PROFESSIONAL SERVICES
SUPPLEMENTAL AGREEMENT # 01
FOR
CITY OF PFLUGERVILLE
WILBARGER CREEK WWTF
DESIGN AND BIDDING PHASE SERVICES

STATE OF TEXAS §
§
COUNTY OF TRAVIS §

This Supplemental Agreement No. 01 to a contract for Professional Services is made by and between the City of Pflugerville, Texas ("City") and Garver, LLC ("Consultant"). City and Consultant may be referred to herein singularly as "Party" or collectively as the "Parties."

WHEREAS, the City and Consultant executed an Agreement for Professional Services ("Agreement") on the 9th day of November, 2020 for the Wilbarger Creek WWTF project ("Project") in the amount of $1,650,192.00; and

(*insert an additional whereas statements for each supplemental agreement*)

WHEREAS, the City and Consultant desire to enter into a Supplemental Agreement # 01 for Professional Services for the Project in the amount of $7,896,181.00, on the ____ day of June 2021 to add design and bid phase effort for the design and bidding and special services for the Wilbarger Creek WWTF to the Agreement; and

WHEREAS, it has become necessary to amend the Agreement to modify the provisions for the Term of the Agreement, Scope of Services, Work Schedule, and Compensation; and

WHEREAS, it is necessary for the City to amend its agreements from time to time to comply with changes in state law relating to contracts of municipalities.

NOW, THEREFORE, premises considered, the City and the Consultant agree that said Agreement is amended as follows:

I.

Article II. Term shall be amended by changing the term of the Agreement to terminate on _ _____, with the ratification and incorporation of the remaining terms of the Agreement.

Article III. Scope of Services and Exhibit A, shall be amended as set forth in the attached addendum to Exhibit A.

Article III. Work Schedule and Exhibit B, shall be amended as set forth in the attached addendum to Exhibit B.

Article IV. Compensation to Consultant and Exhibit C (Fee Schedule), shall be amended by increasing by $7,896,181.00 the amount payable under the Agreement for a total of $9,546,373.00, as shown by the attached Addendum to Exhibit C (Fee Schedule).

2.

Except as amended hereby as indicated above, the terms of the Agreement shall remain unchanged and in full force and effect.

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

CITY OF PFLUGERVILLE		**CONSULTANT**	
_____		_____	
(Signature)		*(Signature)*	
Printed Name:	Sereniah Breland	Printed Name:	Dan Olson, PE
Title:	City Manager	Title:	Vice President
Date:	_____	Date:	June 9, 2021

APPROVED AS TO FORM:

_____

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

EXHIBIT A – CITY OF PFLUGERVILLE
WILBARGER CREEK REGIONAL WWTF
SCOPE OF SERVICES
DESIGN AND BID PHASE SERVICES

General

Generally, the Scope of Services includes professional services necessary for the preliminary design, final design, bid phase, and other services as noted in this document for the City of Pflugerville Wilbarger Creek Regional Wastewater Treatment Facility (RWWTF). The Owner and Client is the City of Pflugerville (Owner) and is represented by CP&Y, the Owner's Representative (OR).

The Scope of Services includes professional services necessary for the preliminary and final design and bidding of a new, greenfield 6 million gallons per day (MGD) RWWTF. This project will be delivered as a design-bid-build project. The previous conceptual design phase (ongoing by Garver) includes significant master planning and site development work, including environmental assessments, hydrologic and hydrology studies, geotechnical engineering, survey, site master planning to 24 MGD, modeling, phasing analysis, and conceptual design of the RWWTF.

The planned capital improvements include new facilities to meet the targeted capacity and treatment criteria for the permitted site.

The scope assumes all virtual meetings unless specifically identified in the scope. All deliverables for the project will be uploaded to the OR SharePoint site. The scope of services includes design of the following elements:

- Hydraulic capacity of the RWWTF Annual Average Design of 6 MGD.
- Hydraulic capacity of the RWWTF Peak Flow of 24 MGD.
- Site civil, such as yard piping, site utilities (drains, water distribution), paving, drainage, site access and security.
- Influent pump station.
- Headworks facility with screening and grit removal with screenings and grit processing loading.
- Influent foul air facility.
- Secondary treatment splitter structures.
- A2O activated sludge basins for secondary treatment.
- Blower facility.
- Mixed liquor splitter box.
- Secondary clarifiers.
- RAS/WAS pump station.
- Tertiary filter facility.
- Ultraviolet disinfection facility.
- Effluent facility.
- Chemical storage and feed facilities.
- Non-potable plant water system.
- Potable plant water system.
- Solids thickening and decant facilities.
- Aerated solids holding tank.
- Solids dewatering facilities.
- Dewatering facility foul air facility (future).
- Operations, laboratory, and maintenance building.

- Electrical service facilities and electrical distribution facilities.
- Backup power generator system.
- SCADA system.

1. Task I: Project Management and Quality Assurance

This task is for the anticipated preliminary design phase, final design phase, and bidding phase only and is anticipated to be eighteen (18) months long.

Garver will provide and develop project control tools including progress reports, action items log, decision log, risk register, design team meetings, workshops, and schedule and invoicing. Garver shall provide professional services in this Task as follows:

1.1. Prepare a Project Work Plan (Garver Form), a document to be used by all participants to ensure communication on understanding of project goals, scope, and tasks. This project plan will serve all design phases. It will address:

- Project schedule.
- Project budget.
- Quality Management Plan.
- Change Management Plan.
- Communications Plan.

