All design shall conform to TxDOT standards and those laid out in the Texas Manual on Uniform Traffic Control Devices (TMUTCD). For this, the following plan sheets shall be include:

i. Existing intersection layout.

ii. Proposed traffic signal layouts, showing the proposed traffic signal features, signal pole schedules, vehicle detection systems, signal phasing, conduit and cable schedules, electrical service.

iii. Proposed traffic signal elevations.

iv. Proposed electrical schedule and phasing diagram.

v. Applicable standard drawings.

vi. General signal notes.

vii. Signal quantities.

C. **Miscellaneous Traffic Engineering –** The ENGINEER to prepare traffic standards, perform agency coordination, take one site visit and prepare summary sheets of all signing, pavement markings, and traffic signal quantities.

D. **ITS Infrastructure Design –** The ENGINEER will coordinate the design of Intelligent Transportation Systems (ITS) infrastructure within the project limits. This includes providing connectivity to existing roadside traffic signal cabinets and planning for future device expansion by incorporating strategically located ground boxes. Design considerations will encompass accommodation of additional roadside devices such as CCTV cameras and provisions for future system growth, as well as integration with existing ITS infrastructure adjacent to the project area. The ENGINEER will develop system connectivity diagrams depicting existing network components and proposed enhancements to support network expansion. Potential electrical service locations for future roadside devices will be identified and integrated into the overall ITS system design. All details will be developed to ensure seamless integration with current and future tolling and ITS infrastructure, consistent with project objectives and industry standards. This task will provide for the preparation of plan layouts for the ITS communication backbone system. The main design components for this project are as follows:

a. Fiber Optic communication system for the project limits, up to 13,000 feet

b. Physical connections for the existing roadside infrastructure and adjacent communication systems

c. Strategically placed ground boxes for easy access to power facilities and future roadside device integration, up to 36 boxes

d. Fiber Optic splice charts and termination tables

MISCELLANEOUS (ROADWAY) (Function Code 163)

1. Miscellaneous Roadway

A. **Cost Estimates -** Develop and update preliminary construction cost estimates at 60%, and 90% and final milestone submittals.

B. **Traffic Control Plans (TCP), Detours, Sequence of Construction –** Prepare Sequence of Phased Construction. Prepare TCP cross sections to identify temporary pavement needs. Identify impacts to existing drainage. Provide a written narrative of the construction sequencing and work activities per phase and determine the existing and proposed traffic control devices (regulatory signs, warning signs, guide signs, route markers, construction pavement markings, barricades, flag personnel, temporary traffic signals, etc.) to be used to handle traffic during each construction sequence. Develop each TCP to provide continuous, safe access to each adjacent property during all phases of construction and to preserve existing access. Road closures should be avoided. If a road closure is determined to be necessary, a Detour Layout and estimated closure duration shall be provided to the Owner for approval.

C. **Storm Water Pollution Prevention Plans (SW3P) –** The ENGINEER shall develop SW3P layouts, on separate sheets from (but in conformance with) the TCP, to minimize potential impact to receiving waterways. The SW3P layouts must include text describing the plan, quantities, type, phase and locations of erosion control devices and any required permanent erosion control.

D. **Quantity Summaries –** Prepare summary sheets of all roadway, SW3P, signing, pavement markings, and traffic control quantities.

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

F. **Standard Details –** Incorporate applicable TxDOT and City standards into the plan set.

G. **Construction Time Determination –** Develop construction schedule.

2. Illumination

A. **Illumination PER Package –** Coordinate with City of Killeen and Electrical Service Provider responsible for maintaining illumination systems upon completion of construction to select decorative street lighting assemblies to be utilized for illumination photometric design. ENGINEER will provide typical anticipated pole

spacing for corridor, and anticipated construction cost for decorative illumination assemblies selected by City of Killeen for up to 10 different types of illumination poles in the Illumination PER Package Phase. Manufacture, Make, and Model of illumination pole and light assembly selection must be finalized prior to starting Photometric Study. This shall be completed prior to start of the 60% Design Milestone Phase. Solar powered illumination will be discussed with Oncor for street lights and will be utilized in appropriate locations.

B. **Illumination Photometric Study –** Continuous street illumination will be designed in accordance to requirements of Texas Department of Transportation Highway Illumination Manual utilizing Illuminance and Luminance Design Values for Minor Arterials with Commercial General Land Use. The photometric modeling will be completed utilizing AGI 32 lighting software. The photometric model and plan sheets will be refined per client review comments.

C. **Illumination Layout Roll Plot –** Prepare illumination roll plot showing illumination pole locations on proposed roadway and light intensity measurements on 10' grid.

D. **Illumination Circuit Design, Electrical Service Design, Layouts, and Details**

i. Coordinate proposed electrical service locations with Electrical Service Provider. Conduct 11 meetings with electrical service provider to determine electrical service locations and lighting selections. (Limit 11 Meetings)

ii. Design conduit runs, circuits in accordance with Oncor Standards for Ground boxes and conduit. Design voltage drop and wire sizing in accordance with TxDOT Standards (Limit: 14 Circuits).

iii. Design size conductors and electrical services (Limit: 4 Services) in accordance to Texas Department of Transportation Highway Illumination Manual and National Electric Code (NEC).

iv. Prepare illumination plan sheets showing illumination pole location, conduit runs, conductor size and lengths, and proposed electrical services locations.

v. Prepare illumination circuit line diagrams for each illumination circuit.

vi. Foundations for illumination assemblies will follow TxDOT and/or Oncor standards. The design and use of non-standard foundations is excluded from this scope.

vii. Design electrical service drops with one branch circuit to irrigation controller for proposed Urban Design irrigation systems (Limit 4

Services). Biweekly coordination meeting with landscape architect and irrigator for 60% and 90% milestone (24 meetings).

viii. Design conduit runs, conductor size and lengths, and proposed electrical service locations for Urban Design Pedestrian lighting at 4 corners of 2nd Street Intersection, 4 corners of 10th Street Intersection, and Northwest corner of Vally Road (Limit 9 Corners). This excludes additional intersections.

