

PROFESSIONAL ENGINEERING SERVICES AGREEMENT

This Agreement is made between the City of Seguin, Texas (“City”), 205 North River Street, Seguin, Texas 78155 and BGE, Inc. (“Engineer”), 7330 San Pedro Ave., #202, San Antonio, Texas 78216, for the provision of professional engineering services in connection with the City’s implementation of a public works program, specifically the design and construction of the Rudeloff Road – Phase 2 Project (the “Project”), funded, in part, by funding from the Alamo Area Metropolitan Planning Organization (AAMPO).

ARTICLE 1 ENGINEER’S SERVICES AND RESPONSIBILITIES

1.1 STANDARDS OF PERFORMANCE

1.1.1 The Engineer will be responsible for the design, any preliminary engineering, and environmental services for the Project. The Project consists of providing environmental clearance, design and preparation of plans, specifications and estimate for the construction of Rudeloff Road from Huber Road to SH 123 (at FM 20) in Seguin, Texas, as more fully set forth in the attached Exhibit “B,” “Services to be provided by Engineer.”

1.1.2 The performance of all services by the Engineer in connection with this Agreement will be by persons appropriately licensed or registered under State, local and Federal laws governing their respective consulting disciplines. In performing all services under this Agreement, the Engineer will use that degree of care and skill ordinarily exercised for similar projects in the area by professional Engineers who possess special expertise in the types of services involved under this Agreement.

1.1.3 No work under this Agreement will be subcontracted by the Engineer without prior written approval from the City. Any work or services subcontracted under this Agreement will be specified by separate written Agreement and will be subject to each provision of this Agreement. Persons hired by the Engineer or its subcontractors shall not be employees of or have any contractual interest with the City. The subcontractors set forth in Exhibit D, attached hereto, are specifically approved by the City.

1.1.4 Any provisions in this Agreement pertaining to the City’s review, approval or acceptance of written materials prepared by the Engineer or its subconsultants, contractors, and subcontractors in connection with this Agreement will not diminish the Engineer’s responsibility for the services set forth herein.

1.1.5 Engineer will perform all of its services in coordination with the City. The Engineer will advise the City of data and information the Engineer needs to perform its services and the Engineer will meet with City representatives at mutually convenient times to assemble this data and information.

1.2 ADDITIONAL SERVICES/CHANGE IN SERVICES

1.2.1 Since the Engineer’s compensation is a fixed fee for Basic Services, including minor deviations from those described in this Agreement, compensation to the Engineer for Additional Services will only be for substantial deviations from the scope of services described in this Agreement.

1.2.2 Each material change (deletion or addition) in the services to be provided by Engineer must be authorized by the City on the Authorization of Change in Services form attached to this Agreement as

Exhibit E. Compensation for additional services will be in addition to that specified for Basic Services in accordance with Article 12 of this Agreement. The approval of the City's governing body is necessary for all additional services in which compensation would exceed \$50,000.00 at the discretion of the City Manager.

ARTICLE 2 THE CITY'S RESPONSIBILITIES

The City will:

2.1 Provide full information to the Engineer regarding the City's requirements for the Engineer's services under this Agreement. The City will furnish the Engineer with copies of official City design standards and construction standards, and other data and information in the City's possession needed by the Engineer at the Engineer's request.

2.2 Designate Mary Hamann, Assistant City Engineer as the City's Project Manager and authorized representative to act on the City's behalf with respect to this Agreement. The City will examine the documents and information submitted by the Engineer and promptly render responses to the Engineer on issues requiring a decision by the City during the design phase of the project.

2.3 Provide access to and make all necessary provisions for the Engineer to enter public and private property as required for the Engineer to perform its services under this Agreement.

2.4 Furnish to the Engineer all items set forth in Exhibit "A," "Services to be Provided by City" that is attached to this Agreement.

2.5 Bear all costs incidental to this Article.

ARTICLE 3 PAYMENTS TO THE ENGINEER

3.1 PAYMENTS ON ACCOUNT OF BASIC SERVICES. Payments for Basic Services will be made to Engineer monthly following receipt by City of Engineer's invoices and appropriate payment requisitions. The amounts of these invoices will be based upon the extent of work completed by the Engineer on a percentage basis within each phase of services, in accordance with Article 12 of this Agreement, less any disputed amounts, pending resolution thereof.

ARTICLE 4 ENGINEER'S RECORDS

4.1 All expense records of Engineer will be kept on a recognized accounting basis acceptable to the City and will be available to the City at mutually convenient times.

4.2 The City, its auditors, federal auditors, and state agencies that have monitoring or auditing responsibilities for this Agreement will have access to any books, documents, papers and records of the Engineer which are directly pertinent to this Agreement for the purpose of making audit, examination, excerpts, copying and transcriptions.

4.3 The Engineer will furnish to the City at such time and in such form as the City may require, financial statements including audited financial statements, records, reports, data and information, as the City may request pertaining to the matters covered by this Agreement.

ARTICLE 5 OWNERSHIP AND USE OF DOCUMENTS

5.1 All documents prepared by Engineer in connection with this Agreement will become the property of the City whether any project related to this Agreement is executed or not. City agrees such documents are not intended or represented to be suitable for reuse for another project by City or others. Any such reuse by City or those who obtained said documents from City without written verification or adaptation by the Engineer will be without liability or legal exposure to the Engineer.

5.2 The Engineer will retain all of its records and supporting documentation relating to this Agreement, and not delivered to the City, for a period of three years except in the event that the Engineer goes out of business during that period, it will turn over, to the City, all of its records relating to the Project for retention by the City.

ARTICLE 6 TERM; TERMINATION OF AGREEMENT

6.1 The term of this Agreement begins on the effective date established in the first paragraph of the Agreement and will end upon the Engineer's completion, and the City's acceptance of all services described in this Agreement unless this Agreement is terminated under Sections 7.2 or 7.3 below. The attached Exhibit "C" designates the proposed time for completion of the project; however said time schedule may be amended by agreement of the Parties. It is anticipated that this contract will end December 31, 2025.

6.2 This Agreement may be terminated by either party upon 15 calendar days prior written notice should the other party fail substantially to perform in accordance with its terms through no fault of the party initiating the termination.

6.3 This Agreement may be terminated at will by the City upon at least 15 calendar days prior written notice to the Engineer.

6.4 In the event of termination as provided in this Article, the Engineer will be compensated for all services performed to termination date which are deemed by the City to be in accordance with this Agreement. This amount will be paid by the City upon the Engineer's delivering to the City all information and materials developed or accumulated by the Engineer in performing the services described in this Agreement, whether completed or in progress. The expense of reproduction of these items will be borne by the City.

ARTICLE 7 INSURANCE AND INDEMNITY

7.1 The Engineer will indemnify, hold harmless and defend the City and its employees, agents, officers and servants from any and all lawsuits, claims, demands and causes of action of any kind arising from the negligent or intentional acts or omissions of the Engineer, its officers, employees or agents. This

will include, but not be limited to, the amounts of judgments, penalties, interest, court costs, reasonable legal fees, and all other expenses incurred by the City arising in favor of any party, including the amounts of any damages or awards resulting from claims demands and causes of action for personal injuries, death or damages to property alleged or actual infringement of patents, copyrights, and trademarks and without limitation by enumeration, all other claims, demands, or causes of action of every character occurring, resulting, or arising from any negligent or intentional wrongful act, error or omission of the Engineer and/or its agents and/or employees. This obligation by Engineer will not be limited by reason of the specification of any particular insurance coverage in this Agreement.

7.2 The Engineer will procure and maintain at Engineer's expense insurance with insurance companies authorized to do business in the State of Texas, covering all operations under this Agreement, whether performed by Engineer or Engineer's agents, subcontractors or employees. Before commencing the work the Engineer will furnish to the City a certificate or certificates in form satisfactory to the City, showing that Engineer has complied with the attached Exhibit "E."

ARTICLE 8 MISCELLANEOUS PROVISIONS

8.1 This Agreement is governed by and will be construed under the laws of the State of Texas. All obligations of both parties are performable and exclusive venue for any dispute arising under this Agreement is in Guadalupe County, Texas.

8.2 As to all acts or failures to act by either party to this Agreement, any applicable statute of limitations will commence to run and any alleged cause of action will be deemed to have accrued when the party commencing the cause of action knew or should have known of the existence of the subject act(s) or failure(s) to act.

8.3 The Engineer will not use funds received by it directly or indirectly under the terms of this Agreement for any partisan political activity or to further the election or defeat of any candidate for public office.

8.4 The Engineer hereby affirms that Engineer and Engineer's firm have not made or agreed to make any valuable gift whether in the form of service, loan, thing, or promise to any person or any of his/her immediate family, having the duty to recommend, the right to vote upon, or any other direct influence on the selection of Engineers to provide professional services to the City within the two years preceding the execution of this Agreement. A campaign contribution, as defined by the Texas Election Code or the Seguin City Code will not be considered as a valuable gift for the purposes of this Agreement.

8.5 In performing the services required under this Agreement, the Engineer will not discriminate against any person on the basis of race, color, religion, sex, national origin, age, disability or ancestry. The Engineer agrees not to engage in employment practices which have the purpose or effect of discriminating against employees or prospective employees because of race, color, sex, religion, national origin, age, disability or ancestry. A breach of this covenant may be regarded as a default by the Engineer of the Agreement.

8.6 All references in this Agreement to any particular gender are for convenience only and will be construed and interpreted to be of the appropriate gender. The term "will" is mandatory in this Agreement.

8.7 Should any provision in this Agreement be found or deemed to be invalid, this Agreement will be construed as not containing the provision, and all other provisions which are otherwise lawful will remain in full force and effect, and to this end the provisions of this Agreement are declared to be severable.

8.8 All services provided pursuant to this Agreement are for the exclusive use and benefit of the City.

8.9 In performing all services under this Agreement, the Engineer, its subcontractors, successors and assigns will comply with all local, state and federal laws.

8.10 The City's execution and performance under this Agreement will not act as a waiver by the City of any immunity from suit to which it is entitled under applicable law. The parties acknowledge that the City, in executing and performing this Agreement, is a governmental entity acting in a governmental capacity.

8.11 The City of Seguin is governed by the Texas Public Information Act (the "Act"), Chapter 552 of the Texas Government Code. This Agreement and all written information generated under this agreement may be subject to release under the Act. The Engineer will not make any reports, information, data, etc. generated under this Agreement available to any individual or organization without the written approval of the City.

8.12 The captions or headings included in this Agreement are for convenience only and in no way define, limit or describe the scope or intent of any provisions, articles, or sections of this Agreement.

8.13 In the event that the performance by either the City or the Engineer of any of its obligations under this Agreement is interrupted or delayed by events outside of their control such as acts of God, war, riot or civil commotion, then the party is excused from such performance for the period of time reasonably necessary to remedy the effects of such events.

8.14 In the event of a default or breach of this Agreement by the Engineer, the City reserves the right to choose among the remedies for the default or breach available to the City. These remedies may be used in conjunction with one another or separately, and together with any other statutory or common law remedies available to the City. Any failure by the City to enforce this Agreement with respect to one or more defaults by the Engineer will not waive the City's ability to enforce the Agreement after that time.

ARTICLE 9 SUCCESSORS AND ASSIGNS

9.1 The City and the Engineer, respectively, bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants of this Agreement. The City and the Engineer will not assign, sublet or transfer any interest in this Agreement without the prior written consent of the other.

9.2 The Engineer will notify the City, in writing, of any change in its partnership/ownership within 30 calendar days of such change.

**ARTICLE 10
EXTENT OF AGREEMENT**

10.1 This Agreement, including appendices and referenced attachments represents the entire and integrated Agreement between the City and the Engineer and supersedes all prior proposals, negotiations, representations or agreements either written or oral between the parties. In the event of a dispute between the City and Engineer regarding the intent of this Agreement, both parties agree that this Agreement will be construed in a manner consistent with the City's Request for Proposals, the Engineer's proposal response and the public record of the City Council's approval of this agreement as applicable. The Engineer's expenses for travel, office, production and other expenses associated directly or indirectly with this Agreement are included as part of the total fee. Except as to a change in the scope of services, the compensation for which does not exceed \$50,000.00, this Agreement may be amended only by separate written instrument approved by the City's governing body and signed by both the City and Engineer.

10.2 Any exhibits and/or attachments attached to this Agreement are incorporated by reference into this Agreement as though included verbatim herein.

10.3 In the event of any conflict between the Agreement and the provisions of any exhibit or attachment to this Agreement, this Agreement will govern and control.

**ARTICLE 11
NOTICES**

11.1 Notices required under this Agreement will be provided by the parties to one another by certified mail, return receipt requested, or by confirmed facsimile transmission, to the following addresses:

To the City:

Steve Parker
City Manager
205 N. River Street
Seguin, Texas 78155

To BGE, Inc.:

Erin Gonzales, PE
Director of Transportation
7330 San Pedro Ave, STE 202
San Antonio, Texas 78216

**ARTICLE 12
BASIS OF COMPENSATION**

13.1 The City will compensate the Engineer, in accordance with Article 3, Payments to the Engineer, and the other terms and conditions of this Agreement, as set out in Exhibit D to this Agreement.

Each of the persons executing this Agreement represents that he or she has full power and authority to execute this Agreement on behalf of the party that person represents. This Agreement will be effective as of the day and year established in the first paragraph of this Agreement.