1.2. Schedule and direct regular coordination meetings with the design team to coordinate task assignments, action items, and to prepare for progress meetings with the Owner/OR. Garver will maintain an Action Item Log/ Decision Log to monitor activity. Coordinate with subconsultants to confirm all project elements are compatible and integrated. Coordinate with the Owner/OR as needed.

1.3. Schedule and conduct up to fifteen (15) progress meetings with the Owner/OR. In addition to reviewing progress at each meeting, review project deliverable status, current schedule, outstanding action items and project bottlenecks that could impact schedule, budget status, outstanding decisions, and decisions made. Prepare agenda and meeting materials, direct and document meetings to review progress, and facilitate the exchange of ideas and information. Prepare draft meeting minutes, to include action lists and decision lists, to submit to the Owner/OR for review and approval. Final minutes will be issued after receipt of review comments. The first progress meeting will include a project start up meeting to confirm project scope, personnel, lines of communication, security protocols, change management, and schedule.

1.4. Prepare monthly Project Summary Reports and submit with monthly invoice. The report shall contain the following elements:

- Summary of work completed to date.
- Microsoft Project Schedule with slip notification.
- Summary of action items/decisions.
- Upcoming activities.
- Potential changes in scope, costs, or schedule.

1.5. Provide Quality Assurance (QA) / Quality Control (QC)

Garver will conduct internal QA/QC of each deliverable prior to delivery to the Owner/OR. Garver will prepare for, plan, and conduct QA/QC of project deliverables. Project documents appropriate to the submittal will be provided a minimum of 5 working days before the review meeting. Prepare a meeting memorandum documenting major revisions and decisions made during the meeting.

Task I Deliverables:

- Draft Progress Meeting Agenda; Upload to SharePoint and email with attachment to project team one (1) week prior to progress meeting (PDF document).
- Progress Meeting (TEAMS Video), action items/decision log (Excel), Microsoft Project schedule update, as needed (PDF document); Upload to SharePoint within one (1) day following progress meeting.
- Draft Progress Meeting Minutes (PDF document); Upload to SharePoint within two (2) weeks following the Progress Meeting.
- Final Progress Meeting Minutes and Meeting Presentation (PDF document); Upload to SharePoint within one (1) week following receipt of all review comments.
- Monthly status reports (PDF document).
- Monthly schedule updates (PDF document).
- Monthly invoices (PDF document).

2. TASK II: Preliminary Design Development (30% Design)

The Preliminary Design Phase will represent approximately 30% of final construction documents. The preliminary design phase submittal will include a submittal of preliminary plans and an opinion of probable construction cost (OPCC). This submittal will not include technical specifications. Garver will not begin final design until the preliminary design is approved by the Owner in writing. Preliminary design will include:

1. Process Design Criteria.
2. Opinion of Probable Construction Cost – Preliminary Design Phase.
3. Preliminary Drawings.
4. Equipment Data Sheets and Manufacturer Information.

Garver will coordinate with the Texas Commission on Environmental Quality (TCEQ) via telephone on the project status, design criteria, minor permit amendment application, and any anticipated effluent quality impacts to the permit. Process design criteria will be documented to identify basis of unit sizing and verification of TCEQ regulatory conformance with the updated TPDES permit following the minor amendment identified in Task VIII.

The opinion of probable construction cost (OPCC) will update the City of Pflugerville's RWWTF Improvements' conceptual estimate of construction costs for project components based on information obtained during the preliminary design phase.

2.1. Garver anticipates the preliminary design drawings will include a site plan, yard piping plan, hydraulic profile, preliminary process and instrumentation diagrams (P&IDs), preliminary layouts of the proposed improvements, such as liquid treatment process units and solids treatment process units, beginning development of BIM modeling, associated equipment, major piping and valves, and preliminary electrical one-line diagrams.

Garver will conduct internal QA/QC of the preliminary drawings prior to delivery to the Owner/OR. Garver will prepare for, plan, conduct QA/QC and participate in the QC review meeting with the Owner/OR. The QC review discussions will occur in conjunction with Design Criteria Workshop, which will be held accordingly at the 30% project completion stages. Project documents appropriate to the submittal stage will be provided a minimum of 5 working days before the review meeting. Prepare a meeting memorandum documenting major revisions and decisions made during the meeting.

2.2. Garver will develop a Preliminary (30%) Design Document that will compile a set of Design Information Memoranda (DIMs - up to 26) under a single cover and will serve as a Preliminary Design Report (PDR). The following list describes the report sections/DIMs to be developed for this project:

- DIM 1 – Executive Summary
- DIM 2 – Overall 6 MGD Phase Design Criteria / Mass Balance
- DIM 3 – Hydraulics
- DIM 4 – Influent Lift Station
- DIM 5 – Headworks
- DIM 6 – Aeration Basins
- DIM 7– Blowers
- DIM 8 – Secondary Clarifiers
- DIM 9– RAS/WAS Pump Station
- DIM 10 – Tertiary Filters
- DIM 11 – UV and Effluent Facility
- DIM 12 – Chemical Feed System
- DIM 13 – Non-Potable Plant Water System
- DIM 14 – Potable Water System
- DIM 15 – Plant Drain System
- DIM 16– Sludge Thickening and Storage
- DIM 17– Dewatering Building
- DIM 18 – Odor Control
- DIM 19 – Site Civil and Yard Piping
- DIM 20 – Structural Design Criteria and Foundation Design
- DIM 21– Electrical Distribution System/Standby generator
- DIM 22 – SCADA System
- DIM 23 – Administration, Operations and Maintenance Building
- DIM 24 – Building Design Criteria
- DIM 25 – Opinion of Probable Construction Cost
- DIM 26 – Annual Operations Planning

Each DIM will detail the applicable system description, design criteria, intended equipment manufacturers, (where applicable) and control descriptions for the area under consideration (where applicable). Process design criteria will be documented to identify basis of unit sizing and verification of TCEQ regulatory conformance.