LANDSCAPE/URBAN DESIGN (Function Code 164)

The current conceptual design approach, developed in the prior preliminary design phase, anticipates a coordinated mix of streetscape zones with varied levels of design and periodic community gateways. This scope will build upon the previous concepts utilizing information and feedback provided by the Client based on the anticipated landscape architecture construction cost developed in the schematic plus escalation.. These Landscape Architectural Services will address the design of the following program elements within the designated streetscape zones, subject to compliance with the Client's directives and proposed construction budget. Coordination tasks listed are based on landscape architecture being performed in a supporting role to the engineering lead of these tasks.

- Integration of a unified streetscape design with the project engineering;
- Coordination of streetscape improvements with driveway consolidations;
- Coordination of sidewalk layouts with Engineer's proposed right of way and curbline geometry;
- Coordination of curblines to accommodate Landscape Planting Beds and Parallel Parking;
- Coordination of underdrains through landscape planting beds with tree plantings;
- Bike Lane design coordination with corridor design aesthetics;
- Pedestrian Curb Ramp facility design coordination;
- Schematic Lighting Design coordination;
- Light Standards, Traffic Signal Hardware and Street Signage hardware aesthetic coordination;
- Landscape Design coordination with proposed Signage;
- Coordination with local agencies regarding approval of Landscape Construction Documents;
- Sidewalk and Pedestrian Walkway layouts with periodic Special Paving;
- Special Pavement design at sidewalks, crosswalks and selective roadway areas;
- Planting design for medians, gateways, parkways and right of way planters;
- Landscape soil conditions, including soil cells and/or structural soil volumes;
- Landscape Irrigation system;

- Grading of landscape areas based on engineering design of Roadways and Right of Ways;
- Site Furnishings selections and designs;
- Gateway Feature layouts and elements design;
- Landscape Specification for plants, planters, landscape soils, specialty hardscapes and irrigation;
- Landscape Bid Item designations and quantities.

1. 60% Design Development (DD)

The Design Development effort will focus on confirming the scope of improvements relative to Client's construction budget, resolving the aesthetic design of features, confirming materials/product selections and coordinating plan layouts. The DD design process will include the following.

- Review and comment on engineering plans and conditions for issues affecting landscape improvements at two intervals within this design stage. This is proposed to occur at the start of this design stage and around the mid-point.
- Update plan layouts based on design directives proposed by BGE and client comments from the 30% stage. Plan layouts shall be CADD drafted along the entire corridor at 1"=20' scale and formatted to project sheets.
- Coordinate plan layouts with the project engineering alignments, utility routines and proposed right of way acquisitions. This will include irrigation crossings, sleeving, mainline routing and usual valve placements. Identify irrigation power source requirements, water meter locations and size requirements for coordination with utility designs. Coordinate conditions for special soil backfill volumes along portions of the corridor. Identify issues requiring client input and feedback.
- Coordinate Plan Layouts with proposed streetlighting layouts prepared by engineering. Identify issues requiring client input and feedback.
- Refine the design of proposed landscape features to confirm material selections, colors, patterns, products, dimensional requirements and compliance with client's construction budget. This may include preliminary detailing, representative material and/or product photos and technical information. Items to be addressed may include special paving, paving edge restraints, crosswalk enhancements, site furnishings, signage and signal enhancements, gateway features, specialty soil volumes, preliminary plant list, irrigation product recommendations or other conditions to be determined.

- Prepare and submit final Design Development Documents to Client in the form of plans, preliminary details, specifications list, materials schedule and OPCC. Present final Design Development package to client in a project meeting. Address comments received in next phases of this scope.

The end goal of this phase is to confirm project layouts, aesthetic design details and material selections to be documented in greater detail within the next design stage.

2. 90% Construction Documents (CD)

Obtain client feedback from prior design stage and confirm actions to be taken to address issues identified. Prepare final plans, specifications and OPCC's that detail the design intent developed for the approved program improvements in anticipation of one comprehensive bid package. Final program of improvements shall be those estimated to fit within client's anticipated construction budget. Incorporate updates to plan layouts based on 60% client feedback. Develop dimensional layouts and technical detail references for proposed improvements. Cross-coordinate design between the various design disciplines. Construction Documents will include, but may not be limited to:

- Cover Sheet and Sheet Index;
- General and category-specific notes;
- Layout Plan(s) with dimensioning and key location coordinates;
- Hardscape Details and plan references;
- Planting Plan(s), Plant List and Details;
- Landscape Irrigations Plan(s) and Details;
- Technical Specifications based on TxDOT standards with recommended supplemental conditions;
- Updated Opinion of Probable Construction Cost (OPCC);
- Conduct a QA/QC Review of the landscape PS&E prior to 90% submittal.
- Submit unsealed PS&E for the landscape design at the 90% stage of final design. Present the 90% Construction Documents package to client in a project meeting. Address client review comments in the next design stage.

3. 100% Construction Documents (CD)

Complete the construction documents to create a full set of PS&E documents for bidding and construction of the proposed improvements.

- Obtain client feedback from prior design stage and confirm actions to be taken to address issues identified.
- Coordinate the improvements with the other design disciplines.
- Bid Item quantities will be estimated and tabulated to Bid Form(s) for use in bidding and construction.
- Conduct a QA/QC review in advance of the 100% submittal.
- Submit signed and sealed PS&E to client.