City of Seguin

BGE, Inc.

Steve Parker, City Manager

Erin Gonzales, PE

EXHIBIT A

SERVICES TO BE PROVIDED BY THE CITY

- Data for the project that City or TxDOT has available (i.e. environmental documents, correspondence, materials/previously conducted studies regarding proposed improvements, etc.) to the extent possible.
- Guidance for project
- Archeological archive information
- Available existing right-of-way maps for the project
- Available as-built plans from utility companies existing within the project limits
- Assist the Engineer, as necessary, in obtaining any required data and information from local, regional, state and federal agencies
- Interface with local, regional, state or federal agencies on behalf of the Engineer, if applicable
- Pay permit and application fees required by the permitting agencies.
- Acquire all right of way necessary to build the project including but not limited to: providing property value appraisals, appraisal reviews, remit offer letters to property owners, negotiate acquisition value, remit payment for acquisition, and file all necessary documentation with the County or other agency.
- Organize, schedule, conduct and facilitate public meetings and hearings required for the project. Tasks may include, but not limited to: securing the meeting location, date and time (includes securing a/v equipment, chairs/tables, podium, etc.) and mailing out notices to all property owners within a quarter mile radius of the project location. The CITY will publish notices in the local newspapers at least 15 days prior to each meeting. The City will secure up to two changeable message signs to run for a 1-week period prior to the meetings.
- Process and issue all payments of approved purchase prices for each parcel, relocation payment, and incidental expenses involved in the transfer of property to the City in accordance with State and Federal law.

EXHIBIT B

BASIC ENGINEERING SERVICES

The work to be performed by the ENGINEER under this work authorization shall consist of providing Public Involvement, Environmental clearance, topographic surveying, and engineering services required for the design and preparation of the plans, specifications and estimate (PS&E) to construct on new alignment a 4 lane roadway with center turn lane, bicycle and pedestrian facilities. The plan set will contain all of the required grading, paving, drainage, stormwater pollution prevention plan, delineation, sequence of construction, construction signing, traffic control plan and associated details and standard drawings necessary for construction of the above mentioned project.

The ENGINEER shall perform Bid Phase services to assist CITY with development of bid documents, distribution of plans, development of addends, evaluation of bids, and recommendation for award.

The ENGINEER will perform all work and prepare all deliverables in accordance with the applicable/current requirements of the City of Seguin, the 2011 Texas Manual of Uniform Traffic Control Devices for Streets and Highways, including latest revisions, the TxDOT 2014 Roadway Design Manual, TxDOT 2016 Hydraulic Design Manual, and the TxDOT 2014 Standard Specifications for Construction of Highways, Streets, and Bridges (English units).

ROUTE AND DESIGN STUDIES (Function Code 110)

1. Data Collection

- A. The determination of data requirements, availability, and sources will be coordinated with the City's designated PM. Once the data needs and sources are identified, the ENGINEER will contact the appropriate agencies and organizations to obtain the data. Data collection will focus on existing publically available information primarily for issues that could substantially influence project alternatives, including potential fatal flaws. Data to be collected will include, but not be limited to:
 1. "As-built plans", existing schematics, right-of-way maps, and previous corridor studies, existing channel and drainage easement data, existing traffic counts, accident data, zoning and future land use maps, available Economic Development Plans, jurisdictional boundaries, City ETJ boundaries.
 2. Existing utility information and mapping obtained from a GIS database and/or provided by the City and/or utility owners. Planned infrastructure such as transmission lines and major utilities.
 3. Readily available floodplain information and studies from the Federal Emergency Management Agency (FEMA), the Corps of ENGINEERS (USACE), local

municipalities and/or other governmental agencies.

4. Graphic files, plans, documents, and other data for existing and proposed improvements along corridor.
5. Photographic record of notable existing features collected during field reconnaissance from public right-of-way locations.

2. Review of Data

- A. The ENGINEER will review the data collected and organize the information into design files.

3. Complete Design Summary Form

- A. Design criteria shall be in accordance with the TxDOT, TDLR, TMUCD, AASHTO Design criteria.

4. Route Studies

- A. The ENGINEER, with input from the City, shall develop key issues and evaluation criteria to assist in evaluating alignment alternatives and typical sections.
- B. The ENGINEER shall develop alignment alternatives that fulfill the Purpose and Need of the Project, meet the design criteria, and avoid or minimize impacts to the identified constraints.
- C. Using the evaluation criteria, the ENGINEER will identify a Recommended Alternative.

5. Schematic Design

- A. The Engineer will develop a schematic roll plot based on the preferred alignment for Rudeloff Road determined during the Public Involvement Phase of the project.
- B. The Engineering schematic shall be produced on a 36" roll plot and contain, at a minimum:
 1. Roadway typical section, horizontal alignment, proposed pavement edges, exiting features (topographic survey), existing utilities, aerial background, traffic flow arrows, cross streets and connections, vertical profile and existing utilities displayed on the profile.
- C. The Engineer shall submit the schematic to TxDOT for review and approval.

6. Geotechnical Investigations

- A. Obtain and review existing and available geotechnical and geologic information. Perform field reconnaissance of project limits.
- B. Perform borings, obtaining a boring sample at 500 foot intervals to a minimum depth of 10 feet below proposed grade. Borings are estimated to consist of the following:
 - 16 borings to a depth of 10 feet within the at-grade or fill areas.

- Borings shall occur within the limits of the existing roadway as well as between the existing roadway edge and the ROW line, dependent upon utilities and access.
 - Three (3) D50 grain size determinations at culvert crossings.
- C. Perform laboratory testing to classify soil strata, evaluate plasticity and shrink/swell potential and evaluate the compressive strength. Tests shall include moisture contents, Atterberg Limits, unconfined compressive strengths, sieve analyses, California Bearing Ratio (CBR), and sulfate content tests.
- D. Develop a recommended pavement design following TxDOT methodology.
- E. Prepare Geotechnical Report to include the summary of field investigations, laboratory testing results, 3 recommended pavement design options, 2 flexible and 1 rigid section, and bridge drilled shaft depth recommendations.

ENVIRONMENTAL COMPLIANCE AND PUBLIC INVOLVEMENT (Function Code 120)

The ENGINEER shall provide professional services to assist the City of Seguin (CITY) in meeting environmental planning and historic preservation compliance requirements for the preparation of a Categorical Exclusion (CE) or Environmental Assessment (EA), as appropriate. The ENGINEER shall assist the CITY in meeting the requirements of State and Federal laws and Executive Orders (EO), including but not limited to, the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations for implementing NEPA at 40 CFR Part 1500, and FHWA's regulations for implementing NEPA at 23 CFR Part 771; Section 106 of the National Historic Preservation Act (NHPA) and implementing regulations at 36 CFR Part 800; the Endangered Species Act (ESA); the Clean Water Act (CWA); the Farmland Protection Policy Act (FPPA); EO 11988 – Floodplain Management; EO 11990 – Protection of Wetlands; EO 12898 – Environmental Justice, and other applicable requirements including those addressing hazardous materials.

1. Project Management

- A. Project Management and Coordination - The ENGINEER will conduct Project Management and Coordination, including up to two project meetings. Brief progress reports shall accompany each monthly invoice. The ENGINEER will handle all project coordination with the concurrence and quality control of the CITY. The ENGINEER will also manage project invoices/billings and subcontractor services.
- B. Quality Assurance/Quality Control – The ENGINEER will conduct an independent comprehensive quality assurance/quality control review at appropriate milestone points during the project, to appraise both technical and business performance and provide direction for project activities. The ENGINEER will also review all correspondence, technical reports, and environmental documentation for quality assurance.

2. Social, Economic, and Environmental Studies

Environmental clearance for the project under this work authorization may be accomplished by means of a CE. However, dependent on potential environmental impacts, public controversy, scope of the project, and coordination with TxDOT, the project may be classified as an EA. This scope of services covers services needed for either a CE or EA. However, any CE- or EA-only tasks are indicated as such, and any non-applicable scope items and their corresponding fee would not be utilized.

Initially, key environmental issues will be investigated including initial data collection efforts through available sources of information and supplemented with field investigations. The results of this task will be the identification and prioritization of important issues that are likely to arise during the course of project development and that should be included within the environmental documentation.

- A. Data Collection - The data collection phase and site reconnaissance visits within the existing ROW will begin upon notice to proceed. However, field investigations within the proposed ROW areas will begin pending secured right-of-entry agreements to those properties. The ENGINEER will obtain through public appraisal district records the owner name and address for use in developing a stakeholder database. The ENGINEER will develop map exhibits with owner names and property identification per parcel.
- B. Scoping Documents and Work Plan Development (WPD) – The ENGINEER will complete the TxDOT ECOS WPD Sections I and II, classification memos, and other documents to be uploaded under the “Other Project-Related Information” activity in ECOS.
 - a. WPD Section I – Project Development
 - b. WPD Section II – Work Plan Development
 - c. EIS to EA Classification Approval
 - d. Open-Ended (d) CE Classification Request Form (*CE only*)
 - e. Other Project-Related Information:
 - i. Project location map
 - ii. Typical sections
 - iii. Site photographs
 - iv. Environmental constraints map
- C. Technical Reports – the following documents and technical studies will be prepared for CITY and TxDOT approval.
 - a. Air Quality (*EA only*) – If classified as an EA, the ENGINEER will prepare a qualitative Mobile Source Air Toxics (MSAT) analysis. Based on the proposed project design and expected Annual Average Daily Traffic (AADT) data of less than 140,000 vehicles per day (vpd), a qualitative (not quantitative) MSAT

analysis will be prepared for the project.

- b. Archaeological Resources – Archaeologists will prepare an Archaeological Background Study, which will be used to determine if an archaeological survey is warranted. The study will conform to TxDOT's Review Standard for Archaeological Background Studies and will include review of the Texas Historical Commission's (THC) Texas Archaeological Sites Atlas maintained by the Texas Archaeological Research Laboratory (TARL) for all known archaeological sites and previous archaeological studies in and near the project area, as well as historic cemeteries, historical markers, National Register of Historic Places (NRHP) listed properties and districts, and State Antiquities Landmarks (SALs). Other resources used in the study would include soils, geology, and historic maps and aerial photographs available online.

Should TxDOT determine an archaeological survey is warranted, archaeologists will prepare an Antiquities Permit Application. Once the permit is issued, the archaeologists will conduct an archaeological survey of the Area of Potential Effects (APE). The ENGINEER will prepare a report documenting the results of the survey, which will adhere to TxDOT's Review Standards for Archaeological Survey Reports.

- c. Historic Resources – Project historians will prepare a Historic Project Coordination Request (PCR) for submittal to TxDOT. The PCR will include database searches of the THC Historic Sites Atlas to identify previously documented archaeological sites, cemeteries, historical markers, properties and districts listed on the NRHP, and SALs.

If required, the ENGINEER will prepare a research design for review and comment by the CITY and TxDOT. The research design will conform to the TxDOT SOU: Non-Archaeological Historic-Age Resource Research Designs Review Checklist. If required, project historians will perform a reconnaissance survey to document each historic-age resource within the study area. The ENGINEER shall provide a report detailing the results and findings of the reconnaissance survey, including effects to historic properties and the need, if any, to conduct future intensive survey efforts.

- d. Community Impacts – The ENGINEER will prepare the Community Impacts Assessment Technical Report Form for the proposed project. Utilizing the latest census data and current poverty guidelines, the ENGINEER will address any disproportionately high and adverse health or environmental impacts to any social group, particularly any minority or low-income population according to EO 12898 on Environmental Justice. Applicable socioeconomic analysis would include a community impacts analysis, access and travel patterns analysis, and community cohesion analysis.
- e. Water Resources – Based on field investigations, if any surface waters (i.e., waterbody or wetland) is located within the project area, the ENGINEER will prepare a Surface Water Analysis Form, Waters of the U.S. Delineation Report, and Section 404/10 Impacts Table to address project impacts to waters of the U.S. (including wetlands), floodplains, and impaired waters.
- f. Biological Resources – The ENGINEER will prepare a Species Analysis

Spreadsheet (including SGCN spreadsheet) to document potential impacts to threatened, endangered, candidate, or rare species from implementation of the proposed project. The ENGINEER will review USFWS and TPWD threatened and endangered species lists for the project area, as well as TXNDD data. In addition, the ENGINEER will prepare a Species Analysis Form to determine potential USFWS/TPWD requirements. If the project is an EA and the Species Analysis Form indicates that TPWD coordination is required, the ENGINEER will prepare the Documentation of TPWD Best Management Practices Form.

The ENGINEER will analyze the proposed project for impacts to farmlands, in accordance with the Farmland Protection Policy Act (FPPA) (7 USC 4201 et. seq). The ENGINEER will complete an NRCS-CPA-106 form, which would be coordinated with the Natural Resources Conservation Service (NRCS), if applicable.