This DIM List is preliminary and subject to change pending final process selections.

The equipment data sheets and manufacturer information will provide information on the major items of process equipment selected for the plant based on Garver's experience and Owner preference. Equipment data sheets that summarize operating conditions and key components will be provided along with manufacturer catalog information.

Within this task, Garver will investigate demand patterns for plant potable water, non-potable water, and on-site drain systems. Garver will create loop-based hydraulic models for distribution of potable and non-potable water throughout the site. Garver will create a drain/sanitary sewer model for on-site uses.

Garver will conduct internal QA/QC of each DIM deliverable prior to delivery to the Owner/OR. Garver will prepare for, plan, conduct QA/QC and participate in the QC review meeting with the Owner/OR. The QC review discussions will occur in conjunction with the 30% Design Review Workshop which will

be held accordingly at the 30% project completion stages. Project documents appropriate to the submittal stage will be provided a minimum of 5 working days before the review meeting. Prepare a meeting memorandum documenting major revisions and decisions made during the meeting.

2.3. 30% Functionality / Operability Review

Garver will conduct a review of the 30% Design Deliverable for overall functionality and operability. The focus of this review will be on the process and instrumentation diagrams (P&IDs) and control narratives. The review will also focus on review of electrical control diagrams. This review is anticipated to be an internal review, conducted by Garver and its subconsultants. Documentation of the review will be submitted to the Owner/OR.

2.4. Garver will prepare for, lead, and participate in up to three workshops during the preliminary design process. The workshops will be as noted below, with major items of discussion and location of meetings to be held as noted:

- Building Workshop (to be held virtually):
  - Discuss Operations/Lab Buildings functionality and floorplan and elevation.
  - Discuss architectural building standards to be used across all facilities.
  - Discuss structural/foundation design requirements.
  - Discuss building mechanical requirements and expectations across all facilities.
  - General review of associated DIMs (DIM 21 – Structural Design Criteria and Foundation Design, DIM 24 – Administration, Operations, and Maintenance Buildings, and DIM 25 – Building Design Criteria).
- Electrical and SCADA Workshop (to be held virtually):
  - Review and refinement of preliminary electrical one-line drawings.
  - Review and refinement of preliminary SCADA design approach and system architecture.
  - Review and refinement of the connection to offsite city-wide SCADA system.
  - Review and refinement of the cyber security plan.
  - Review and refinement of the building and site access systems (card readers).
  - Review and refinement of the facility video systems.
  - General review of associated DIMs (DIM 22 – Electrical Distribution and Standby Generator, and DIM 23 – SCADA System).
- Design Criteria and Process Control Workshop (to be held at City of Pflugerville offices with wastewater operators present; it is anticipated that this review workshop will be held after the initial review of process DIMs and initial comments to DIMs have been incorporated):
  - Review and refinement of process design criteria.
  - Review and refinement of preliminary P&IDs.
  - Review and refinement of the preliminary site plan, hydraulic profile, and facilities layouts.
  - Review and preliminary selection of major equipment items.
  - Facility Operations and Maintenance focused reviews.

2.5. As part of the Design Criteria and Process Control Workshop, Garver will conduct an Operations & Maintenance (O&M)-focused discussion to determine process control parameters and equipment preferences. The WWTF staff preferences will be documented within the Preliminary Design Documents.

2.6. Garver will coordinate with the Owner regarding the front-end documents for the project. Garver will utilize the Texas Water Development Board (TWDB), Engineers Joint Council Documents Committee

(EJCDC) standard documents and City front ends as a base for developing the project's front-end documents. Garver will coordinate these preliminary front-end documents with the Owner and O/R.

2.7. Garver will prepare, compile, and finalize the Preliminary (30%) Design Submittal and submit for review by the Owner/OR.

2.8. Garver will prepare and transmit a written documentation of responses to the Owner's review comments of the Preliminary Design Documents.

2.9. Garver will coordinate with TCEQ via telephone on project status and design criteria.

2.10. Garver will lead a 30% Design Review Workshop at the Owner's office to solicit comments and feedback from the Owner/OR.

Task II Deliverables:

- 30% Functionality / Operability Review Summary write-up of review and resulting updates/decisions (PDF document).
- Draft Preliminary (30%) Design Documents (including drawings by separate, bookmarked PDF) (PDF document).
- Draft Preliminary (30%) Design Report (PDF document).
- Responses to Owner/OR comments (PDF document).
- Final Preliminary (30%) Design Report (PDF document).
- Required copies of documentation for funding and technical review as required by state agencies (PDF document).

3. TASK III: Final Design Development (60% Design)

3.1. During the Final Design Development (60% Design) Phase of the project, Garver will incorporate comments from the 30% workshops and reviews to progress the design across all disciplines. This submittal will include a drawing set that builds on the 30% drawing set, specifications, and updated OPCC based on the latest design data, and a Microsoft Project schedule update that identifies slip.