4. Specialty Features

Prepare Construction Documents for Client selected Gateway 1, 2 and 3 (Gateway 4 excluded) structures shown within the 30% Urban Design conceptual package such as Art Wall(s), Landmark Features, Arbors, Planter Walls, Structure Foundations, Piers and anchorages. Perform design collaboration with the Structural Engineer to establish the design of these features at the 60% stage submittal and provide final design progress drawings at the 90% stage and construction documents for the 100% submittal, including specifications and opinion of probable construction costs (OPCC) for specialty components. This task scope of work and fee will be confirmed by written submittal approved in writing by Client and Consultant following client confirmation of design scheme and Gateway Feature selections. Until that time, this task is tentatively estimated as a fee allowance subject to confirmation by Consultant's written submittal and Client approval of specific scope and fee. This estimate does not include additional geotechnical analysis which may be required for structural design.

5. Art Collaboration

BGE will assist the City with Artist solicitations and reviews. This task includes a one-time (1) effort by BGE to research and recommend names of three to five (3-5) artists for inclusion in a City issued request for artist qualifications and proposal submittals. Up to two (2) online coordination/review meetings with City staff, one (1) day of participation in online artist interviews and a written final recommendation of artist selection and design reasoning are included. This task will be performed during the 90% and 100% stage work efforts.

6. Maintenance Specification

Create one (1) comprehensive maintenance regiment for landscape, specialty hardscape and irrigation improvements included in the Project final design for implementation by City and/or private forces including task descriptions, recommended frequency and time of year scheduling. One (1) Draft and one (1) Final OPCC for annual maintenance cost will be prepared. Means and methods are not included. Participate in up to three (3) online coordination meetings with City staff, City maintenance company personnel and/or private

stakeholders identified by City. Meetings will be organized, orchestrated and coordinated by City staff. This task will be performed during the 90% and 100% stage work efforts for inclusion in the Project Bid package.

7. PROWAG/RAS Coordination

Participate in reviews of the recently adopted PROWAG (Public Right of Way Accessibility Guidelines) and TAS (Texas Accessibility Standard) led by the Project designated RAS (Registered Accessibility Specialist) at 60%, 90% and 100% stages for pedestrian related design features. BGE will review PROWAG criteria and potential solutions for non-standard TxDOT Pedestrian Facility Curb Ramp configurations to meet PROWAG, as may be appropriate to Project conditions.

8. Independent Cost Review

Obtain a construction cost estimate for streetscape hardscape/landscape improvements from a specialty contractor based on the 60% stage of Urban Design PS&E development.

9. Landscape Meetings, Strip Map Preparation and Visualizations

Address relevant landscape design and documentation issues throughout the project process in online and in-person client-related meetings organized and managed by the client and BGE project manager. These meetings are each intended to be one (1) to three (3) hour duration, plus associated meeting coordination, depending on issues at the time of the meetings.

- Attend an in-person kick-off meeting with the client and project team to review final deliverables from the preliminary design phase and to obtain client directions for the project design.

- Participate in twenty-three (23) monthly meetings with the client and project team to present and coordinate landscape related issues. Eighteen (18) of these meetings will be attended online with in-person attendance at five (5), intended as one per design stage.

- Participate in four (4) online meetings with client and outside agencies or organizations (such as utility providers, property associations, grant organization, etc.).

- Participate in three (3) online meetings to review accessibility issues and/or review comments with the project designated Registered Accessibility Specialist (RAS). This will include a project introduction briefing, a project layout conditions meeting and a final plans review meeting.

- Attend one (1) Public Meeting during Task C organized by the client and project team to address landscape issues and questions utilizing previously prepared project

plans and renderings. This task includes the preparation of four (4) static perspective 'Lumion' visualizations of the proposed right of way design, based on the completed sixty (60%) percent design, reviewed with client in draft and final format. Views will be selected at different points within the corridor based on design conditions at the time of the meeting. Two of the views will be at the same locations previously illustrated in the Preliminary Design by BGE. Buildings along the corridor will be shown as neutral background boxes without elevational detail specific to particular locations. A color rendered, forty (40) scale strip map plan of the corridor will also be provided depicting general plan conditions within the proposed right of way at a detail level similar to the Preliminary Design phase strip map prepare by BGE.

- Participate in one (1) online pre-bid meeting and one online bid assessment meeting with the client and project team (2 meetings) during Task D.

BID PHASE SERVICES (Function Code 170)

1. Bid Phase Services

A. **Project Manual Development –** Prepare project manual utilizing front-end documents and specifications provided by City including bid items, contract, and special conditions.

B. Pre-bid Meeting Attendance –Provide bidding support services, including assistance with responding to bidder questions, attend pre-bid meeting, and prepare minutes. The agenda will be prepared by BGE.

C. Respond to Bidders' Questions – Prepare Responses to Bidders' questions.

D. Bid Evaluations and Negotiations – Tabulate, evaluate bids, and make award recommendation.

DELIVERABLES ITEMS REQUIRED FROM THE ENGINEER

The ENGINEER will make 60%, 90% and 100% PS&E submittals. All submittals are intended as a means of obtaining City review comments which will be addressed in the subsequent submittals.

PS&E 60% Review Submittal

1. Address comments from 30%
2. Begin public engagement
3. Ongoing utility coordination
4. Additional survey

5. 25% ROW Negotiations
6. Revised typical sections and cross sections to reflect more complete design
7. Traffic Control Plan
8. Draft Geotechnical Report

PS&E 90% Review Submittal

1. Address comments from 60%
2. Public engagement event
3. Ongoing utility coordination
4. 35% ROW negotiations
5. Final Geotechnical Report
6. Preliminary Construction Time Determination

PS&E 100% Review Submittal

1. Finalize public engagement
2. Ongoing utility coordination
3. 40% ROW negotiations
4. Final signed and sealed plans.
5. Completed TDLR Project Registration Form
6. Updated Construction Time Determination

Assumptions

1. The scope and fee assume a project design duration of up to 24 months.
2. The project is anticipated to be environmentally cleared through TxDOT as a Categorical Exclusion (CE) for the entire limits of the new proposed right-of-way (ROW)
3. All telecommunication utilities west of N 10th St will be constructed in joint duct or trench facilities. These utilities will be allowed up to two (2) ducts to utilize for current infrastructure as well as future growth.