- g. Hazardous Materials – The ENGINEER will prepare the Hazardous Materials Initial Site Assessment (ISA) and Hazardous Materials Issue Identification and Resolution (IIR) for CITY and TxDOT approval. The ISA shall determine the potential for encountering hazardous materials in the project area, including possible environmental liability, increased handling requirements (e.g. soil and groundwater), and potential construction worker health and safety issues. The Hazardous Materials IIR will track the resolution of hazardous materials issues identified in the ISA.
 - h. Noise – The ENGINEER will prepare a Traffic Noise Analysis Technical Report for the proposed project. The noise analysis will inventory potential noise sensitive receivers and establish the project area's existing noise environment through computer modeling. The noise analysis will include predicted noise impact contours at appropriate distances from the roadway project. This scope assumes no design changes and no revisions to traffic data after the noise modeling analysis is completed. If the noise modeling identifies impacted noise receivers (receivers whose noise levels exceed regulatory thresholds) and those impacted receivers are in close proximity to each other, a noise barrier analysis will be prepared, as well as up to one applicable noise workshop.
 - i. Section 4(f) Analysis (non-historic) – Due to the adjacent baseball fields at Huber Road, the ENGINEER will complete the Section 4(f) Analysis activity in ECOS. However, since the adjacent baseball fields are privately-owned, a Section 4(f) evaluation (*de minimis* or individual) are not anticipated.
 - j. Cumulative Impacts Analysis (*EA only*) – If classified as an EA, the ENGINEER will utilize TxDOT's Cumulative Impacts Decision Tree to determine if no cumulative impacts are anticipated, or if a more detailed five-step cumulative impacts analysis is required. If a detailed analysis is required, the ENGINEER will conduct a detailed five-step cumulative impacts analysis per TxDOT guidelines.
 - k. Induced Growth Analysis (*EA only*) – If classified as an EA, the ENGINEER will conduct a detailed six-step induced growth analysis per TxDOT guidelines.
- D. Environmental Assessment (*EA only*) – If classified as an EA, the ENGINEER will prepare an EA for the project in accordance with TxDOT's Environmental

Handbook: Preparing an Environmental Assessment, Environmental Assessment Outline, and Environmental Assessment Cover Page. The EA will be submitted for CITY and TxDOT review following completion of all other resource activities that are listed above. Following the Notice Affording the Opportunity for a Public Hearing (NAOPH), the ENGINEER will prepare the Final EA and a Draft Finding of No Significant Impact (FONSI), if appropriate.

- E. Public Involvement – Public involvement is required to update the public of the proposed project.
- a. Meetings with Affected Property Owners and Stakeholder/Elected Official Meetings – The ENGINEER will provide two environmental support staff members to attend up to six MAPOs or stakeholder meetings. The ENGINEER will take notes and document the proceedings of the meetings and preparing meeting minutes.
 - b. Virtual Public Meeting with In-Person Option – The CITY will hold a Virtual Public Meeting with In-Person Option for the proposed project, in accordance with TxDOT guidelines and standards. The ENGINEER will assist in the organization and preparation of the meeting. The ENGINEER will prepare notification letters and meeting materials (i.e. display boards, name tags, sign-in sheets, comment forms, etc.) in English and Spanish. Spanish translation will also be provided at the meeting, if necessary. The ENGINEER will provide support for the PowerPoint presentation, including preparation of summary slides for environmental impacts, commenting options, etc. Up to ten exhibit board designs will be prepared and published by the ENGINEER for the meeting, as well as media packets (a folder that will include a news release, project map, and comment forms). All materials will be prepared in English and Spanish, if necessary.

The ENGINEER will attend the in-person public meeting and gather information and public comments required to prepare a Documentation of Public Meeting Report. This report will include a comment/response matrix, meeting materials, etc.

The CITY shall secure the meeting location, date and time (includes securing a/v equipment, chairs/tables, podium, etc.) and mail out notices to all property owners within a quarter-mile radius. The CITY will also secure up to two changeable message signs to run for a 1-week period prior to the meeting. The CITY will publish notices in the local newspapers at least 15 days prior to each meeting.

- c. Notice Affording an Opportunity for a Public Hearing (NAOPH) – The CITY will provide a NAOPH to adjacent landowners, affected local governments, public officials, and special interest groups. The ENGINEER will prepare the notice, which will be mailed and placed in the local newspaper. The CITY will mail out the notices, publish the notice in the local newspaper, and post the notice to their website at least 15 days prior to the deadline specified in the notice for requesting a hearing.

3. Deliverables:

- 1. Work Plan Development, Sections I/II

2. EIS to EA Classification Approval Form
3. Open-Ended (d) CE Classification Request Form (*CE only*)
4. Other Project-Related Information documents
5. Qualitative MSAT Analysis Technical Report (*EA only*)
6. Archaeological Background Study
7. Archaeological Survey Report, if required
8. Historic Project Coordination Request
9. Historic Research Design, if required
10. Historic Resources Survey Report, if required
11. Community Impacts Assessment (CIA) Technical Report Form
12. Surface Water Analysis Form
13. Waters of the U.S. Delineation Report
14. Section 404/10 Impacts Table
15. Species Analysis Spreadsheet
16. Species Analysis Form
17. Documentation of TPWD BMPs Form (*EA only*)
18. Farmlands NRCS-CPA-106 Form
19. Hazardous Materials ISA
20. Hazardous Materials IIR
21. Traffic Noise Analysis Technical Report
22. Section 4(f) Analysis
23. Cumulative Impacts Analysis (*EA only*)
24. Induced Growth Analysis (*EA only*)
25. Draft EA (*EA only*)
26. Final EA (*EA only*)
27. Draft FONSI (*EA only*)
28. MAPOs/Stakeholder Meeting Minutes
29. Documentation of Virtual Public Meeting with In-Person Option
30. Notice Affording an Opportunity for Public Hearing

4. **Environmental Exclusions** – In addition to the items previously described within this section, the following tasks are not covered in this scope of work and may or may not be necessary. If deemed necessary, these tasks could be conducted under a separate or supplemental work authorization.

- Quantitative MSAT Analysis
- Intensive historic survey, or HABS/HAER documentation
- Threatened and endangered species biota (presence/absence) surveys
- Biological Assessment preparation or Section 7/10(a) coordination
- Cave or solution feature mitigation
- Construction phase services
- Work extending beyond the specified limits of the project at the time of this work order
- Additional meetings not previously specified
- Additional documentation services requested as a result of a change in environmental

regulations or CITY/TxDOT documentation standards from those in practice and acceptable at the time of approval of this work authorization.

Note: Only those services expressly stated in this task order will be performed. If any services, other than those expressly stated in this task order are required, the ENGINEER may perform those services under a separate or supplemental task order.

RIGHT OF WAY DATA (Function Code 130)

1. Right of Way Acquisition

A. Communication

1. Prepare initial property owner contact list for use by the City in distribution of the introduction letters or as determined necessary by City staff.

2. Utility Coordination

- A. The ENGINEER shall perform all Subsurface Utility Engineering (SUE), Utility Coordination, and Utility Engineering services for approximately nine (9) utilities as listed below:

- AT&T – Telephone / Fiber Optic Cable
- Spectrum – Telephone / Fiber Optic Cable
- Springs Hill WSC – Water
- GVEC - OH Electric
- TxDOT – Traffic Signal Wiring
- City of Seguin – Wastewater
- Centerpoint Energy – Gas
- LCRA – Electric
- CPS Rio Nogales/Markwest/Pinnacle, LLC - Gas

- B. The work to be performed by the ENGINEER under this contract shall consist of providing engineering services required for SUE and Utility Coordination. The existing utility file will be referenced into the current roadway design sheets.
- C. These services include SUE, utility adjustment coordination activities including but not limited to, meeting and contact with utilities on the project, initial project notifications, preparation of existing utility layouts, providing progress reports, preparation of contact lists, reviewing conflicts between the utilities and the proposed project, and creation of a utility conflict list.

D. Subsurface Utility Engineering (SUE)

ENGINEER will perform SUE services for this project in general accordance with the recommended practices and procedures described in ASCE publication CI/ASCE 38-02 “Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data.” As described in the publication, four levels have been established to describe and depict the quality of subsurface utility information. The four quality

levels are as follows:

1. Quality Level D (QL“D”) – Information obtained from existing utility records.
2. Quality Level C (QL“C”) – Surveyed data depicting visible above-ground features supplemented with QL“D” information.
3. Quality Level B (QL“B”) – Two-dimensional horizontal information obtained through the application and interpretation of non-destructive surface geophysical methods. Also known as “designating,” this level incorporates QL“C” information and provides horizontal positioning of subsurface utilities to within approximately 1.0 foot.
4. Quality Level A (QL“A”) – Three-dimensional horizontal and vertical information obtained through non-destructive vacuum excavation equipment to expose utilities at critical points. Also known as “locating,” this level incorporates QL“B” information and provides horizontal and vertical positioning of subsurface utilities to within approximately 0.05 feet.

SUE will be performed in two phases as follows:

1. Phase I of the scope of this proposal includes QL “C” / “D” SUE. In general, SUE services are requested within the limits of the project.
2. Phase II of the scope of this proposal includes QL“A” & QL “B” SUE. ENGINEER will research utility records and attempt to designate (QL “B”) existing underground utilities within the project limits including mapping of the following utilities: water, reclaimed water, chilled water, wastewater, natural gas, gas/oil pipelines, electric, telephone, fiber, duct banks, cable TV, and storm sewer. It is assumed that ENGINEER will invert all sanitary sewer and storm sewer lines and that those utilities will be shown as QL “C” within the project limits. Irrigation lines and an inventory of overhead utilities are excluded from this scope of work.
3. Phase II also includes up to five (5) QL“A” SUE test holes on various utilities to determine the vertical location of existing utilities within the project limits. Proposed test hole locations will be determined by the Client and ENGINEER once the QL “B” SUE deliverable has been reviewed.
4. Any necessary Right-of-Entry (ROE) permits will be obtained by the City and provided to the ENGINEER prior to the start of field work.

Procedures

QL“D” and “C” – Records Research and Surface Feature Survey

ENGINEER will perform due-diligence with regard to records research and the acquisition of available utility records. The due-diligence provided will consist of contacting the applicable One Call agency and associated utility owners/municipalities, visually inspecting the work area for evidence of utilities, and reviewing available utility record information. Additional utilities not identified through these efforts will be referred to as Unknown utilities.

QL“B” – Designating

Following a review of the available utility records, ENGINEER will begin designating the approximate horizontal position of known subsurface utilities within

the project area. A suite of geophysical equipment that includes magnetic and electromagnetic induction will be used to designate conductive utilities. Where access is available, a sonde will be inserted into non-conductive utilities to provide a medium for transmission which can then be designated using geophysical equipment. Non-conductive utilities can also be designated using other proven methods, such as rodding and probing. ENGINEER will make a reasonable attempt to designate Unknown utilities identified during field work; however, no guarantee is made that all Unknown utilities will be designated. Utilities will be marked and labeled to distinguish type and ownership. Field data depicting the designated utilities, as well as relevant surface features, will be produced to ensure accuracy and completeness of subsequent survey data. ENGINEER will review the collected survey data, field data, and utility records for accuracy and completeness.

QL“A” – Locating

ENGINEER will utilize non-destructive vacuum excavation equipment to excavate test holes at the requested locations. To layout the test holes, ENGINEER will follow the QL“B” – Designating procedures described above. Once each utility is located, ENGINEER will record the size, type, material, and depth. Test holes will be uniquely marked. Excavations will be backfilled by mechanical means with the appropriate material, and the original surface will be restored. If necessary, ENGINEER can core pavement up to a depth of 12 inches. Asphalt surfaces will be repaired with an asphalt cold patch, and concrete cores will be epoxied in place, flush with the surrounding surface. ENGINEER assumes that flowable fill will not be required when backfilling test holes and that full-section pavement repair (including sidewalks) will not be required to restore the original pavement surface. If requested, these services can be provided at an additional cost.

ENGINEER will establish any necessary routine traffic control measures at no additional cost. However, if non-routine traffic control measures (lane closures, traffic detours, flagpersons, etc.) are required, this service will be invoiced as a direct expense. Due to the risk of damage, ENGINEER will not attempt to probe or excavate test holes on AC water lines unless approval is obtained from the owner in advance. Additionally, excavation in rock, or to a depth greater than 18 feet, is considered beyond the scope of this proposal.

ENGINEER has made the following assumptions with regard to the test holes on this project:

- All test holes will be accessible to truck-mounted vacuum excavation equipment.
- Right-Of-Way (ROW) permits from the City of Seguin or Texas Department of Transportation will not be required.
- Designed traffic control plans will not be required.
- Non-routine traffic control measures will not be required.
- The coring of pavement will not be required.

SUE Deliverables

- A utility file in CAD format depicting all designated and located utilities.
- A summary sheet of all test hole coordinate data and depth information.
- 8.5" x 11" Test Hole Data Forms for all test hole locations completed signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.
- 11" x 17" SUE Plan Sheets depicting all designated and located utilities signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.

E. **Utility Adjustment Coordination** including utility coordination meetings with individual utility companies, and communication and coordination with utilities.

The ENGINEER shall perform utility coordination and liaison activities with involved utility owners, their consultants, and the City of Seguin to achieve timely project notifications, formal coordination meetings, conflict analysis and resolution.

The ENGINEER shall coordinate all activities with the City of Seguin, or their designee, to facilitate the orderly progress and timely completion of the design phase. The Utility Coordinator will be responsible for the following:

- a. Provide initial project notification letters to all affected utility companies, owners, and other concerned parties, if needed.
- b. Provide the City of Seguin and all affected utility companies and owners a Utility Contact List for each project with all information such as: (a) Owner's Name; (b) Contact Person; (c) Telephone Numbers; (d) Emergency Contact Number; (e) E-mail addresses; (f) as well as all pertinent information concerning their respective affected utilities and facilities, including but not limited to: size, number of poles, material, and other information which readily identifies the utilities companies' facilities.
- c. 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.
- d. Coordinate which utilities will conflict with roadway construction and make the utility company aware of these conflicts.