Garver will conduct internal QA/QC of the 60% design phase deliverable prior to delivery to the Owner/OR. Garver will prepare for, plan, conduct QA/QC and participate in the QC review meeting with the Owner/OR. The QC review discussions will occur in conjunction with the 60% Design Review Workshop which will be held accordingly at the 60% project completion stages. Project documents appropriate to the submittal stage will be provided a minimum of 5 working days before the review meeting. Prepare a meeting memorandum documenting major revisions and decisions made during the meeting.

3.2. Garver and the TWDB's standard contract forms, including documents from the City and EJCDC, will be used, along with Garver's standard drawing format and technical specifications. Garver will utilize the TWDB, EJCDC and City standard documents as a base for developing the project's front-end documents. EJCDC's standard and City General Conditions shall be utilized with edits being provided by the Supplemental Conditions. Standard forms, as required by the funding source, will be incorporated.

3.3. 60% SCADA Controls Review

Garver will conduct a review of the SCADA control deliverable. This review will focus on the process and instrumentation diagrams and control narratives to check they are progressing in alignment with review comments made at the 30% Deliverable.

3.4. Garver will prepare up to three (3) equipment preselection packages. It is anticipated that the equipment packages will be for the procurement of the UV system and two additional process units. This effort includes the following:

- Preparation of the procurement package, including preliminary drawings and specifications.
- Prepare for and attend the pre-submittal conference.
- Review and address questions submitted by potential equipment suppliers.
- Prepare addenda responses, as necessary.
- Evaluate the equipment proposals and provide a recommendation of award for the selected equipment.

3.5. Garver will lead a 60% Design Review Workshop at the Owner's office to solicit comments and feedback from the Owner/OR. A BIM model will be developed to review constructability and operability at this workshop.

3.6. Garver will prepare, compile, and finalize the Final (60%) Design Submittal and submit for review by the Owner/OR.

3.7. Garver will prepare and transmit a written documentation of responses to the Owner's review comments for the Final (60%) Design Submittal.

3.8. Develop a construction phasing sheet as it pertains to construction equipment heights for areas of the proposed project site in the 60% Design Documents. Include references to federal and local laws related to airspace concerns and incorporate requirements as a result of the FAA airspace study.

Task III Deliverables:

- Microsoft Project schedule update with slip identification (PDF document).
- Responses to Owner/OR comments (PDF document).
- Draft 60% Design Documents (PDF document).

4. TASK IV: Final Design Development (90% Design)

4.1. During the Final Design Development (90% Design) Phase of the project, Garver will incorporate the comments from the 60% reviews to complete the design. This submittal will include all drawings, specifications, an OPCC updated for all final design elements, and a Microsoft Project schedule update that identifies slip.

Garver will conduct internal QA/QC of the 90% design phase deliverable prior to delivery to the Owner/OR. Garver will prepare for, plan, conduct QA/QC and participate in the QC review meeting with the Owner/OR. The QC review discussions will occur in conjunction with the 90% Design Review Workshop which will be held accordingly at the 60% project completion stages. Project documents appropriate to the submittal stage will be provided a minimum of 5 working days before the review meeting. Prepare a meeting memorandum documenting major revisions and decisions made during the meeting.

4.2. 90% Operability/Functionality/SCADA Controls Review

Garver will review the 90% Design Deliverable for overall functionality and operability. This review will focus on the process and instrumentation diagrams and control narratives. The review will also focus on the electrical control diagrams, the I/O List, and the conduit and conductor schedules to check for

consistency throughout and to check they are progressing in alignment with review comments made in previous reviews.

4.3. Garver will lead a 90% Design Review Workshop at the Owner's office to solicit comments and feedback from the Owner/OR. A BIM model will be available to review constructability and operability at this workshop.

4.4. Garver will continue coordination and revisions of the project's front-end documents.

EJCDC's standard General Conditions shall be utilized with edits being provided by the Supplemental Conditions. Standard forms, as required by the funding source, will be incorporated.

4.5. During Final Design, an O&M Workshop will be conducted to solicit input from Owner/OR on the final design documents.

4.6. Garver will prepare, compile, and finalize the Final (90%) Design Submittal and submit for review by the Owner/OR.

4.7. Garver will prepare and transmit a written documentation of responses to the Owner's review comments for the Final (90%) Design Submittal.

4.8. Finalize construction phasing sheet as it pertains to construction equipment heights for areas of the proposed project site, including references to federal and local laws related to airspace concerns and incorporate requirements as a result of the FAA airspace study.

Task IV Deliverables:

- 90% Operability/Functionality/SCADA Controls Review Summary write-up of review and resulting updates/decisions (PDF document).
- Responses to Owner/OR comments (PDF document).
- Draft 90% Design Documents (PDF document).

5. TASK V: Contract Documents (100%)

5.1. During the Contract Documents (100%) Phase of the project, Garver will incorporate the TWDB's comments and comments from the 90% reviews to create the biddable design documents. This submittal will include all drawings, specifications, and an OPCC updated for all final design elements.

Garver will conduct internal QA/QC of the 100% contract documents deliverable prior to delivery to the Owner/OR. Garver will prepare for, plan, conduct QA/QC.