4. There are twelve (12) utility owners within the Rancier Avenue Project Limits. All utility providers will be responsible for their own utility design and will coordinate with the Engineer to define and locate the conduits within the proposed duct bank. Utility providers will also coordinate with the Engineer to locate and limit the number of access points to 30.

5. Test holes will be excavated using vacuum excavation equipment.

6. Right-Of-Way (ROW) permits from the Owner will be required. The Rios Group will obtain all required Owner permits and ensure that coordination and compliance with the Owner is provided.

7. Designed traffic control plans for test holes will not be required.

8. Pavement coring/repair will be required at twenty (20) locations. The Rios Group can core pavement up to a depth of 12 inches. The Rios Group will backfill with appropriate volume of sand, tamp each layer and place ready mix to repair asphalt surfaces or epoxy concrete cores in place, flush with the surrounding surface for concrete surfaces.

9. All bank processing fees for lienholder partial or full releases are paid by the Owner at parcel closing.

10. All attorney fees for preparation of partial or full releases of liens are paid by the Owner at parcel closing.

11. City of Killeen will purchase title insurance for all right of way acquisitions. Cost of title insurance and recording fees will be paid by the City at closing and are not included in this contract.

12. Attorney fees for preparation of partial or full lien releases paid by ROW Service Provider will be reimbursed at closing by the City. In addition, any processing fees charged by the lienholder for partial or full lien releases that are paid by ROW Service Provider will be reimbursed at closing.

13. City will issue payment to any property owners deemed eligible to receive relocation assistance payments by the relocation assistance agent.

14. Parcels requiring title curative work prior to closing by ROW Service Provider which include Abstracts of Judgments, bankruptcy, foreclosures and tax liens will be invoiced as additional services at $160 per hour, not to exceed $3,200 per parcel.

15. Meetings exceeding the maximum of three (3) meetings with the landowner during the initial offer phase invoiced at $160 per hour

16. Meetings exceeding the maximum of one (1) meeting with the landowner after the final offer letter invoiced at $160 per hour

17. This project will be awarded to its eventual contractor as a competitive sealed proposal.

18. There will be a single bid for utilities and roadway construction. The ENGINEER will work with the City during final design and after coordination with existing utilities to evaluate the need or preference to bid the utilities and roadway construction, requiring additional services.

Exclusions

1. Legal advice, recommendations, or analysis.
2. ROW hearing services.
3. Expert witness services.
4. Retaining wall design.
5. Temporary Traffic Signal layouts.
6. Redesign of illumination circuit and assemblies to incorporate solar power.
7. Foundation design for illumination assemblies outside of TxDOT and Oncor standards.
8. TxDOT Utility Conflict Exhibits
9. Electrical distribution or transmission design of any kind
10. Splice diagrams of any kind
11. Any building-specific mechanical, electrical or plumbing engineering of any kind
12. The locating of private service lines, irrigation lines and detailed vault investigations.
13. Flowable fill for backfill of test holes,
14. Full-section pavement repair (including sidewalks) if test holes are located within a sidewalk section
15. Excavation in rock, or to a depth greater than 18 feet, is considered beyond the scope of this proposal.
16. Historical Studies Research Design, Historic Resources Reconnaissance Survey, and coordination with the Texas Historical Commission (THC).
17. Agency coordination for protected species.
18. USACE coordination

19. Additional hazardous materials investigations outside of this scope of services, including special considerations, or other commitments will be the responsibility of the Owner and are excluded from this scope of services.

20. Changes to the parcel including but not limited to plan changes, splits of the parcel, re-appraisal, plat changes, survey changes, or other changes beyond the control of Right of Way Service Provider.

21. Revised or updated offer letters as a result of appraisal updates

22. Coordination with landowners regarding updating of building electrical and telecommunication services, including but not limited to the location and placement of items such as electrical switchgears, transformers, telecommunication pedestals, meters, necessary easements.