F. **Utility Engineering**

- i. Utility Layout: The ENGINEER shall maintain a utility layout. This layout shall include existing utilities which are to remain in place or to be abandoned, and adjusted utilities. This layout will be utilized to monitor the necessity and evaluate alternatives. The ENGINEER will utilize the layout of existing utilities as prepared, if available, and make a determination of the facilities in conflict with the proposed project that are to be relocated.
- ii. Public & Individual Meetings with Utility Companies and the City of Seguin as required, to facilitate utility conflict identification and resolution (approximately 1 public utility meeting and up to three (3) individual utility meetings).
 - a. Progress Meetings: Meet with the City of Seguin periodically to coordinate the work effort and resolve problems and prepare a written report of such meetings. The meetings will review:
 - Activities completed since the last meeting

- Problems encountered.
- Late activities.
- Activities required by the next progress meeting.
- Solutions for unresolved and/or anticipated problems.
- Information or items required from other agencies/consultants.
- Review of Utility's Proposed Adjustments
- Evaluate Alternatives: The ENGINEER will evaluate alternatives in the adjustment of utilities balancing the needs of both the City of Seguin and the Utility.

G. Deliverables:

- i. Preliminary field sketches depicting the designated utilities for use during surveying activities.
- ii. SUE plans in AutoCAD format to be depicted in the roadway plan and profile sheets, and drainage plan and profile sheets.
- iii. Utility Contact List
- iv. Potential Conflict Analysis Spreadsheet
- v. Meeting minutes (delivered electronically)

FIELD SURVEYING (Function Code 150)

1. General

- A. Surveys provided will be in accordance with the "Texas Board of Professional Land Surveying" and the applicable City of Seguin regulations.
- B. Survey field notes will be submitted if requested by the City of Seguin.
- C. The Surveyor will Contact the One-Call System in advance of performing field surveys to attempt data collection including 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.

2. Field Surveys for Right-of-way mapping, parcel acquisition, hydraulic and roadway design Topo.

- A. Surveyor will attempt to obtain existing horizontal control points. Additional control will be established to adequately position horizontal control points as needed for project future design activities and plan notations thereof. Control points will be established with conformance to current TxDOT specifications for primary controls. Where possible, reference ties to permanent features will be provided for each established horizontal control point. Data for the horizontal control will be based on Texas State Plane Coordinate System, Central Zone, NAD 83 (2010).
- B. Vertical control will be established via differential level loops from known project

control recovered through this proposal. A vertical benchmark system will be perpetuated at approximate 1500 foot intervals for future reference on the plans and maintained to construction, if necessary. Vertical Datum will be NAVD88, Geoid18.

- C. Boundary data collection will consist of all property corners and occupation lines relative to the boundary resolution for Right-of-way mapping and the parcel acquisition. Topographic data collect will consist of all visible improvements and utilities along with those utility marks and potholes provided by the respective utility locators, tops & toes at all visible grade changes and relative trees.
- D. Survey shots will be assigned a unique point number which provides a positive identification of the point. Each point will be assigned a feature number or feature name using the TxDOT's standard feature table. An ASCII points file and a hard copy print out will be provided. Each line of the output data shall contain in this order: the point number, northing, easting, elevation, and the descriptive feature code.
- E. Surveyed data will be provided in a Microstation .dgn (V8) compatible two dimensional base map format. The survey shot point attributes will appear on separate levels.
 - 1. Survey cross sections will be acquired along the proposed alignment at 50 foot intervals for a width to match the proposed ROW plus 10 feet on each side.
 - 2. Survey cross sections will be acquired along drainage channels at 200 foot intervals for a width to match the channel banks plus 10 feet on each side.

3. Utilities

- A. Location of existing utilities as marked by the respective 811 utility locators will be shown on the 2D files using field marked information designated by the utility companies surveyed on the ground.

4. Parcels

- A. Provide survey plats and metes and bounds descriptions for the parcels needed for the right-of-way map include the location of the complete parcel boundary and deed research to confirm boundary of property. For the purposes of this proposal, it is presumed that there will be a total of 4 parcels for right of acquisition.

5. Right-of-Way Map

- A. Provide a Right-of-way map to TxDOT standards for the new right-of-way of Rudeloff Road along the project limits.
 - 1. Provide boundary work sufficient to recover front and back property pins.

6. Topographic Design File

- A. Surveyed data will be provided in a Microstation .dgn (V8) compatible three dimensional base map format with 1' contours. The survey shot point attributes will appear on separate levels.

ROADWAY DESIGN CONTROLS (Function Code 160)

- 1. Roadway plans for 30%, 60%, 90%, and 100% Submittals shall be in accordance with TxDOT and City of Seguin Criteria.**
 - A. The ENGINEER will develop horizontal alignment sheets using OpenRoads
 - B. The ENGINEER will develop existing typical sections and CITY approved proposed typical sections
 - C. The ENGINEER will develop plan and profile sheets for Rudeloff Road.
 - D. The ENGINEER will develop intersection layouts at:
 1. Huber Road
 2. SH 123 (at FM 20)
 - E. The ENGINEER will develop cross sections for earthwork calculations
 - F. The ENGINEER will develop removal plans and miscellaneous roadway details

DRAINAGE (Function Code 161)

1. Drainage Impact
 - a. Assessment of existing conditions
 - 1) The ENGINEER will compute existing condition peak flows for the 2, 10, 25, 50 and 100 year events using HEC-HMS.
 - i. The ENGINEER will utilize existing available LOMR flows at the Walnut Branch tributary crossing.
 - ii. The ENGINEER will utilize topographic survey to analyze the upstream watershed and Walnut Creek Tributary 1 as a non-FEMA floodplain.
 - 2) The ENGINEER will determine existing headwater and tailwater elevations at the ROW for all waterway crossings, and all hydraulic analysis locations using HEC-RAS and/or HY-8 hydraulic models.
 - b. Assessment of proposed conditions
 - 1) The ENGINEER will compute proposed condition peak flows for all crossings using HEC-HMS.
 - 2) The ENGINEER will determine the proposed headwater and tailwater elevations at the ROW for all waterway crossings, and all hydraulic analysis locations using HEC-RAS and/or HY-8 hydraulic models.
2. Drainage plans for 30%, 60%, 90%, and 100% Submittals in accordance with TxDOT and City of Seguin Criteria.
 - a. The ENGINEER will develop Drainage Area Maps

- b. The ENGINEER will develop Hydraulic Data Sheets and Storm Sewer Computations sheets
- c. The ENGINEER will develop storm sewer plan and profile sheets and provide ditch flow capacity calculations (Show hydraulic grade line)
- d. The ENGINEER will develop culvert layouts and hydrologic data sheets
- e. The ENGINEER will develop miscellaneous drainage details
- f. The ENGINEER will provide standard drainage details
- g. The ENGINEER will develop Stormwater Pollution Prevention Plan (SW3P)
- h. The ENGINEER will develop temporary drainage to be shown on TCP layouts

SIGNING, PAVEMENT MARKING, & SIGNAL (Function Code 162)

- 1. Signing and Pavement Marking plans for 60%, 90%, and 100% Submittals in accordance with TxDOT and City of Seguin Criteria.
 - a. The ENGINEER will prepare signing and pavement markings layouts. Prepare drawings, details, and specifications in accordance with TMUTCD, TxDOT Sign Crew Field Book, and the applicable TxDOT Statewide and/or San Antonio District Standards. Layouts shall indicate existing signs that are to remain, to be removed, or to be relocated. Proposed signs shall be illustrated and numbered. Layouts shall include proposed delineators and object markers.
 - b. The ENGINEER will prepare standard summary of small signs sheet. Foundations and supports shall be selected in accordance with TxDOT standards.
 - c. The ENGINEER will prepare Signal Layouts for the intersection of Rudeloff Road and SH 123 (at FM 20). Layouts include signal elevation information.

MISCELLANEOUS ROADWAY (Function Code 163)

- 1. Traffic Control Plans
 - a. The ENGINEER will prepare Traffic Control Plans for all phases of construction in accordance with TMUTCD and the applicable TxDOT Statewide and/or San Antonio District Standards.
 - b. The ENGINEER will prepare a conceptual Sequence of Construction narrative.
 - c. The ENGINEER will develop Advanced Signing Layouts.
 - d. The ENGINEER will develop Typical Sections and required details for construction.
- 2. Quantities, Specifications & Estimate
 - a. The ENGINEER will prepare the following miscellaneous drawings

- 1) Title Sheet
- 2) Index of Sheets
- 3) Summary of Quantities
- 4) Driveway Summary
- b. The ENGINEER will develop a detailed Construction Cost Estimate (30%, 60%, 90%, and Final).
- c. The ENGINEER will develop the Project Construction Manual utilizing the LGPP prescribed documents. This includes:
 - 1) General Notes applicable to the project
 - 2) Governing Specifications and Special Provisions

PROJECT MANAGEMENT (Function Code 164)

1. Project Management

- a. The ENGINEER will set up the project, direct and coordinate the various elements and activities associated with the project.
- b. The ENGINEER will provide continuous quality assurance and quality control to ensure completeness of product and compliance with City and TxDOT procedures.
- c. The ENGINEER will review all work for compliance with TxDOT's and the CITY's latest practices and procedures, policies, standards, specifications and design criteria prior to submission of deliverables.

2. Project Administration

- a. The ENGINEER will prepare correspondence, invoicing and progress reports, on a monthly basis in accordance with current CITY, TxDOT and LGPP requirements and format. The ENGINEER will provide progress reports on a weekly basis.
- b. The ENGINEER will maintain routine project record keeping.
- c. The ENGINEER will maintain the LGPP checklist and submit it with each progress submittal, and at each stage of project development including bid phase, construction phase, and final close out.

3. Progress/Coordination Meetings

- a. The ENGINEER will attend a Kickoff Meeting and interim coordination/progress meetings with the CITY as necessary to communicate the development of the project. The ENGINEER shall provide up to three (3) team members at these meetings, including sub-consultants as needed. Meetings include the following:

Project Kickoff (1 each)

Coordination/Progress Meetings (6 each)

- b. The ENGINEER will prepare meeting minutes and submit to the CITY Project Manager for review via e-mail within three working days of the meeting.
- c. The ENGINEER will conduct internal coordination meetings with the project team as required to advance the development of the route study.

4. Project Schedule

- a. The ENGINEER will prepare a project schedule indicating tasks, subtasks, critical dates, milestones, deliverables, and CITY review requirements.
- b. The ENGINEER will submit schedule updates on a monthly basis with the project invoice indicating progress to date on each task and subtask. If substantial revisions to the schedule are anticipated, these revisions will be discussed at the next project progress meeting.

DELIVERABLES

- 1. Meeting Minutes, Sign-in Sheet, Agenda (7 Meetings)
- 2. Project Schedule
- 3. Monthly Invoices and Progress Reports
- 4. Project Management Plan

BID AND CONSTRUCTION PHASE SERVICES (Function Code 351)

- 1. The ENGINEER will attend pre-bid conference.
- 2. The ENGINEER will distribute plans to the Plan Rooms
- 3. The ENGINEER will respond to contractor questions.
- 4. The ENGINEER will prepare and issue addenda, as needed.
- 5. The ENGINEER will perform reference checks.
- 6. The ENGINEER will perform bid analysis and prepare Letter of Recommendation of Award to the CITY.
- 7. The ENGINEER will respond to contractor Requests for Information (RFI) (Assume 8).

8. The ENGINEER will review shop drawings.
9. The ENGINEER will attend monthly construction progress meetings.
10. The ENGINEER will prepare Final Punch List upon completion of construction.

SUPPLEMENTAL SERVICES

The following services are included as additional services to the Basic Services and will be utilized on an as needed basis. Work will not commence on these services unless authorized by the CITY.

ROUTE AND DESIGN STUDIES (Function Code 110)

1. Engineer to provide route and design studies as stated in the Basic Engineering Services above to extend the project limits no more than 1,000 feet east of SH 123 on FM 20.

ENVIRONMENTAL COMPLIANCE AND PUBLIC INVOLVEMENT (Function Code 120)

1. Engineer to provide environmental compliance and public involvement as stated in the Basic Engineering Services above to extend the project limits no more than 1,000 feet east of SH 123 on FM 20.

RIGHT OF WAY DATA (Function Code 130)

1. Engineer to provide right of way data as stated in the Basic Engineering Services above to extend the project limits no more than 1,000 feet east of SH 123 on FM 20.

FIELD SURVEYING (Function Code 150)

1. Engineer to provide field surveying as stated in the Basic Engineering Services above to extend the project limits no more than 1,000 feet east of SH 123 on FM 20.

ROADWAY DESIGN CONTROLS (Function Code 160)

1. Engineer to provide roadway design controls as stated in the Basic Engineering Services above to extend the project limits no more than 1,000 feet east of SH 123 on FM 20.

DRAINAGE (Function Code 161)

1. Engineer to provide drainage design as stated in the Basic Engineering Services above to extend the project limits no more than 1,000 feet east of SH 123 on FM 20.

SIGNING, PAVEMENT MARKING, & SIGNAL (Function Code 162)

1. Engineer to provide signing, pavement markings, & signals as stated in the Basic Engineering Services above to extend the project limits no more than 1,000 feet east of SH 123 on FM 20.