5.2. The Contract Documents will consist of drawings and specifications that set forth requirements for construction of the improvements, and shall include proposal forms, notice to bidders, bid forms, bond forms, and other information as required by Owner to competitively bid the work.

Task V Deliverables:

- 100% Design Documents (PDF document).

6. TASK VI: Bid Phase Services

6.1. Contractor Pre-Qualification Assistance

During the pre-qualification period of the project, the effort will include:

6.1.1. Prepare Draft Pre-qualification Information Packet that will serve as the Request for Qualifications for interested Contractors. Submit to Owner/OR for review and comment on the document.

6.1.2. Prepare Final Pre-qualification Information Packet that addresses Owner/OR comments and will serve as the Request for Qualifications.

6.1.3. Prepare and submit Advertisement for Pre-qualification for Contractors to the Owner/OR for review. After addressing Owner's comments submit to TWDB for review and approval. Following TWDB approval for construction and Garver's notification to TCEQ, Garver will submit the Advertisement to the Owner for advertising on CivCast and in the local newspaper. Owner will pay advertising costs outside of this contract.

6.1.4. Owner will post advertisement for Pre-qualification for Contractors, Pre-qualification Packet, and any associated information to CivCast for download by prospective contractors.

6.1.5. Support the Pre-qualification Packet by preparing addenda as appropriate. Owner will post to CivCast.

6.1.6. Prepare for and lead one (1) pre-qualification meeting at the Owner's location.

6.1.7. Prepare a pre-qualification meeting memorandum. Owner will post to CivCast.

6.1.8. Participate and lead a construction site tour by interested Pre-qualification meeting attendees and other interested parties.

6.1.9. Attend the Pre-qualification Submittals of Qualifications opening.

6.1.10. Prepare a review of each submittal of interested contractors based upon agreed to criteria. Also, perform the following:

6.1.10.1. Check Contractor's certifications and licenses to serve as the Prime Contractor for this Project.

6.1.10.2. Survey (via telephone) the submitted Project References.

6.1.10.3. Survey (via telephone) the submitted references for key staff.

6.1.10.4. Evaluate the submittals and recommend a list of pre-qualified contractors to Owner/OR.

6.1.11. Prepare prequalification notices to short-listed contractors and advise of preliminary schedule for bidding.

6.2. Bidding Assistance

During the bidding period phase of the project, the effort will include the following:

6.2.1. Prepare and submit Advertisement for Bids to the Owner for review for newspaper publication as directed by the Owner. Owner will submit to the newspaper and pay advertising costs outside of this contract.

6.2.2. Provide advertisement for bids, construction contract documents, and any associated information to the Owner to be posted by the Owner to CivCast for download by the pre-qualified contractors. Owner will pay advertising costs outside of this contract.

6.2.3. Support the contract documents by preparing addenda as appropriate and delivering to the Owner for posting on CivCast.

6.2.4. Prepare for and lead one pre-bid meeting.

6.2.5. Prepare a pre-bid meeting agenda. Provide to the Owner for posting to CivCast the pre-bid meeting memorandum with attendance record.

6.2.6. Participate and lead a construction site tour following the pre-bid meeting by interested pre-bid meeting attendees and other interested parties.

6.2.7. Attend the bid opening.

6.2.8. Prepare bid tabulation.

6.2.9. Evaluate bids and recommend award.

6.2.10. Attend and participate in reporting recommendation of award to Owner Council.

6.2.11. Prepare construction contracts.

6.2.12. Prepare conformed documents.

6.2.13. Distribute conformed documents as required to State Agencies and Funding Agencies

Task VI Deliverables:

- Draft and final pre-qualification packet (PDF document).
- Draft and final pre-qualification advertisement (PDF document).
- Draft and final pre-qualification meeting agenda (PDF document).
- Prepare addenda for the pre-qualification package (PDF document).
- Draft and final pre-qualification meeting memorandum (PDF document).
- Draft and final pre-qualification memorandum of interested contractors including a recommendation (PDF document).
- Draft and final bid advertisement (PDF document).
- Draft and final pre-bid meeting agenda (PDF document).
- Prepare addendum for the bid package (PDF document).
- Draft and final pre-bid meeting memorandum (PDF document).
- Draft and final bid tabulation (PDF document).
- Draft and final recommendation of Award (PDF document).
- Draft and final presentation for Council Award (PDF document).
- Construction contracts (PDF document).
- Conformed documents (two (2) half size sets of drawings, two (2) copies of specifications, and a PDF document).

7. TASK VII: Regulatory/Agency Review Set

7.1. A final PDR and sealed plans and specifications will be submitted to the Owner/OR for OR submittal to the TWDB for review and approval for construction. Responses to TWDB comments will be coordinated with the Owner/OR and addressed in the final bid set.

7.2. A summary letter will be developed and submitted to TCEQ that includes notification that review documents including 30% PDR and Sealed Plans and Specifications have been sent to the TWDB for review. Upon receipt of construction approval by the TWDB in writing, correspondence will be submitted to TCEQ per title 30 TAC 217.9.

Task VII Deliverables:

- Required hard copies for regulatory review.