23. Specialty Signage and Wayfinding

24. Custom-designed Light Fixtures

25. Irrigation Pumping Plant Design

26. Bus Shelters and/or Facilities

27. Gateway 4 Improvements (38th Street vicinity)

28. North Killeen/Rancier Corridor Urban Design Coordination

29. Rancier Corridor Urban Design Guideline/Standards

30. Phased PS&E packages

31. Construction Management Coordination

32. Contractor Pre-Qualifications

33. Horticultural Soil Testing

34. Construction Phase Services

PROJECT NAME: RANCIER AVE **EXHIBIT D-3 - FEE SCHEDULE**

FROM FORT HOOD ROAD (SH 95) TO 38th STREET

FC	DESCRIPTION	BGE	The Rios Group	Dianna Tinkler	TOTAL
FC 120	ENVIRONMENTAL COMPLIANCE	$24,570.00			$24,570.00
FC 121	PUBLIC INVOLVEMENT	$77,530.00			$77,530.00
FC 130	UTILITY INVESTIGATION AND ADJUSTMENT COORDINATION	$223,198.00	$ 10,711.45		$233,909.45
FC 131	WATER AND WASTEWATER UTILITY ENGINEERING	$398,375.00			$398,375.00
FC 132	DUCT BANK DESIGN	$262,025.00			$262,025.00
FC 133	ELECTRIC UTILITY PRELIMINARY ENGINEERING REPORT AND CIVIL INFRASTRUCTURE DESIGN	$553,020.00			$553,020.00
FC 134	RIGHT-OF-WAY ACQUISITION	$30,750.00		$ 1,123,070.00	$1,153,820.00
FC 145	PROJECT MANAGEMENT	$114,645.00			$114,645.00
FC 150	FIELD SURVEYING	$678,705.00			$678,705.00
FC 160	ROADWAY DESIGN CONTROLS	$510,380.00			$510,380.00
FC 161	DRAINAGE	$322,423.00			$322,423.00
FC 162	SIGNING, PAVEMENT MARKINGS, AND SIGNALIZATION	$601,265.00			$601,265.00
FC 163	MISCELLANEOUS (ROADWAY)	$422,328.00			$422,328.00
FC 164	LANDSCAPE/URBAN DESIGN	$987,790.00			$987,790.00
FC 170	BID PHASE SERVICES	$53,280.00			$53,280.00
	SUBTOTAL LABOR EXPENSES	$5,260,284.00	$10,711.45	$1,123,070.00	**$6,394,065.45**
	EXPENSES	$34,235.50	$25,000.00	$ 66,250.00	**$125,485.50**
	UNIT COST EXPENSES		$65,735.00	$ 811,125.00	**$876,860.00**
	TOTAL	$5,294,519.50	$101,446.45	$2,000,445.00	**$7,396,410.95**

BGE, INC.

PROJECT NAME: RANCIER AVE

FROM FORT HOOD ROAD (SH 195) TO W S YOUNG DR

EXHIBIT D-3 - FEE SCHEDULE

TASK DESCRIPTION	Senior Project Mgr	Project Manager	Project Engineer	QC Manager	Utility Engineer	EIT	Senior Engineer Tech	Senior CADD Op	Senior ENV	ENV Scientist	GIS Specialist	LA/UD PIC	Senior LA / UD	LA/UD	LA Designer	Irrigator PIC/QA-QC	Irrigator PM	Irrigation Designer	Structural Engineer	Structural Designer	Admin/ Clerical	Total Hours	TOTAL LABOR HRS. & COSTS
FC 120 ENVIRONMENTAL COMPLIANCE																							**$24,570.00**
1. TxDOT Categorical Exclusion																							
A. Draft and Final WPD I and WPD II				1					2	10												13	$2,075.00
B. Draft and Final Project Area Maps				1					2	20												23	$3,425.00
2. Archaeological Studies																							
A. Draft and Final Archaeological Background Study				1					4	20												25	$3,865.00
3. Historical Studies																							
A. Draft and Final Historical Studies PCR				1					4	18												23	$3,595.00
4. Threatened and Endangered Species																							
A. Draft and Final Species Analysis Summary				1					2	12												15	$2,345.00
B. Draft and Final Species Analysis Form				1					2	12												15	$2,345.00
5. Water Resources																							
A. Surface Water Analysis Form & 404 Table				1					4	14												19	$3,055.00
6. Hazardous Materials																							
A. Update Draft and Final Hazardous Materials ISA				1					4	20												25	$3,865.00
FC 121 PUBLIC INVOLVEMENT																							**$77,530.00**
1. TxDOT Public Involvement																							
A. Conduct In-person Public Hearing	8	8	8	8					8	8			8									56	$13,160.00
2. Additional Public Involvement																							
A. Develop Public Engagement Plan		8		2					30	100											20	160	$25,710.00
B. Coordinate Hearing Announcements and Promotions		8		2					16	20											9	55	$10,180.00
C. Develop Materials, Web Content and Final Electronic Copies		8		2					20	60											2	92	$15,410.00
D. Develop Post Public Hearing Documentation		8		2					20	36											8	74	$13,070.00
FC 130 UTILITY INVESTIGATION AND ADJUSTMENT COORDINATION																							**$223,198.00**
1. Utility Engineering Investigation (Provided by The Rios Group)																							
2. Utility Adjustment Coordination																							
A. Utility Coordination	38	250		20	60																	368	$88,840.00
B. Utility Agreements for Utility Adjustments	8	80		8																	16	112	$27,280.00
C. Coordination of Engineering Activities	25	225		10	72		150															482	$107,078.00
FC 131 WATER AND WASTEWATER UTILITY ENGINEERING																							**$398,375.00**
1. Water and Wastewater Utility Engineering																							
A. Water and Wastewater Design	25	175	398	127		768		1069														2562	$398,375.00
FC 132 DUCT BANK DESIGN																							**$262,025.00**
1. Duct Bank Design																							
A. Duct Bank Design	8	146	340	49		455		653														1651	$262,025.00
FC 133 ELECTRIC UTILITY PRELIMINARY ENGINEERING REPORT AND CIVIL INFRASTRUC																							**$553,020.00**
1. Electric Utility Preliminary Engineering Report																							
A. Electric Delivery Preliminary Engineering Report	11	100	197	26		252		257														843	$141,840.00
B. Memorandum of Understanding	4	12	19	4		50		37														126	$20,455.00
C. Electric Civil Infrastructure Design	29	230	273	69		836		1170														2607	$390,725.00
FC 134 RIGHT-OF-WAY ACQUISITION																							**$30,750.00**
6. Right-of-Way Acquisition Services (Provided by Tinkler)																							
7. Relocation Assistance Agent (Provided by Tinkler)																							
8. Appraiser (Provided by Tinkler)																							
9. Review Appraiser (Provider by Tinkler)																							
A. Coordination for Title, Acquisition Limits	9	35	90																			134	$30,750.00
FC 145 PROJECT MANAGEMENT																						0	**$114,645.00**
1. Meetings																							
A. Progress Meetings	48	48	48																		14	158	$37,860.00
2. General Contract Administration																							
A. Monthly Invoice and Progress Reports	8	33	33																		58	132	$26,410.00
B. Subconsultant Management	28	56	56			56																196	$41,860.00
C. Develop and Maintain Design Schedule	5	28																				33	$8,515.00
FC 150 FIELD SURVEYING																							**$43,030.00**
1. Right-of-Way Parcel Map Exhibits (Provided by BGE Survey)																							
2. Survey Coordination (116 parcels)	12	58	116																			186	$43,030.00
FC 160 ROADWAY DESIGN CONTROLS																							**$510,380.00**
1. PS&E Development																							
A. Geometric Design	5	24	60	8		320		120														537	$80,675.00
B. Parcel Access (up to 70 parcels)			156																			156	$33,540.00
C. ROW Map	1	4	8			20																33	$5,815.00
D. Design Cross Sections		2	28	10		140		140														320	$44,380.00
E. Typical Sections	5	12	28	11		60		88														204	$31,670.00
F. Plan & Profile Drawings (50 scale)	16	80	160	24		420		120														820	$138,040.00
G. Alignment Data Sheets						5		5														10	$1,250.00
H. Earthwork Quantities		2	14			32																48	$8,000.00
I. Driveway Details (130 Driveways / side streets)		28	140	16		280		160														624	$98,600.00
J. Intersection Details (9 Intersections)		5	28	16		80		55														184	$29,105.00
K. Removal Plans		2	16	8		80		55														161	$23,480.00
L. Title Sheet, Project Layout, Index of Sheets	1	4	14	8		22		56														105	$15,825.00