MISCELLANEOUS ROADWAY (Function Code 163)

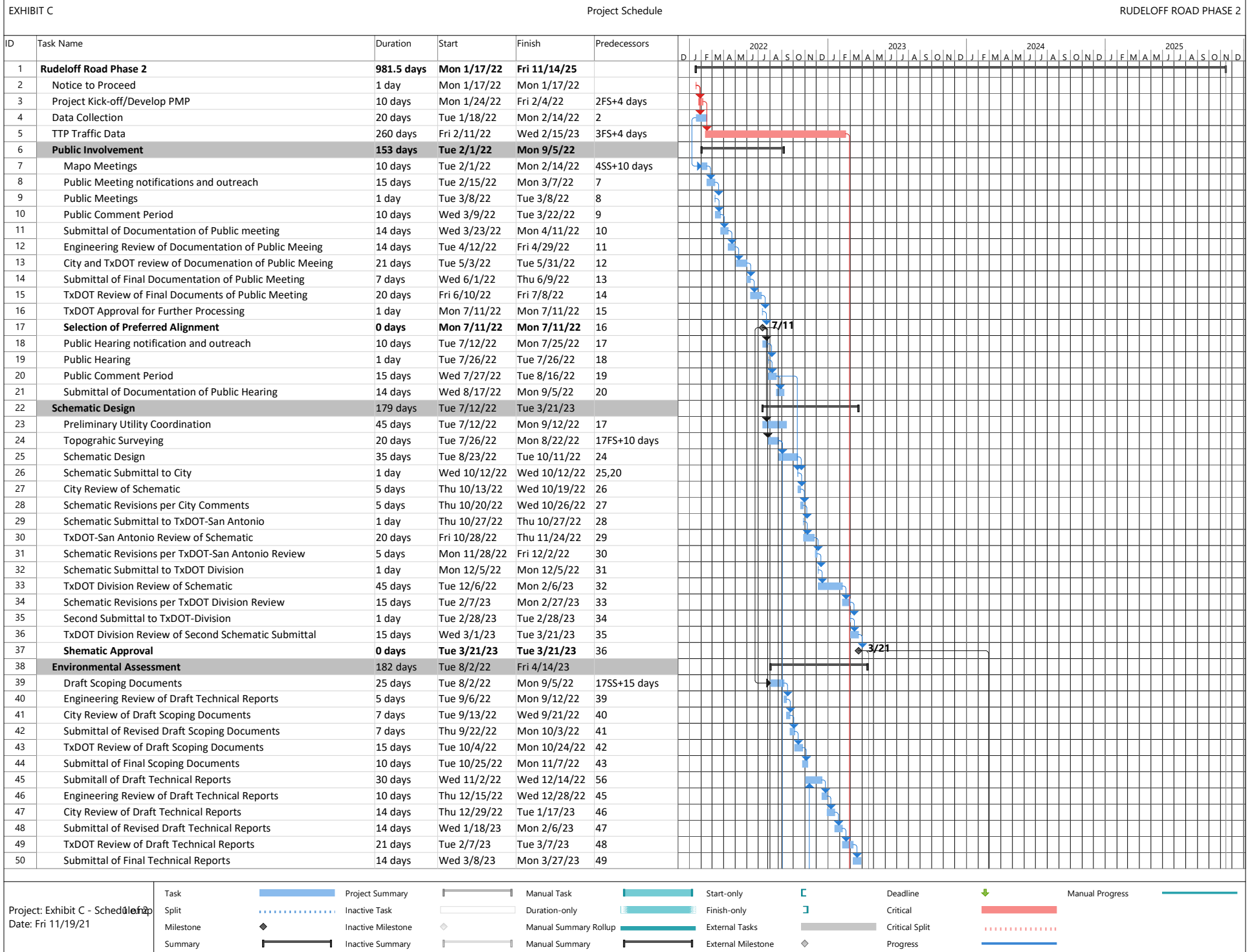
1. Engineer to provide miscellaneous roadway design services as stated in the Basic Engineering Services above to extend the project limits no more than 1,000 feet east of SH 123 on FM 20.

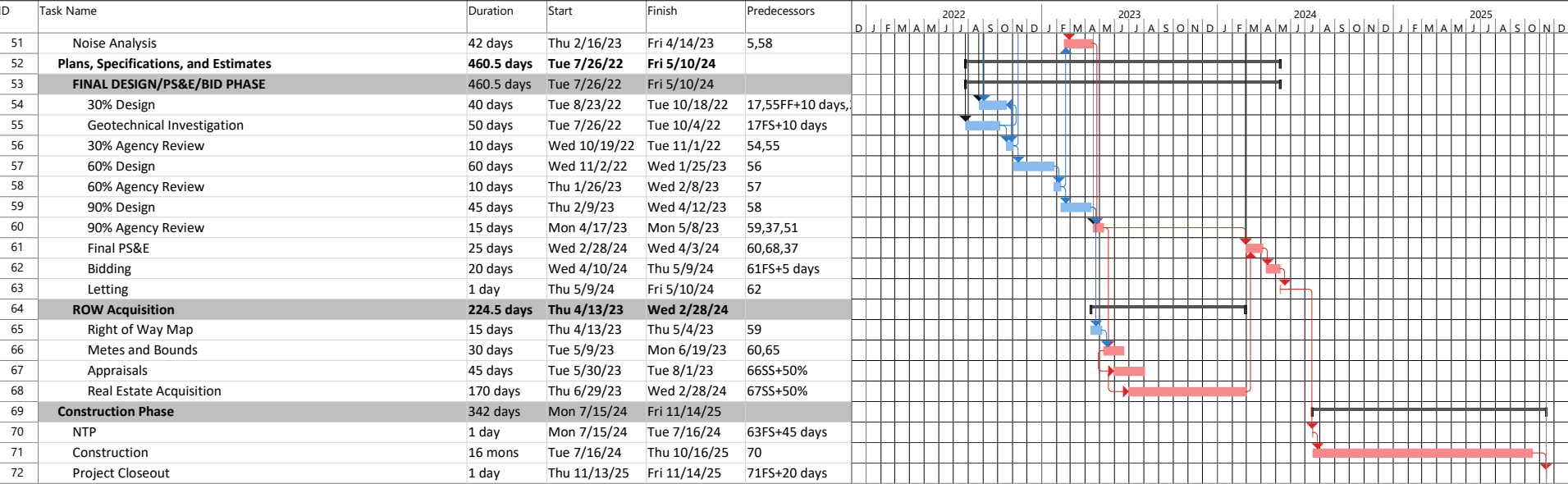
PROJECT MANAGEMENT (Function Code 164)

1. Engineer to provide project management as stated in the Basic Engineering Services above to extend the project limits no more than 1,000 feet east of SH 123 on FM 20.

BID AND CONSTRUCTION PHASE SERVICES (Function Code 351)

1. Engineer to provide bid and construction phase services as stated in the Basic Engineering Services above to extend the project limits no more than 1,000 feet east of SH 123 on FM 20.





Project: Exhibit C - Schedule
Date: Fri 11/19/21

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Critical

Critical Split

Progress

Manual Progress

PRIME PROVIDER NAME: BGE, Inc.
CITY OF SEGUIN
PROJECT NAME: Rudeloff Road Phase 2

FUNCTION CODE	BASIC SERVICES - SUMMARY									
	BGE		TRG		PCI		CORSAIR		TOTAL	
	HOURS	FEES	UNITS	FEES	HOURS	FEES	HOURS	FEES	HOURS	FEES
ROUTE & DESIGN STUDIES (FC 110)	674	\$117,078.50					247	\$27,241.22	921	\$144,319.72
ENVIRONMENTAL STUDIES & PUBLIC INVOLVEMENT (FC 120)	664	\$ 104,595.40			883	\$ 114,526.06			1,547	\$219,121.46
RIGHT OF WAY DATA (FC 130)	216	\$42,003.84	51	\$ 5,361.40					267	\$47,365.24
DESIGN SURVEY (FC 150)	340	\$63,941.82	33	\$ 3,566.84					373	\$67,508.66
ROADWAY DESIGN CONTROLS (FC160)	1,042	\$178,368.56							1,042	\$178,368.56
DRAINAGE (FC161)	1,086	\$171,411.40							1,086	\$171,411.40
SIGNING, PVMT. MARKING, & SIGNAL (FC162)	308	\$50,282.24							308	\$50,282.24
MISCELLANEOUS (ROADWAY) (FC 163)	530	\$86,240.19							530	\$86,240.19
MANAGING CONTRACTED PER SERVICES & SURVEY CONTRACTS (FC 164)	448	\$100,577.78							448	\$100,577.78
BID AND CONSTRUCTION SERVICES (FC 351)	422	\$ 81,453.42							422	\$81,453.42
Other Direct Expenses		\$27,617.00				\$2,931.00		\$ 1,572.00	0	\$32,120.00
UNIT COST				\$ 10,375.00				\$ 25,039.00	0	\$35,414.00
TOTAL	5,730	\$ 1,023,570.15	84	\$ 19,303.24	883	\$ 117,457.06	247	\$ 53,852.22	6944	\$1,214,182.67

SUPPLEMENTAL SERVICES - SUMMARY

FUNCTION CODE	Supplemental	
	HOURS	FEES
ROUTE & DESIGN STUDIES (FC 110)	8	\$1,127.87
ENVIRONMENTAL STUDIES & PUBLIC INVOLVEMENT (FC 120)	12	\$1,728.92
RIGHT OF WAY DATA (FC 130)	3	\$494.99
DESIGN SURVEY (FC 150)	9	\$1,772.78
ROADWAY DESIGN CONTROLS (FC160)	54	\$8,953.57
DRAINAGE (FC161)	8	\$1,103.12
SIGNING, PVMT. MARKING, & SIGNAL (FC162)	12	\$1,661.74
MISCELLANEOUS (ROADWAY) (FC 163)	22	\$2,931.05
BID AND CONSTRUCTION SERVICES (FC 351)	1	\$219.21
Other Direct Expenses		\$7.20
TOTAL	129	\$ 20,000.45

EXHIBIT D-FEE SCHEDULE (BGE, INC.)

PRIME PROVIDER NAME: BGE, INC.
RUDELOFF ROAD PHASE 2

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
ROUTE & DESIGN STUDIES (FC 110)																					
DATA COLLECTION		8		8	8		8												32		
DATA REVIEW		2			4														10		
COMPLETE DSR		2			4		4												6	16	0.375
ALIGNMENT ANALYSIS	8	80			120	80	80		120										488		
PRELIMINARY TYPICAL SECTIONS	2	4			16		24	8											54		
PRELIMINARY CROSS SECTIONS	2	6		8	16	24		24											80		
REVIEW GEOTECHNICAL REPORT/ PAVEMENT RECOMMENDATION		4																	4		
HOURS SUB-TOTALS	12	106	0	16	168	104	116	32	120	0	0	0	0	0	0	0	0	0	674		
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$3,456.00	\$26,984.42	\$0.00	\$3,507.36	\$26,135.76	\$13,605.28	\$22,968.00	\$5,996.48	\$14,425.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$117,078.50		
% DISTRIBUTION OF STAFFING	1.8%	15.7%	0.0%	2.4%	24.9%	15.4%	17.2%	4.7%	17.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
SUBTOTAL (FC 110)																			\$117,078.50		
TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
ENVIRONMENTAL STUDIES & PUBLIC INVOLVEMENT (FC 120)																					
1. Project Management		16								40									56		
2.A. Data Collection (PCI Only)		2								8	16	16	16						58		
2.B. Scoping Documents and Work Plan Development		4								40									44		
2.C.a. Air Quality (PCI Only)																			0		
2.C.b. Archeological Background Study										4	16		16			32			68		
2.C.c. Historic Resources Project Coordination Request										4	16		8			24			52		
2.C.d Community Impacts (PCI Only)																			0		
2.C.e Water Resources (PCI Only)																			0		
2.C.f Biological Resources (PCI Only)																			0		
2.C.g Hazardous Materials (PCI Only)																			0		
2.C.h Noise (PCI Only)		2																	2		
2.C.i Section 4(f) Analysis (non-historic) (PCI Only)		2																	2		
2.C.j Cumulative Impacts Analysis (PCI Only)		1																	1		
2.C.k Induced Growth Analysis (PCI Only)		1																	1		
D. Environmental Assessment (Support)		4																	4		
E.a Public Involvement - MAPO (Support Staff Only)		16				16				16				32	32				112		
E.b Public Involvement - Virtual Public Meeting/In-Person Open House (Suport Staff and Exhibits)		24			12	12		40		16				40	40	80			264		
E.c Notice Affording Opportunity for a Hearing (PCI Only)																					
HOURS SUB-TOTALS	0	72	0	0	12	28	0	40	0	128	48	16	40	72	72	136	0	0	664		
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$0.00	\$18,329.04	\$0.00	\$0.00	\$1,866.84	\$3,662.96	\$0.00	\$7,495.60	\$0.00	\$30,773.76	\$4,242.72	\$1,980.00	\$7,778.40	\$6,364.08	\$8,910.00	\$13,192.00	\$0.00	\$0.00	\$104,595.40		
% DISTRIBUTION OF STAFFING	0.00%	10.84%	0.00%	0.00%	1.81%	4.22%	0.00%	6.02%	0.00%	19.28%	7.23%	2.41%	6.02%	10.84%	10.84%	20.48%	0.00%	0.00%			
SUBTOTAL (FC120)																			\$104,595.40		
TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
RIGHT OF WAY DATA (FC 130)																					
Utility Coordination		80			24	40		40											184		
SUE		8						8									16		32	10	3.2
																			0		
HOURS SUB-TOTALS	0	88	0	0	24	40	0	48	0	0	0	0	0	0	0	0	0	16	216		
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$0.00	\$22,402.16	\$0.00	\$0.00	\$3,733.68	\$5,232.80	\$0.00	\$8,994.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,640.48	\$42,003.84		
% DISTRIBUTION OF STAFFING	0.00%	40.74%	0.00%	0.00%	11.11%	18.52%	0.00%	22.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.41%			
SUBTOTAL (FC130)																			\$42,003.84		