8. TASK VIII: Permitting

8.1. TCEQ Permitting

The Owner has an existing TPDES permit for the Wilbarger Creek RWWTF, Permit No. WQ0011845005. The existing permit includes three (3) phases in the permit: Interim I Phase, Interim II Phase, and Final Phase. The Interim I Phase is permitted for 2.0 MGD average daily flow with a 2-hr peak capacity of 5,556 gallons per minute (GPM), the Interim II Phase is permitted for 4.0 MGD average daily flow with a peak 2-hr capacity of 11,111 GPM, and the Final Phase is permitted for 15.75 MGD average daily flow with a peak 2-hr capacity of 43,750 GPM. Based on the evaluation during the Conceptual Design Phase for the Wilbarger Creek RWWTF, the initial phase of the Wilbarger Creek RWWTF will be designed for a 6.0 MGD average daily flow and a peak 2-hr capacity of 16,667 GPM.

Based on the new flow capacity of 6 MGD average daily flow and the peak 2-hr capacity of 16,667 GPM flow, a minor permit amendment is required. The amendment application will include a cover letter, application preparation, and support during reviews by the TCEQ.

8.1.1. Prepare Minor Amendment Permit Application. The minor permit application consists of the following five tasks:

8.1.1.1. Initiate Application Process and Gather/Develop Appropriate Information:

- Review the information available from the previous permit application.
- Prepare a list of additional information to be provided by the Owner and the appropriate format for presenting the additional information.
- Prepare for and participate in a project meeting with the Owner/OR.
- Prepare for and participate in a meeting with TCEQ to discuss the planned project.

8.1.1.2. Prepare Permit Application Documents:

- Complete the application forms, assemble the necessary worksheets, and prepare appropriate exhibits.
- Information in the application information includes, but is not to be limited to, description of the facilities, listing of the major treatment units with dimensions of each unit of the project, process flow schematic diagrams, facility site plan, buffer zone map, location maps, design calculations.
- Provide draft copies of all permit application documents for Owner/OR review. Comments will be incorporated into the application, as applicable. Four copies of the application will be submitted to the TCEQ.
- The application must be submitted with proof of payment of the application fee. Any fees will be responsibility of the Owner.

8.1.1.3. Respond to TCEQ During Administrative Review Process:

- Respond to TCEQ requests for additional information during the administrative review until TCEQ declares the application administratively complete.
- Assist Owner with publication of the notice of application. Owner will be responsible for publishing the notices and paying the costs of the publishing.
- Provide a hard copy of the application to the Owner for placement by Owner in a suitable location for public viewing.

- Upload copy of the application to the SharePoint site.

8.1.1.4. Assist with Responding to Comments:

- After coordination with Owner/OR respond to TCEQ requests for additional information during the technical review. This may include technical information regarding aspects of the application or other technical information.
- Track the application through the permitting process by periodically contacting TCEQ staff responsible for developing the permit.

8.1.1.5. Review and Comment on Draft TPDES Permit:

- Review the initial draft permit provided by the TCEQ.
- Prepare a draft response-to-draft letter, coordinating with the Owner/OR for submission to TCEQ.
- For purposes of this scope of services, it is anticipated that the draft permit process will include a total of 2 rounds of draft permits from the TCEQ from the initial draft to a final draft prior to the final public notice.
- Assist Owner with publication of the second notice. Owner will be responsible for publishing the notices and paying the costs of the publishing.

Task VIII Deliverables:

- Draft TCEQ Permit application (PDF document).
- TCEQ Permit application submittal (PDF document and four (4) hard copies for TCEQ submittal).
- TCEQ Permit application submittal for Owner public viewing (one (1) hard copy).

9. TASK IX: Regulatory/Agency Coordination (T&M)

Garver will assist the Owner in complying with regulatory and agency technical requirements for the construction of the RWWTF as noted in the following items:

- The technical requirements for State's technical regulations as administered by TWDB for this project.
- The funding program requirements of the TWDB's Clean Water State Revolving Fund (CWSRF).
- Garver will prepare and deliver design documents to TWDB for their review and comment as detailed earlier in this document in Task IV.

9.1. Garver will assist the Owner in complying with the agency coordination requirements for the construction of the RWWTF as noted for the technical requirements for State's technical regulations as administered by TWDB for this project. Garver will perform the following tasks:

9.1.1. Garver will organize TWDB's review comments for the project's submittals and provide responses to the review comments.

9.1.2. Garver will meet and collaborate with TWDB's reviewers to refine responses and address the TWDB's comments such that the project documents receive TWDB's approval.

9.2. Garver will assist the Owner in complying with the agency coordination requirements for the construction of the RWWTF as noted in the following for the funding program requirements of the TWDB's Clean Water State Revolving Fund (CWSRF). Garver will perform the following tasks:

9.2.1. Develop contractual language to incorporate into contract documents for contractor compliance for migratory bird and state listed species.

9.2.2. Conduct nest survey of migratory birds in accordance with regulatory agency.

9.2.3. Prepare environmental information for pre-bid meeting to make contractors aware of environmental compliance items.

9.2.4. Perform review of environmental documentation to address a design change. This may include updating records for agencies such as USACE as well as coordination with the TWDB.

9.3. City of Pflugerville Permitting/ Building Code/Enforcement Permitting

Coordinate, prepare and respond to City comments for the following City permits:

- Site Development
- Building

9.4. Garver will provide survey and develop and prepare one easement documentation for the City to acquire one easement for the WWTF Outfall Maintenance Easement. Garver will provide survey and develop and prepare one easement documentation for the City to acquire a 20-foot-wide easement along the north side of Gregg Lane along the WWTF site.

9.5. Travis County Coordination

Garver will provide coordination, technical support, and documentation to Travis County to register the project. The City will coordinate with Travis County regarding the road improvements near the WWTF.