BGE, INC.

PROJECT NAME: RANCIER AVE

FROM FORT HOOD ROAD (SH 195) TO W S YOUNG DR

EXHIBIT D-3 - FEE SCHEDULE

FC 161	**DRAINAGE**																						**$322,423.00**
1.	PS&E Development																						
A.	Drainage Area Map Finalize			2	1		8															11	$1,835.00
B.	Hydrologic & Hydraulic Calculations	2	8	60	12		120		4			16										222	$37,702.00
C.	Culvert Analyses & Design	2	16	60	20		120		120													338	$53,230.00
D.	Storm Drain Plans	2	8	80	20		200		200													510	$75,490.00
E.	Prepare Quantities & Cost Estimate		12	24	12		20		36													104	$18,400.00
F.	Details and Specifications		8	32	12		20		60													132	$21,740.00
G.	Drainage Report	4	8	32	4		40					8										96	$17,536.00
H.	Temporary Construction Phased Storm Drain Plans	8	24	60	16		120		120													348	$55,780.00
I.	Coordination with Utilities	2	20	40			80		60													202	$32,050.00
J.	Coordination with City of Killeen	6	6	12			16		6													46	$8,660.00
FC 162	**SIGNING, PAVEMENT MARKINGS, AND SIGNALIZATION**																						**$601,265.00**
1.	PS&E Development																						
A.	Signing & Pavement Markings		12	55	16		84		160													327	$48,805.00
B.	Traffic Signal Layouts		5	16			40															61	$10,315.00
i.	Gilmer St		16	40	11		55															122	$23,515.00
ii.	Valley Rd		16	40	11		55															122	$23,515.00
iii.	N College St		16	40	11		55															122	$23,515.00
iv.	2nd St		16	40	11		55															122	$23,515.00
v.	4th St	2	24	59	16		80															181	$35,115.00
vi.	N Gray St		16	40	11		55															122	$23,515.00
vii.	8th St	2	24	59	16		80															181	$35,115.00
viii.	10th St		16	40	11		55															122	$23,515.00
ix.	Alexander St		16	40	11		55															122	$23,515.00
x.	WS Young Dr		16	40	11		55															122	$23,515.00
xi.	PHB		16	40	11		55															122	$23,515.00
C.	Miscellaneous Traffic Engineering	2	12	22			16															52	$10,580.00
D.	ITS Infrastructure Design	64	160	460			660															1344	$249,700.00
FC 163	**MISCELLANEOUS (ROADWAY)**																						**$422,328.00**
1.	Miscellaneous Roadway																						
A.	Cost Estimates	16	18	32	8		40															114	$23,750.00
B.	Traffic Control Plans, Detours, Sequence of Construction	8	60	190	12		476		170													916	$147,110.00
C.	Storm Water Pollution Prevention Plan		11	40	6		80		180													317	$44,115.00
D.	Quantity Summaries		11		5		55															71	$11,930.00
E.	Specifications and General Notes		6	32	2																	40	$8,980.00
F.	Standard Details			2	1		32															35	$5,195.00
G.	Construction Time Determination	2	16		2		40															60	$10,800.00
2.	Illumination																						
A.	Illumination PER Package	6	6	27																		39	$8,985.00
B.	Illumination Photometric Study	3	16	55	17	13	153	20														277	$48,832.00
C.	Illumination Layout Roll Plot		3	13	5		55	104														180	$32,965.00
D.	Illumination Circuit Design, Electrical Service Design, Layouts and Details	12	22	88	30	14	155	100														421	$79,666.00
FC 164	**LANDSCAPE/URBAN DESIGN**																						**$987,790.00**
1.	60% Design Development												16	304	380	456	4	24	60	30	60	16	1350	$258,020.00
2.	90% Construction Documents												24	368	460	552	8	40	80	40	80	24	1676	$321,860.00
3.	100% Bid Documents												32	176	220	264	8	40	80	30	60	40	950	$186,480.00
4.	Specialty Features												20	40	80	24				20	40		224	$49,200.00
5.	Art Collaboration												4	40	60	24							128	$26,220.00
6.	Maintenance Specification												8	80	40	24							152	$33,840.00
7.	PROWAG/RAS Coordination												2	20	40	12							74	$15,060.00
8.	Indepenedent Cost Review												2	16	20	8						100	146	$24,620.00
9.	Landscape Meetings, Strip Map Preparation, and Visualizations												25	101	89	175							390	$72,490.00
FC 170	**BID PHASE SERVICES**																						**$53,280.00**
1.	Bid Phase Services																						
A.	Project Manual Development	12	24	30			36															102	$20,910.00
B.	Pre-bid Meeting Attendance	6	6												6							18	$4,350.00
C.	Respond to Bidders' Questions		20	20										20	20							80	$18,500.00
D.	Bid Evaluations and Negotiations		4	8			8							4	16	12						52	$9,520.00
	HOURS SUB-TOTALS	455	2393	4200	770	159	7205	374	5101	118	350	24	133	1177	1431	1551	20	104	220	120	240	307		26,452
	CONTRACT RATE PER HOUR	$275.00	$255.00	$215.00	$285.00	$149.00	$140.00	$195.00	$110.00	$220.00	$135.00	$97.00	$280.00	$260.00	$195.00	$125.00	$95.00	$280.00	$200.00	$150.00	$290.00	$150.00		
	TOTAL LABOR COSTS	$125,125.00	$610,215.00	$903,000.00	$219,450.00	$23,691.00	$1,008,700.00	$72,930.00	$561,110.00	$25,960.00	$47,250.00	$2,328.00	$37,240.00	$306,020.00	$279,045.00	$193,875.00	$1,900.00	$29,120.00	$44,000.00	$18,000.00	$69,600.00	$46,050.00		$4,624,609.00
	SUBTOTAL																						**$4,624,609.00**