EXHIBIT D-FEE SCHEDULE (BGE, INC.)																					
PRIME PROVIDER NAME: BGE, INC. RUDELOFF ROAD PHASE 2																					
TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
DESIGN SURVEY (FC 150)																					
ROW Retracement Map	2	4	80				2	102											190	4	47.5
Topographic Survey			16				2		36								80	2	136		
Utility Locates		2	2				2										8		14		
HOURS SUB-TOTALS	2	6	98	0	0	0	6	102	36	0	0	0	0	0	0	0	88	2	340		
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$576.00	\$1,527.42	\$19,404.00	\$0.00	\$0.00	\$0.00	\$1,188.00	\$19,113.78	\$4,327.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$17,600.00	\$205.06	\$63,941.82		
% DISTRIBUTION OF STAFFING	0.59%	1.76%	28.82%	0.00%	0.00%	0.00%	1.76%	30.00%	10.59%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.88%	0.59%			
SUBTOTAL (FC150)																			\$63,941.82		
TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
ROADWAY DESIGN CONTROLS (FC160)																					
HORIZONTAL AND VERTICAL ALIGNMENT DATA SHEETS		1		2	4		2	4	8										21	3	7
PROPOSED TYPICAL SECTIONS	8	2		4	8		4	4	20										50	2	25
EXISTING TYPICAL SECTIONS	8				4		4		8										24	1	24
ROADWAY PLAN AND PROFILE (SCALE: H 1"=100' V 1"=10')	40	8		24	16	48	24	36	80										276	10	28
CROSS STREET ROADWAY PLAN AND PROFILE (SCALE: H 1"=100' V 1"=10')	8	4		5	16			4	40										77	2	39
SUPERELEVATION TABLES																			0		
INTERSECTION LAYOUTS & GRADING	8	4		16	24	24		16	54										146	5	29
SIDEWALK PLAN AND PROFILE (SCALE: H 1"=100' V 1"=10')	8	4		10	16	16	24	4	32										114	17	7
MISCELLANEOUS ROADWAY DETAILS		2		4		4		4	16										30	2	15
PAVEMENT REMOVAL PLANS & DEMOLITION PLANS		2		4	8	16		2	24										56	4	14
EARTHWORK CROSS SECTIONS		8		24	40		120	8	40										240	50	5
Plan review for TDLR submission		4																4	8	2	4
HOURS SUB-TOTALS	80	39	0	93	136	108	178	82	322	0	0	0	0	0	0	0	0	4	1042	98	
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$23,040.00	\$9,928.23	\$0.00	\$20,386.53	\$21,157.52	\$14,128.56	\$35,244.00	\$15,365.98	\$38,707.62	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$410.12	\$178,368.56		
% DISTRIBUTION OF STAFFING	7.68%	3.74%	0.00%	8.93%	13.05%	10.36%	17.08%	7.87%	30.90%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.38%			
SUBTOTAL (FC 160)																			\$178,368.56		
TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
DRAINAGE (FC161)																					
COMPUTE EXISTING PEAK FLOWS				8	24	16													48		
DETERMINE EXISTING HEADWATER AND TAILWATER ELEVATIONS (3 CROSSINGS)		8		24	24	64													120		
COMPUTE PROPOSED PEAK FLOWS				8	16	24													48		
DETERMINE PROPOSED HEADWATER AND TAILWATER ELEVATIONS (3 CROSSINGS)	8	8		8	16	40													80		
DRAINAGE AREA MAPS	4	4		8	12	24	24	4	36										116	6	19
HYDRAULIC DATA SHEETS	4	2		12	16	24	8	4	36										106	4	27
STORM SEWER COMPUTATIONS	4			8	16	24													52		
STORM SEWER DITCH PLAN AND PROFILES		4		16	16	28	12	16	64										156	17	9
DITCH CALCULATIONS TABLE				8	8	24		4	8										52	1	52
DRAINAGE SUMMARIES		1		2			6	2	8										19	1	19
CULVERT LAYOUTS AND SECTIONS	8	4		8	16	24	4		36										100	2	50
DRAINAGE / RIPRAP DETAILS		4		8	8	24	16	4	24										88	3	29
STANDARD DETAILS				4		8			8										20	6	3
STORM WATER POLLUTION PREVENTION PLAN (SW3P):																					
STORM WATER POLLUTION PREVENTION PLAN		1		4	4	8		4	36										57	5	11
STORM WATER POLLUTION PREVENTION PLAN STANDARDS				1					4										5	4	1
STORM WATER POLLUTION PREVENTION PLAN SUMMARIES		1		2	4			8	4										19	1	19
HOURS SUB-TOTALS	28	37	0	129	180	332	70	46	264	0	0	0	0	0	0	0	0	0	1,086	50	
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$8,064.00	\$9,419.09	\$0.00	\$28,278.09	\$28,002.60	\$43,432.24	\$13,860.00	\$8,619.94	\$31,735.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$171,411.40		
% DISTRIBUTION OF STAFFING	2.58%	3.41%	0.00%	11.88%	16.57%	30.57%	6.45%	4.24%	24.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
SUBTOTAL (FC 161)																			\$171,411.40		

Sheet 3 of 14

EXHIBIT D-FEE SCHEDULE (BGE, INC.)																						
PRIME PROVIDER NAME: BGE, INC. RUDELOFF ROAD PHASE 2																						
TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET	
SIGNING, PVMT. MARKING, & SIGNAL (FC162)																						
SIGNING AND PAVEMENT MARKING LAYOUTS	8	4		12	12	8	24	8	36										112	9	12	
SIGNING SUMMARIES (SMALL)				4		8	8		10										30	1	30	
SIGNING, PAVEMENT MARKING, ETC. QUANTITIES		2			8	12	4		4										30	1	30	
SIGNAL LAYOUT (@SH 123)	4			16	24	24		8	40										116	3	39	
TRAFFIC STANDARDS				4			8	4	4										20	15	1	
HOURS SUB-TOTALS	12	6	0	36	44	52	44	20	94	0	0	0	0	0	0	0	0	0	308	11		
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53				
TOTAL LABOR COSTS	\$3,456.00	\$1,527.42	\$0.00	\$7,891.56	\$6,845.08	\$6,802.64	\$8,712.00	\$3,747.80	\$11,299.74	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$50,282.24			
% DISTRIBUTION OF STAFFING	3.90%	1.95%	0.00%	11.69%	14.29%	16.88%	14.29%	6.49%	30.52%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
SUBTOTAL (FC 162)																			\$50,282.24			
TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET	
MISCELLANEOUS (ROADWAY) (FC 163)																						
TRAFFIC CONTROL PLAN, DETOURS & SEQUENCE OF CONSTRUCTION:																						
OVERALL PHASING LAYOUT	8	3		4	8	16	6	16	16										77	4	19	
TCP, DETOURS AND SEQUENCE OF CONSTRUCTION	4	4		8	16	24			56										112	4	28	
ADVANCE SIGNING LAYOUTS		2		2	4	4	2		16										30	2	15	
TCP DETAILS, TYPICAL SECTIONS		4		8	12	16	8		16										64	4	16	
TCP STANDARDS						10			8										18	20	1	
RETAINING WALL LAYOUTS																			0	0		
QUANTITIES, SPECIFICATIONS & ESTIMATE:																						
TITLE SHEET/INDEX SHEET		1		1		7	4	8	16										37	2	19	
ROADWAY QUANTITY SHEETS	8	1		4	4	10	2		8										37	2	19	
COMPUTE & TABULATE TCP QUANTITIES		1		4	8	20	8		16										57	4	14	
COMPUTE & TABULATE REMOVAL QUANTITIES		1		2	4	6			4										17	1	17	
SUMMARY SHEETS FOR DRIVEWAY, MISCELLANEOUS QUANTITIES, ETC.	8	1		2	4	6		4	4										29	1	29	
GENERAL NOTES, SPECIFICATIONS AND PROVISIONS, PROJECT CONSTRUCTION MANUAL	4	16		16		8												8	52	200	0	
	32	34	0	51	60	127	30	28	160	0	0	0	0	0	0	0	0	8	530	244		
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53				
TOTAL LABOR COSTS	\$9,216.00	\$8,655.38	\$0.00	\$11,179.71	\$9,334.20	\$16,614.14	\$5,940.00	\$5,246.92	\$19,233.60	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$820.24	\$86,240.19			
% DISTRIBUTION OF STAFFING	6.04%	6.42%	0.00%	9.62%	11.32%	23.96%	5.66%	5.28%	30.19%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.51%				
SUBTOTAL (FC 163)																			\$86,240.19			
TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET	
MANAGING CONTRACTED PER SERVICES & SURVEY CONTRACTS (FC 164)																						
PROJECT MANAGEMENT PLAN		4																	4			
ATTEND KICK-OFF MEETINGS WITH CITY AND TXDOT	8	8																	16			
PROJECT MANAGEMENT & ADMINISTRATION WITH CITY (24 MONTHS)	4	80																24	108			
PROJECT MANAGEMENT & ADMINISTRATION WITH SUBS (24 MONTHS)		80		80			24											6	190			
LGPP COMPLIANCE	8	24		8															40			
DESIGN SCHEDULE		4		12		2													18			
PROGRESS/COORDINATION MEETINGS (6 MEETINGS)	12	24			12													24	72			
HOURS SUB-TOTALS	32	224	0	100	12	2	24	0	0	0	0	0	0	0	0	0	0	54	448			
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53				
TOTAL LABOR COSTS	\$9,216.00	\$57,023.68	\$0.00	\$21,921.00	\$1,866.84	\$261.64	\$4,752.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,536.62	\$100,577.78			
% DISTRIBUTION OF STAFFING	7.14%	50.00%	0.00%	22.32%	2.68%	0.45%	5.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.05%				
SUBTOTAL (FC 164)																			\$100,577.78			

EXHIBIT D-FEE SCHEDULE (BGE, INC.)

PRIME PROVIDER NAME: BGE, INC.
RUDELOFF ROAD PHASE 2

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
BID AND CONSTRUCTION SERVICES (FC 351)																					
ATTEND PRE-BID CONFERENCE AND DISTIBUTE PLANS		8		4														16	28		
RESPOND TO CONTRACTOR QUESTIONS		8		8	12													10	38		
PREPARE AND ISSUE ADDENDA		16		24	24													12	76		
ASSIST IN CONTRACT BID OPENING AND PERFORM REFERENCE CHECKS		8		16														8	32		
TABULATE BIDS AND RECOMMENDED AWARD TO THE CITY		4			8	8												12	32		
RESPOND TO RFI'S (ASSUME 10)		20		20		40	40												120		
REVIEW SHOP DRAWINGS (SIGNALS, RETAINING WALLS, CULVERTS)		8		40			16												64		
ATTEND MONTHLY PROGRESS MEETINGS (ASSUME 16)		16																	16		
FINAL PUNCH LIST	8	8																	16		
HOURS SUB-TOTALS	8	96	0	112	44	48	56	0	0	0	0	0	0	0	0	0	0	58	422	0	
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$2,304.00	\$24,438.72	\$0.00	\$24,551.52	\$6,845.08	\$6,279.36	\$11,088.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,946.74	\$81,453.42		
% DISTRIBUTION OF STAFFING	1.90%	22.75%	0.00%	26.54%	10.43%	11.37%	13.27%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.74%			
SUBTOTAL (FC120)																			\$81,453.42		