9.6. Manville WSC Coordination

Garver will coordinate with the Manville Water Supply Corporation (WSC) for connection to the Manville WSC potable water supply. The connection shall take place at the Gregg Lane Booster Pump Station Facility, which has an approximate pressure of 100 psi. Coordination includes the development of the Manville WSC Feasibility Study and supporting documentation and addressing comments on the feasibility study.

Task IX Deliverables:

- Provide design deliverables to the TWDB at each phase (PDF document).
- Deliver reports, plans and/or specifications at each design deliverable to the Owner for submittal to the TWDB (PDF document).
- Coordinate bid documents with the TWDB to provide program compliance.
- Coordinate with the TWDB to address comments regarding the design deliverables.
- Coordinate with the TWDB regarding questions and comments for bidding documents and bidding requirements.
- Owner/OR will be responsible for all other TWDB coordination, forms, and reimbursement requests.
- Provide memo to Owner/OR regarding the nest survey (PDF document).
- Provide updated EID and/or agency documentation to address design change (PDF document).
- Submittal deliverables for City permitting (one (1) hard copy and PDF document).

- Deliver copy of the plant outfall maintenance easement documentation (PDF document).
- Travis County registration documentation (PDF document).
- Manville WSC Feasibility Study (PDF document).

10. TASK X: Startup and Commissioning Planning

10.1. Develop Commissioning and Startup Plan

At the 60% and 90% Design Phase Milestone, Garver will develop and prepare an overall Commissioning and Startup Plan. The Commissioning and Startup Plan will be the guiding document, intended to be utilized by the project team, to understand the recommended approach for transitioning the project from construction to operations with a fully trained operations and maintenance staff.

The Commissioning and Startup Plan will address the overall approach to planning and executing the commissioning and startup phase of the project.

The Plan will generally include the following sections:

- Section 1. Acronyms and Definitions.
- Section 2. Commissioning Process.
- Section 3. Safety Plan.
- Section 4. Roles and Responsibilities During Commissioning.
- Section 5. Communications Plan.
- Section 6. Operations and Maintenance Training.
- Section 7. Functional and Performance Test Packages (FAPTPs).
- Section 8. Extended Duration Testing.
- Section 9. Schedule.

10.2. Operating Costs

Provide update to the annual operating costs based on the equipment selected, projected flow (provided by others), energy costs and chemical costs for City budgetary planning for the first 5 years of plant operation.

10.3. Garver will prepare and participate in the coordination of the Wilbarger System.

This task will include coordination with the other design teams for the following projects:

- Sorento Phase 2 & Weiss Lane Decommissioning.
- Wilbarger Interceptor Start-Up.
- Carmel LS/Diversion Structure.

This task also includes a ½ day workshop for the coordination of the Wilbarger System. Workshop to be led by others.

Task X Deliverables:

- Update of the annual operating costs (PDF document).
- Draft Commissioning and Startup Plan (PDF document).
- Final Commissioning and Startup Plan (PDF document).

11. TASK XI: Public Outreach Plan (T&M)

The public outreach plan will be executed on a time and material basis up to the fee amount allocated in the fee spreadsheet. Based on Owner input, it will be agreed upon by the Owner and Garver in writing which tasks will be executed. The tasks that could be implemented up to the fee amount are as follows.

11.1. Stakeholder Engagement

Provide dedicated assistance with developing in-meeting interactivity for virtual public meetings, post meeting engagement and stakeholder engagement. The elements listed below represent the approach, tools, and tactics. Be responsible for when engaging the public and stakeholders. They are designed to result in equitable, innovative, and convenient stakeholder participation across participant segments in the community.

11.1.1. Project Content Development

Coordinate the research and recommendation of topics for social media/web content related to the project. In conjunction with critical meetings and milestones for the project, provide educational information about the project on a monthly basis. This information can be shared visually, through narrative or video. The deliverables will be provided to the PIO/Communications Department for publishing. Below are draft ideas for social media/web content about the project and the team:

- Meet the Project Team: Backgrounds on the Experts working on the project (video and article).
- Top 10 Reasons Why We Need RWWTF (article and social media GIF).
- Engineering Facts about RWWTF (articles).
- History of Wilbarger Creek and its role in the development of Pflugerville/Central Texas.
- Education/STEM Content:
    - WWTF Design Elements
    - Construction Equipment
    - Geological Exploration
    - Water Reuse Programs
    - Collection Systems
    - Stormwater Regulation
    - What are Biosolids
    - Habitat of Wilbarger Creek
    - RWWTF Funding

11.1.2. Educational Outreach

Support engagement and educational activities and opportunities for students and the general public. Educational activities can include, but are not limited to:

- Coordinate youth engagement with existing City of Pflugerville youth, family, and community special events such as Nature PFest + PFun Camp in Spring/Summer 2022.
    - Provide educational display or engagement activity about the WWTF.
    - Coordinate with engineering subject matter experts to participate in career development seminars, project design presentations or other STEM-related informationals.

- Host student-led interviews with members of the project team via FB live, and IG TV
    - Partner with the City of Pflugerville Youth Advisory Council to develop a cohort Project Ambassadors that are well-positioned to educate other youth and the general public about the WWTF and other City of Pfugerville public works infrastructure programs and projects.
    - Integrate web/digital series on existing City of Pfugerville communication platforms to increase traffic and visibility.
- In partnership with an educator, we can support the development of a curriculum guide/brochure on STEM topics related to facility design and construction, such as:
    - Water and Wastewater Treatment Practices
    - Hydrology
    - Construction
    - Reclaimed Water
    - Biosolids
    - Composting
- Create a social media educational series on STEM topics related to facility design, construction, water/wastewater, and beneficial use.