BGE, INC.
PROJECT NAME: RANCIER AVE
FROM FORT HOOD ROAD (SH 195) TO W S YOUNG DR

EXHIBIT D-3 - FEE SCHEDULE

FUNCTION CODE	TOTAL COSTS	TOTAL DIRECT EXPENSE	TOTAL LABOR COSTS	Senior Project Manager	Project Manager	Project Engineer	QC Manager	Utility Engineer	EIT	Senior Engineer Tech	Senior CADD Operator	Senior ENV	ENV Scientist	GIS Specialist	LA/UD PIC	Senior LA / UD	LA/UD	LA Designer	Irrigator PIC/QA-QC	Irrigator PM	Irrigation Designer	Stuctural Engineer	Sturctural Designer	Admin/ Clerical		TOTAL MH BY FC
	$4,658,844.50	$34,235.50	$4,624,609.00	455	2393	4200	770	159	7205	374	5101	118	350	24	133	1177	1431	1551	20	104	220	120	240	307		26452
SUBTOTAL LABOR HOURS				455	2393	4200	770	159	7205	374	5101	118	350	24	133	1177	1431	1551	20	104	220	120	240	307		26452
SUBTOTAL LABOR EXPENSES	$4,658,844.50	$34,235.50	$4,624,609.00	1.7%	9.0%	15.9%	2.9%	0.6%	27.2%	1.4%	19.3%	0.4%	1.3%	0.1%	0.5%	4.4%	5.4%	5.9%	0.1%	0.4%	0.8%	0.5%	0.9%	1.2%		

OTHER DIRECT EXPENSES	QUANTITY	UNIT	RATE	
Mileage	3,150	mile	$ 0.70	$2,205.00
Hotel	8	night	$ 250.00	$2,000.00
Meals	8	day	$ 56.00	$448.00
Photocopies B/W (8 1/2"x11")	1,550	each	$ 0.10	$155.00
Photocopies B/W (11" X 17")	500	each	$ 0.20	$100.00
Photocopies Color (8 1/2" X 11")	500	each	$ 0.75	$375.00
Photocopies Color (11" X 17")	500	each	$ 1.25	$625.00
Large Format Plotting	10	SF	$ 2.25	$22.50
Foam core exhibit boards	12	each	$ 75.00	$900.00
Venue Rental	1	each	$ 1,000.00	$1,000.00
Audio - Equipment Rental	1	each	$ 500.00	$500.00
Audio-Visual Equipment Rental	1	each	$ 600.00	$600.00
Postage	100	each	$ 0.55	$55.00
Certified Mail	100	each	$ 1.50	$150.00
Professional Narrator	1	event	$ 750.00	$750.00
Translator (English to Spanish, other language as appropriate, or Sign Language	1	event	$ 600.00	$600.00
Misc. (meeting supplies, signage, etc.)	1	each	$ 250.00	$250.00
Court Reporter (Public Hearing and Transcription)	1	each	$ 1,000.00	$1,000.00
Custodian for Pubic Hearing	6	hours	$ 100.00	$600.00
Newspaper Advertisement - Community Newspaper	1	each	$ 3,000.00	$3,000.00
Sound Technician for Public Hearing	1	event	$ 450.00	$450.00
Misc. (meeting supplies, signage, etc.)	1	each	$ 250.00	$250.00
Traffic Counts (Quality Counts)	1	LS	$ 4,200.00	$4,200.00
TDLR Review	2	each	$ 5,000.00	$10,000.00
TDLR Inspecton	1	each	$ 4,000.00	$4,000.00
SUBTOTAL DIRECT EXPENSES				$34,235.50