DESCRIPTION	TOTAL MH BY FC	TOTAL COSTS BY FC	
ROUTE AND DESIGN STUDIES (FC110)	674	\$117,078.50	12%
ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT (FC 120)	664	\$104,595.40	11%
RIGHT OF WAY DATA (FC 130)	216	\$42,003.84	4%
DESIGN SURVEY (FC 150)	340	\$63,941.82	6%
ROADWAY DESIGN CONTROLS (FC 160)	1,042	\$178,368.56	18%
DRAINAGE (FC 161)	1,086	\$171,411.40	17%
SIGNING, PVMT. MARK., & SIGNALS (FC162)	308	\$50,282.24	5%
MISCELLANEOUS (ROADWAY) (FC 163)	530	\$86,240.19	9%
MANAGING CONTRACTED PER SERVICES & SURVEY CONTRACTS (FC 164)	448	\$100,577.78	10%
BID AND CONSTRUCTION SERVICES (FC 351)	422	\$81,453.42	8%
SUBTOTAL LABOR EXPENSES	5730	\$995,953.15	
OTHER DIRECT EXPENSES (COMPLETE IN ACCORDANCE WITH YOUR CONTRACT)	# OF UNITS	COST/UNIT	
Air Travel	0	\$ 800.00	\$0.00
Mileage (# of miles) (current state rate)	1,800	\$0.550	\$990.00
Per diem	0	\$36.00	\$0.00
Hotel	0	\$125.00	\$0.00
Photocopies B/W (8.5 X 11)	600	\$0.12	\$72.00
Photocopies B/W (11 X 17)	900	\$0.30	\$270.00
White Mylar (11 X 17)	0	\$3.00	\$0.00
CD Archive	0	\$5.00	\$0.00
Photocopies Color (8.5 X 11)	200	\$1.50	\$300.00
Photocopies Color (11 X 17)	200	\$2.00	\$400.00
Certified Mail	50	\$10.00	\$500.00
Traffic Counts - 72 hour bidirectional class counts	6	\$900.00	\$5,400.00
Plats and Field Notes	4	\$4,500.00	\$18,000.00
TDLR PROJECT REGISTRATION	1	\$175.00	\$175.00
TDLR PLAN REVIEW FEE	1	\$575.00	\$575.00
TDLR INSPECTION FEE	1	\$575.00	\$575.00
TDLR PRELIMINARY REVIEW FEE	1	\$145.00	\$145.00
TDLR SPECIAL INSPECTION FEE (\$/hr 1 Hr min)	1	\$215.00	\$215.00
SUBTOTAL DIRECT EXPENSES			\$27,617.00

SUMMARY	
TOTAL COSTS FOR PRIME ONLY	\$995,953.15
NON-SALARY (OTHER DIRECT EXPENSES) FOR PRIME ONLY	\$27,617.00
GRAND TOTAL	\$1,023,570.15

EXHIBIT D-FEE SCHEDULE (PCI)

PRIME PROVIDER NAME: BGE, Inc.
CONTRACT NUMBER:
PROJECT NAME: RUDELOFF ROAD PHASE 2

TASK DESCRIPTION	PRINCIPAL	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	SENIOR ENV. PLANNER	ENV. SCIENTIST SPECIALIST	GIS ANALYST	TECHNICIAN	CADD OPERATOR	CLERICAL	TOTAL LABOR HRS. & COSTS
ENVIRONMENTAL STUDIES & PUBLIC INVOLVEMENT (FC 120)											
Project Management and Coordination											0
Project Management and Coordination	18	18									
Quality Assurance/Quality Control		40									40
Social, Economic, and Environmental Studies											0
Data Collection					4	12	8				24
Scoping Documents and Work Plan Development (WPD)											0
WPD Section I - Project Development		2				8					10
WPD Section II - Work Plan Development		2				2					4
EIS to EA Classification Approval		1				4					5
Open-Ended (d) CE Classification Request Form (CE only)		1				4					5
Other Project-Related Information						4	12				16
Technical Reports											0
Air Quality (EA only)					4	1					5
Archaeological Resources						6					6
Historic Resources						4					4
Community Impacts					4	32	8				44
Water Resources											0
- Surface Water Analysis Form					2	1					3
- Waters of the U.S. Delineation Report					40	4	12				56
- Section 404/10 Impacts Table					12	1					13
Biological Resources											0
- Species Analysis Spreadsheet					2	32	4				38
- Species Analysis Form						2					2
- Documentation of TPWD BMPs Form (EA only)						2					2
- NRCS-CPA-106 Form					2	16					18
Hazardous Materials						32					32
Noise					160	4	16				180
Section 4(f) Analysis						2					2
Cumulative Impacts Analysis (EA only)					36	8	8				52
Induced Growth Analysis (EA only)					24	4	4				32
Environmental Assessment (EA only)		8			12	72	12				104
Public Involvement											0
MAPOs/Stakeholder Meetings		2			6	18					
Virtual Public Meeting with In-Person Option		12			12	80	12				116
NAOPH						8					8
											0
HOURS SUB-TOTALS	18	86	0	0	320	363	96	0	0	0	883
CONTRACT RATE PER HOUR	196.2665	149.35	164.4395	127.308	148.526	111.3945	106.09	79.5675	84.872	63.654	
TOTAL LABOR COSTS	\$3,532.80	\$12,844.10	\$0.00	\$0.00	\$47,528.32	\$40,436.20	\$10,184.64	\$0.00	\$0.00	\$0.00	\$114,526.06
% DISTRIBUTION OF STAFFING	2.04%	9.74%	0.00%	0.00%	36.24%	41.11%	10.87%	0.00%	0.00%	0.00%	
SUBTOTAL (FC120)											\$114,526.06

EXHIBIT D-FEE SCHEDULE (PCI)

PRIME PROVIDER NAME: BGE, Inc.
CONTRACT NUMBER:
PROJECT NAME: RUDELOFF ROAD PHASE 2

OTHER DIRECT EXPENSES (COMPLETE IN ACCORDANCE WITH YOUR CONTRACT)	# OF UNITS	COST/UNIT	
Air Travel		\$ 800.00	\$0.00
Mileage (# of miles) (current state rate)	600	\$0.575	\$345.00
ASTM Radius Search	2	\$500.00	\$1,000.00
Courier Service		\$30.00	\$0.00
Noice Meter Rental	1	\$100.00	\$100.00
GPS Rental	1	\$75.00	\$75.00
Cultural Site File Registration and Investigation		\$20,101.00	\$0.00
Backhoe & Operator		\$1,200.00	\$0.00
Hazardous Materials Database Report		\$650.00	\$0.00
Photocopies B/W (8.5 X 11)	250	\$0.12	\$30.00
Photocopies B/W (11 X 17)	40	\$0.30	\$12.00
White Mylar (11 X 17)		\$3.00	\$0.00
CD Archive	2	\$4.50	\$9.00
Photocopies Color (8.5 X 11)	175	\$1.20	\$210.00
Photocopies Color (11 X 17)	75	\$2.00	\$150.00
Exhibit Boards	10	\$100.00	\$1,000.00
SUBTOTAL DIRECT EXPENSES			\$2,931.00

SUMMARY	
Total Cost	\$114,526.06
Non-Salary (Other Direct Expenses)	\$2,931.00
Total Basic Services	\$117,457.06

EXHIBIT D-FEE SCHEDULE (RIOS)

PRIME PROVIDER NAME: BGE, INC.
Rudeloff Road Phase 2

TASK DESCRIPTION	Supervisory Engineer	SUE Project Manager	Professional Engineer	Assistant Project Manager	CADD Technician	Admin. Specialist II	Field Manager	TOTAL UNITS & COSTS	NO OF DWGS	LABOR HRS PER SHEET
RIGHT OF WAY DATA (FC 130)										
Quality Level "C" & "D" SUE - Phase I	1	6	4	12	16	4	8	51		
UNITS SUB-TOTALS	1	6	4	12	16	4	8	51		
CONTRACT RATE PER UNIT	\$ 166.06	\$ 151.93	\$ 143.73	\$ 105.89	\$ 79.76	\$ 70.80	\$ 109.85			
TOTAL COSTS	\$166.06	\$911.58	\$574.92	\$1,270.68	\$1,276.16	\$283.20	\$878.80	\$5,361.40		
% DISTRIBUTION OF COST	1.96%	11.76%	7.84%	23.53%	31.37%	7.84%	15.69%			
SUBTOTAL (FC130)								\$5,361.40		

TASK DESCRIPTION	Supervisory Engineer	SUE Project Manager	Professional Engineer	Assistant Project Manager	CADD Technician	Admin. Specialist II	Field Manager	TOTAL UNITS & COSTS	NO OF DWGS	LABOR HRS PER SHEET
RIGHT OF WAY DATA (FC 130)										
Quality Level "A" & "B" SUE - Phase II	1	4	2	8	8	2	8	33		
HOURS SUB-TOTALS	1	4	2	8	8	2	8	33		
CONTRACT RATE PER HOUR	166.06	151.93	143.73	105.89	79.76	70.8	109.85			
TOTAL LABOR COSTS	\$166.06	\$607.72	\$287.46	\$847.12	\$638.08	\$141.60	\$878.80	\$3,566.84		
% DISTRIBUTION OF STAFFING	1.96%	7.84%	3.92%	15.69%	15.69%	3.92%	15.69%			
SUBTOTAL (FC130)								\$3,566.84		

EXHIBIT D-FEE SCHEDULE (RIOS)

PRIME PROVIDER NAME: BGE, INC.
Rudeloff Road Phase 2

OTHER DIRECT EXPENSES (COMPLETE IN ACCORDANCE WITH YOUR CONTRACT)	# OF UNITS	COST/UNIT						
Air Travel	0	\$ 800.00						\$0.00
Mileage (# of miles) (current state rate)	0	\$0.575						\$0.00
Per diem	0	\$36.00						\$0.00
Photocopies B/W (11 X 17)	0	\$0.25						\$0.00
White Mylar (11 X 17)	0	\$3.00						\$0.00
CD Archive	0	\$5.00						\$0.00
Photocopies Color (8.5 X 11)	0	\$1.50						\$0.00
Photocopies Color (11 X 17)	0	\$2.00						\$0.00
								\$0.00
SUBTOTAL DIRECT EXPENSES								\$0.00

UNIT COSTS	QUANTITY	UNIT	RATE					TOTAL
Level C-D. Includes labor and equipment for records research, CADD, and mapping.		LF						\$ -
Level B (Designation)		LF						\$ -
Mobilization/Demobilization		mile	\$5.00					\$ -
Level A (Location, Test Holes). Includes labor and equipment for vacuum excavation, engineering and CADD.								\$ -
0 to 5 ft.	4	each	\$1,250.00					\$ 5,000.00
>5 to 8 ft.	1	each	\$1,525.00					\$ 1,525.00
>8 to 13 ft.		each	\$1,900.00					\$ -
>13 to 20 ft.		each	\$2,450.00					\$ -
One (1) Designating Person with equipment	10	hour	\$150.00					\$ 1,500.00
Two (2) Designating Person with equipment	10	hour	\$235.00					\$ 2,350.00
SUBTOTAL UNIT COSTS								\$ 10,375.00

SUMMARY	
TOTAL COST	\$8,928.24
NON-SALARY (OTHER DIRECT EXPENSES)	\$0.00
UNIT COSTS	\$ 10,375.00
GRAND TOTAL	\$19,303.24

EXHIBIT D-FEE SCHEDULE (Corsair)
Rudeloff Road

PRIME PROVIDER NAME: BGE, Inc.
CONTRACT NUMBER:
PROJECT NAME: Rudeloff Road Phase 2

TASK DESCRIPTION	SENIOR PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	FIELD ENGINEER	EIT	SENIOR ENGINEERING TECH	TOTAL LABOR HRS. & COSTS
ROUTE & DESIGN STUDIES (FC 110)							
Geotechnical Services							
Mark Soil Bore Locations/ Utility Call-ins					8		
Field Personnel During Drilling					40		
Sample Classification, Laboratory Coordination and Boring Log Generation	2	5	7		15		
Analysis of Pavement	4	15	25		25		
Preliminary Report Generation	4	15	25		20		
Final Report Generation	4	5	10		15		
Prepare Boring Log Sheets for Plan Set and Stamp	2				1		
HOURS SUB-TOTALS	16	40	67	0	124	0	247
CONTRACT RATE PER HOUR	177.38	163.72	102.34	98.25	88.69	50	
TOTAL LABOR COSTS	\$2,838.08	\$6,548.80	\$6,856.78	\$0.00	\$10,997.56	\$0.00	\$27,241.22
% DISTRIBUTION OF STAFFING	10.4%	24.0%	25.2%	0.0%	40.4%	0.0%	
SUBTOTAL (FC 110)							\$27,241.22

Corsair - OTHER DIRECT EXPENSES					
Other Direct Expenses	Unit	Fixed Cost	Maximum Cost	Quantity	Total Cost
Lodging/Hotel - Taxes and Fees	day/person	Current State Rate	30	3	\$90.00
Lodging/Hotel (Taxes/fees not included)	day/person	Current State Rate	\$91.00	3	\$273.00
Meals (Excluding alcohol & tips) (Overnight stay required)	day/person	Current State Rate	51	3	\$153.00
Mileage	mile	Current State Rate	.55	220	\$121.00
Traffic Control Services, Arrow Boards and Attenuator trucks - Medium Project (Includes labor, equipment and fuel)	day		\$2,000.00	0	\$0.00
Mobilization and Demobilization of Drilling Rig	per mile		\$4.25	220	\$935.00

TOTAL	\$1,572.00
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EXHIBIT D-FEE SCHEDULE (Corsair)
Rudeloff Road

PRIME PROVIDER NAME: BGE, Inc.
CONTRACT NUMBER:
PROJECT NAME: Rudeloff Road Phase 2

Corsair - UNIT COSTS					
Unit Costs					
Services To Be Provided	Test Code/Method	Unit	COST	QUANTITIES	TOTAL COST
Modified Proctor Test	ASTM D1557	each	\$250.00	2	\$ 500.00
California Bearing Ratio (Single Sample without MD Curve)	ASTM D1883	test	\$200.00	2	\$ 400.00
Calcium Carbonate Content of Soils	ASTM D4373	each	\$48.00	22	\$ 1,056.00
Soil Boring/Rock Coring without TCP (< 60 ft.)	N/A	LF	\$32.00	260	\$ 8,320.00
Determining of Moisture Content in Soils	TEX103-E	each	\$13.00	111	\$ 1,443.00
Determining Liquid Limit of Soils	TEX 104-E	each	\$35.00	70	\$ 2,450.00
Determining Plastic Limit of Soils	TEX 105-E	each	\$35.00	70	\$ 2,450.00
Particle Size Analysis of Soils	TEX 110-E	each	\$70.00	70	\$ 4,900.00
Determining the Amount of Material in Soils Finer than the 78 micrometer (No. 200) Sieve	TEX 111-E	each	\$40.00	70	\$ 2,800.00
Determining Potential Vertical Rise	Tex-124-E	each	\$80.00	9	\$ 720.00
					\$ -

Total	\$ 25,039.00
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SUMMARY	
TOTAL Labor COSTS	\$27,241.22
NON-SALARY (OTHER DIRECT EXPENSES)	\$1,572.00
NON-SALARY (OTHER UNIT COSTS)	\$ 25,039.00
GRAND TOTAL	\$53,852.22

PRIME PROVIDER NAME: BGE, INC.
RUDELOFF ROAD PHASE I

SUPPLEMENTAL SERVICE - EXHIBIT D-FEE SCHEDULE (BGE, INC.)

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
ROUTE & DESIGN STUDIES (FC 110)																					
ALIGNMENT ANALYSIS		1				1			2										4		
PRELIMINARY TYPICAL SECTIONS									2										2		
PRELIMINARY CROSS SECTIONS						2													2		
HOURS SUB-TOTALS	0	1	0	0	0	3	0	0	4	0	0	0	0	0	0	0	0	0	8		
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$0.00	\$254.57	\$0.00	\$0.00	\$0.00	\$392.46	\$0.00	\$0.00	\$480.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,127.87		
% DISTRIBUTION OF STAFFING		12.5%				37.5%			50.0%												
SUBTOTAL (FC 110)																			\$1,127.87		

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
ENVIRONMENTAL STUDIES & PUBLIC INVOLVEMENT (FC 120)																					
REVIEW CONSTRAINTS/ENVIRONMENTAL DOCUMENT		1								2	1	4						4	12		
HOURS SUB-TOTALS	0	1	0	0	0	0	0	0	0	2	1	4	0	0	0	0	0	4	12		
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$0.00	\$254.57	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$480.84	\$88.39	\$495.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$410.12	\$1,728.92		
% DISTRIBUTION OF STAFFING		8.33%								16.67%	8.33%	33.33%						33.33%			
SUBTOTAL (FC120)																			\$1,728.92		

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
RIGHT OF WAY DATA (FC 130)																					
Utility Coordination		1																	1		
SUE									2										2		
ROW Acquisition Services (6 Parcels)																			0		
HOURS SUB-TOTALS	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3		
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$0.00	\$254.57	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$240.42	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$494.99		
% DISTRIBUTION OF STAFFING		33.33%							66.67%												
SUBTOTAL (FC130)																			\$494.99		

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
DESIGN SURVEY (FC 150)																					
Topographic Survey (up to 1,000 FT)			1					2									6		9		
HOURS SUB-TOTALS	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	6	0	9		
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$0.00	\$0.00	\$198.00	\$0.00	\$0.00	\$0.00	\$0.00	\$374.78	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,200.00	\$0.00	\$1,772.78		
% DISTRIBUTION OF STAFFING			11.11%					22.22%									66.67%				
SUBTOTAL (FC150)																			\$1,772.78		

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
ROADWAY DESIGN CONTROLS (FC160)																					
ROADWAY DESIGN:																					
HORIZONTAL AND VERTICAL ALIGNMENT DATA SHEETS				1	1				1										3	3	1
PROPOSED TYPICAL SECTIONS	1	1		1	1				2										6	2	3
EXISTING TYPICAL SECTIONS					1				1										2	1	2
ROADWAY PLAN AND PROFILE (SCALE: H 1"=100' V 1"=10')	2	1		2	2	4			8										19	17	1
INTERSECTION LAYOUTS & GRADING																			0	5	0
MISCELLANEOUS ROADWAY DETAILS																			0	2	0
PAVEMENT REMOVAL PLANS & DEMOLITION PLANS					1	2			2										5	10	1
EARTHWORK CROSS SECTIONS				1	4		4		2										11	N/A	N/A
HOURS SUB-TOTALS	3	6	0	5	10	6	4	0	16	0	0	0	0	0	0	0	0	4	54	62	
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$864.00	\$1,527.42	\$0.00	\$1,096.05	\$1,555.70	\$784.92	\$792.00	\$0.00	\$1,923.36	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$410.12	\$8,953.57		
% DISTRIBUTION OF STAFFING	5.56%	11.11%		9.26%	18.52%	11.11%	7.41%		29.63%									7.41%			
SUBTOTAL (FC 160)																			\$8,953.57		

SUPPLEMENTAL SERVICE - EXHIBIT D-FEE SCHEDULE (BGE, INC.)

PRIME PROVIDER NAME: BGE, INC.
RUDELOFF ROAD PHASE I

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET	
DRAINAGE (FC161)																						
COMPUTE EXISTING PEAK FLOWS					1				1											2		
DRAINAGE AREA MAPS					1															1	1	
HYDRAULIC DATA SHEETS									1											1	1	
STORM SEWER COMPUTATIONS																				0		
STORM SEWER DITCH PLAN AND PROFILES																				0		
DITCH CALCULATIONS TABLE					1															1	1	
DRAINAGE SUMMARIES									1											1	1	
CULVERT LAYOUTS AND SECTIONS																				0		
DRAINAGE / RIPRAP DETAILS																				0		
STANDARD DETAILS																				0		
STORM WATER POLLUTION PREVENTION PLAN (SW3P):																						
STORM WATER POLLUTION PREVENTION PLAN					1				1											2	1	2
STORM WATER POLLUTION PREVENTION PLAN STANDARDS																				0		
STORM WATER POLLUTION PREVENTION PLAN SUMMARIES																				0		
HOURS SUB-TOTALS	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	8	5	
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53				
TOTAL LABOR COSTS	\$0.00	\$0.00	\$0.00	\$0.00	\$622.28	\$0.00	\$0.00	\$0.00	\$480.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,103.12			
% DISTRIBUTION OF STAFFING					50.00%				50.00%													
SUBTOTAL (FC 161)																			\$1,103.12			

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST III	PUBLIC INVOLVEMENT SPECIALIST III	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET	
SIGNING, PVMT. MARKING, & SIGNAL (FC162)																						
SIGNING AND PAVEMENT MARKING LAYOUTS				1		1			4											6	1	6
SIGNING SUMMARIES (SMALL)																				0	0	
SIGNING, PAVEMENT MARKING, ETC. QUANTITIES				1		1			4											6	1	6
SIGNAL LAYOUT (@SH 46)																				0	0	
TRAFFIC STANDARDS																				0	0	
HOURS SUB-TOTALS	0	0	0	2	0	2	0	0	8	0	0	0	0	0	0	0	0	0	0	12	2	
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53				
TOTAL LABOR COSTS	\$0.00	\$0.00	\$0.00	\$438.42	\$0.00	\$261.64	\$0.00	\$0.00	\$961.68	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,661.74			
% DISTRIBUTION OF STAFFING				16.67%		16.67%			66.67%													
SUBTOTAL (FC 162)																			\$1,661.74			

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST I/II	PUBLIC INVOLVEMENT SPECIALIST I/II	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET	
MISCELLANEOUS (ROADWAY) (FC 163)																						
TRAFFIC CONTROL PLAN, DETOURS & SEQUENCE OF CONSTRUCTION:																						
OVERALL PHASING LAYOUT					1				1											2	1	2
TCP, DETOURS AND SEQUENCE OF CONSTRUCTION					2	4			4											10	1	10.0
ADVANCE SIGNING LAYOUTS																				0		
TCP DETAILS, TYPICAL SECTIONS					1	1			2											4	1	4
TCP STANDARDS					1	1			2											4	1	4
RETAINING WALL LAYOUTS																				0		
QUANTITIES, SPECIFICATIONS & ESTIMATE:																						
TITLE SHEET/INDEX SHEET																				0		
ROADWAY QUANTITY SHEETS																				0		
COMPUTE & TABULATE TCP QUANTITIES					1	1														2	1	2
COMPUTE & TABULATE REMOVAL QUANTITIES																				0		
SUMMARY SHEETS FOR DRIVEWAY, MISCELLANEOUS QUANTITIES, ETC.																				0		
GENERAL NOTES, SPECIFICATIONS AND PROVISIONS, PROJECT CONSTRUCTION MANUAL																				0		
HOURS SUB-TOTALS	0	0	0	0	6	7	0	0	9	0	0	0	0	0	0	0	0	0	0	22	5	
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53				
TOTAL LABOR COSTS	\$0.00	\$0.00	\$0.00	\$0.00	\$933.42	\$915.74	\$0.00	\$0.00	\$1,081.89	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,931.05			
% DISTRIBUTION OF STAFFING					27.3%	31.8%			40.9%													
SUBTOTAL (FC 163)																			\$2,931.05			

SUPPLEMENTAL SERVICE - EXHIBIT D-FEE SCHEDULE (BGE, INC.)

PRIME PROVIDER NAME: BGE, INC.
RUDELOFF ROAD PHASE I

TASK DESCRIPTION	QC MANAGER	Sr. PROJECT MANAGER	SURVEY MANAGER RPLS	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	GRADUATE ENGINEER	SR. ENGINEERING TECH	Sr. CADD TECH	CADD TECH	ENV. SCIENTIST SENIOR	ENV. SCIENTIST I/II	ENV. SCIENTIST III	ENV. SCIENTIST IV	PUBLIC INVOLVEMENT SPECIALIST III	PUBLIC INVOLVEMENT SPECIALIST III	GIS TECHNICIAN	SURVEY CREW	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
BID AND CONSTRUCTION SERVICES (FC 351)																					
ATTEND PRE-BID CONFERENCE AND DISTIBUTE PLANS																				0	
RESPOND TO CONTRACTOR QUESTIONS																				0	
PREPARE AND ISSUE ADDENDA																				0	
ASSIST IN CONTRACT BID OPENING AND PERFORM REFERENCE CHECKS																				0	
TABULATE BIDS AND RECOMMENDED AWARD TO THE CITY																				0	
RESPOND TO RFIS (ASSUME 1)				1																1	
REVIEW SHOP DRAWINGS (SIGNALS, RETAINING WALLS, CULVERTS)																				0	
ATTEND MONTHLY PROGRESS MEETINGS (ASSUME 16)																				0	
FINAL PUNCH LIST																				0	
HOURS SUB-TOTALS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
CONTRACT RATE PER HOUR	288	254.57	198	219.21	155.57	130.82	198	187.39	120.21	240.42	88.39	123.75	194.46	88.39	123.75	97	200	102.53			
TOTAL LABOR COSTS	\$0.00	\$0.00	\$0.00	\$219.21	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$219.21		
% DISTRIBUTION OF STAFFING				100.00%																	
SUBTOTAL (FC120)																			\$219.21		

DESCRIPTION		TOTAL MH BY FC	TOTAL COSTS BY FC
ROUTE AND DESIGN STUDIES (FC110)		8	\$1,127.87
ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT (FC 120)		12	\$1,728.92
RIGHT OF WAY DATA (FC 130)		3	\$494.99
DESIGN SURVEY (FC 150)		9	\$1,772.78
ROADWAY DESIGN CONTROLS (FC 160)		54	\$8,953.57
DRAINAGE (FC 161)		8	\$1,103.12
SIGNING, PVMT, MARK., & SIGNALS (FC162)		12	\$1,661.74
MISCELLANEOUS (ROADWAY) (FC 163)		22	\$2,931.05
BRIDGE DESIGN (FC 170)		0	\$0.00
BID AND CONSTRUCTION SERVICES (FC 351)		1	\$219.21
SUBTOTAL LABOR EXPENSES		129	\$19,993.25
OTHER DIRECT EXPENSES (COMPLETE IN ACCORDANCE WITH YOUR CONTRACT)	# OF UNITS	COST/UNIT	
Air Travel		\$ 800.00	\$0.00
Mileage (# of miles) (current state rate)		\$0.575	\$0.00
Per diem		\$36.00	\$0.00
Hotel		\$125.00	\$0.00
Photocopies BW (8.5 X 11)		\$0.12	\$0.00
Photocopies BW (11 X 17)	24	\$0.30	\$7.20
White Mylar (11 X 17)		\$3.00	\$0.00
CD Archive		\$5.00	\$0.00
Photocopies Color (8.5 X 11)		\$1.50	\$0.00
Photocopies Color (11 X 17)		\$2.00	\$0.00
Certified Mail		\$10.00	\$0.00
TDLR PROJECT REGISTRATION		\$175.00	\$0.00
TDLR PLAN REVIEW FEE		\$575.00	\$0.00
TDLR INSPECTION FEE		\$575.00	\$0.00
TDLR PRELIMINARY REVIEW FEE		\$145.00	\$0.00
TDLR SPECIAL INSPECTION FEE (\$/hr 1 Hr min)		\$215.00	\$0.00
SUBTOTAL DIRECT EXPENSES			\$7.20

SUMMARY	
TOTAL COSTS FOR PRIME ONLY	\$19,993.25
NON-SALARY (OTHER DIRECT EXPENSES) FOR PRIME ONLY	\$7.20
GRAND TOTAL	\$20,000.45