SUMMARY	
TOTAL LABOR COSTS	$4,624,609.00
NON-SALARY (OTHER DIRECT EXPENSES)	$34,235.50
GRAND TOTAL	$4,658,844.50

Rancier Avenue Design Survey, Killeen, TX BGE, Inc.				
TASKS	Crew Rate	RPLS	Senior Tech	Total
	$175	$195	$135	
150.2 Design Survey				
Additional survey for areas outside existing ROW				$0
Update DGN and TIN/Terrain				$0
QAQC and Final Updated Deliverables				$0
Sub Total				**$0**
Parcel Descriptions (for 103 Parcel Acquisitions)				
Obtain Boundary Monumentation data	1280			$224,000
Boundary Analysis		205	550	$114,225
Prepare exhibit maps		205	550	$114,225
Prepare exhibit Descriptions		365	365	$120,450
Address Comments		45	90	$20,925
QA/QC		90	180	$41,850
Sub Total				**$635,675**
Per Parcel				**$5,480**

Total Hours	1280	910	1735	
Total	**$224,000**	**$177,450**	**$234,225**	**$635,675**

The Rios Group

PROJECT NAME: Rancier Ave

PROJECT LIMITS: Fort Hood St to 38th ST

163.19 SUE Services

Labor	Rate	Assumed Quantity	Unit	SubTotal
Supervisory Engineer	$ 190.86	4	HR	$ 763.44
SUE Project Manager	$ 169.71	8	HR	$ 1,357.68
Professional Engineer	$ 165.19		HR	$ -
Asst. Project Manager	$ 118.30	16	HR	$ 1,892.80
EIT	$ 110.49		HR	$ -
CADD Tech	$ 74.84	60	HR	$ 4,490.40
Eng Tech	$ 74.67	4	HR	$ 298.68
Field Mgr	$ 127.23	15	HR	$ 1,908.45
Administrative	$ 81.39		HR	$ -
Subtotal				$ 10,711.45

Direct Expenses	Rate	Assumed Quantity	Unit	SubTotal
ROW Permit	$ 500.00	1	EA	$ 500.00
Traffic Control (Standard)	$ 1,000.00	4	DAY	$ 4,000.00
Traffic Control (Intersection)	$ 1,500.00	2	DAY	$ 3,000.00
Survey (RPLS)	$ 2,500.00	7	DAY	$ 17,500.00
				$ 25,000.00

QL "B" SUE Test Holes

Unit Rate - Depth	Rate	Assumed Quantity	Unit	Subtotal
One Designating Person	$ 160.00	120	EA	$ 19,200.00
Two Person Designating Crew	$ 250.00	50	EA	$ 12,500.00
Subtotal				$ 31,700.00

QL "A" SUE Test Holes

Unit Rate - Depth	Oustide Pavement Area	Assumed Quantity	Unit	Subtotal
0-5 Feet	$ 1,315.00	10	EA	$ 13,150.00
5-8 Feet	$ 1,600.00	7	EA	$ 11,200.00
8-13 Feet	$ 1,995.00	3	EA	$ 5,985.00
13-20 Feet	$ 2,575.00		EA	$ -
Over 20 Feet	$ 3,025.00		EA	$ -
Pavement Coring	$ 370.00	10	EA	$ 3,700.00
Subtotal				$ 34,035.00

Total Estimated Cost **$ 101,446.45**

Dianna Tinkler

PROJECT NAME: Rancier Avenue

PROJECT LIMITS: Fort Hood St to 38th ST

TASKS	SHTS	Project Manager	Right of Way Agent	Adminstrative Assistant	TOTAL HOURS	TOTAL COST
		$200.00	$160.00	$85.00		
FC 134 (134) Right-of-Way Acquisition						
___ ROW Acquisition Services		212	6,360	742	7,314	$ 1,123,070.00
SUBTOTAL	0	212	6,360	742	7,314	**$ 1,123,070.00**
LABOR TOTALS	**0**	**212**	**6360**	**742**	**7,314**	**$ 1,123,070.00**
		2.9%	87.0%	10.1%		

OTHER DIRECT EXPENSES	# OF UNITS	COST/UNIT	UNIT		
MILEAGE		0.58	mile		$ -
RENTAL CAR (Includes taxes and fees; Insurance costs will notbe reimbursed)		$65.000	day		$ -
RENTAL CAR FUEL		$100.00	day		$ -
Air Travel - In State - Short Notice (Coach)		$420.00	Rd/Trip/person		$ -
Lodging/Hotel (Taxes/fees not included)		$96.000	day/person		$ -
Lodging/Hotel (Taxes/fees)		$30.000	day/person		$ -
Meals (Excluding alcohol & tips) (Overnight stay required)		$50.000	day/person		$ -
OVERNIGHT MAIL - OVERSIZED BOX		$40.000	each		$ -
PHOTOCOPIES B/W (11" X 17")		$0.200	each		$ -
PHOTOCOPIES B/W (8 1/2" X 11")		$0.100	each		$ -
PHOTOCOPIES COLOR (11" X 17")		$1.25	each		$ -
PHOTOCOPIES COLOR (8 1/2" X 11")		$0.75	each		$ -
PLOTS (COLOR ON BOND)		$1.25	per sq. ft.		$ -
Reimbursables	106	$625.00	each		$ 66,250.00
					$ -
					$ -
					$ -
					$ -
SUBTOTAL DIRECT EXPENSES (FC 164)					$ 66,250.00

UNIT COST EXPENSES	# OF UNITS	COST/UNIT	UNIT		
					$ -
Appraisals	103	$5,985.000	Each		$ 616,455.00
Review Appraisals	103	$1,890.00	Each		$ 194,670.00
					$ -
SUBTOTAL UNIT COST EXPENSES (FC 164)					$ 811,125.00

SUMMARY

TOTAL COSTS FOR SUBCONSULTANT 1	$ 1,123,070.00
NON-SALARY (OTHER DIRECT EXPENSES) FOR SUBCONSULTANT 1	$ 66,250.00
NON-SALARY (UNIT COST EXPENSES) FOR SUBCONSULTANT 1	$ 811,125.00
GRAND TOTAL	**$ 2,000,445.00**