11.1.3. Stakeholder Database

Help maintain a stakeholder database that includes contact information of, stakeholders, affected jurisdictions and agencies, residents, businesses, property owners, schools, and churches within the defined project area.

11.2. Stakeholder and Community Meetings

11.2.1. Presentation Prep and Development

Work with the team to develop strategies for increased in-meeting engagement during virtual public meeting. The City of Pflugerville uses WebEx as their platform for public meetings. Our team will also suggest software tools to utilize during virtual meetings to foster interaction.

11.2.2. Virtual Public Meetings

Support the planning, promotion, and facilitation of up to four (4) Community Meetings, to be held during the design phase of the project. The meetings will be held virtually. Each meeting will include an agenda and presentation developed by the project team.

11.2.3. Post-Meeting Engagement

Support the public feedback process through internet accessible surveys and polls; and track input received. Also, our team will keep a record of the number of participants in the input processes and help track media coverage of the project. Specifically, the project team will:

- Create online survey questionnaire - Document inquiries about the project, one for each public meeting (4 total).

11.3. Support City Staff in the preparation of up to four City Council Meetings. The meeting content will be developed to update the City Council on the project status of work completed, schedule, and construction cost estimate.

11.3.1. Presentation preparation and development.

11.3.2. City Council Meetings.

11.3.3. Post Meeting Follow-Up.

Task XI Deliverables (could include):

- 11.1: Stakeholder Engagement:
  - Fact Sheet (two (2) versions): Draft, Revised, and Final (includes project overview, timeline/milestones, project team, project contact information, media inquiries and social media information).
  - Blog Post Topics Lists: Draft, Revised, for budgeting purposes; a total of eight (8) articles is proposed (300–500 word count).
  - Education/STEM Contact List of Schools to Engage.
  - Curriculum Brochure on RWWTF (working in partnership with an educator).
  - Special Event Plan: Draft, Revised, Final (two (2)); Nature Fest + Fun Camp includes facilitation of event logistics, materials, presentation development and promotional/swag items).
  - Social Media Topics List, Prompts, and Platform for proposed series: Draft, Revised, Final.
- 11.2: Stakeholder and Community Meetings:
  - Meeting Strategy/Agenda for each meeting: Draft, Revised, Final.
  - Public Meeting Attendance.
  - Online Survey: Draft, Revised, Final (four (4) total).
- 11:3: Support City Staff in the preparation of up to four City Council Meetings:
  - Presentation preparation and development.

12. Work Not Included/Extra Work

The following items are not included under this agreement but will be considered as Extra Work. Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and Garver.

1. Environmental Information Document.
2. Asbestos investigation or remediation plan.
3. Construction Phase Engineering Services.
4. Construction Phase On-site Construction Management Services.
5. Construction materials testing.
6. Geotechnical services.
7. Survey, property boundary survey, or bathymetric survey. Easement survey services beyond the scope included.
8. Easement coordination and acquisition beyond the scope included.
9. SSES, I&I analysis, and/or sewer system survey.
10. Design of improvements off-site.
11. Design of a nitrogen fire protection system.
12. Deductive alternates.
13. Utility relocation coordination or design.
14. Hydraulics and hydrology for floodway No-Rise Certification and Individual 404 permit.
15. Redesign for the Owner's convenience or due to changed conditions after previous alternate direction and/or approval.
16. Submittals or deliverables in addition to those listed herein.

17. Preparation of a Storm Water Pollution Prevention Plan (SWPPP).
18. Environmental Handling and Documentation beyond those previously identified, including wetlands identification or mitigation plans or other work related to environmentally or historically (culturally) significant items.
19. Floodplain delineation and coordination with FEMA and preparation/submittal of a CLOMR and/or LOMR.
20. Perform work on an application for a new discharge permit or a major permit amendment.
21. Water quality modeling.
22. Prepare to serve or serve as an expert witness on behalf of Owner.
23. Provide technical or procedural support if proposed permit amendment is protested.
24. Sludge Management Plan.
25. Warranty Assistance.
26. Water Reuse Master Plan.
27. Utility Rate Study.
28. Water Conservation Plan.
29. Drought Management Plan.
30. Jar Testing Services.
31. Sampling Services.
32. Additional meetings beyond those identified in the scope.
33. Software licenses.

Design Development and Bid Phase
Scope of Services
Wilbarger Creek Regional Wastewater Treatment Facility

Background

Garver, LLC, (GARVER) and K Friese & Associates, Inc. (KFA) are completing the Concept Design Phase for the City of Pflugerville (Owner) Wilbarger Creek Regional Wastewater Treatment Facility (WCRWTF). The Concept Design identified options for a 24.0 million gallon per day (MGD) average daily flow (ADF) wastewater treatment plant with a phased implementation strategy beginning with 6.0 MGD ADF initial phase. KFA will assist GARVER with the Design Development and Bid Phase for the initial 6.0 MGD phase of the WCRWTF (Project) as defined in the Concept Design Phase. The Project generally includes the following:

- Developing a Design Information Memorandum (DIM) for each major process with 30% level drawings.
- Preparing design documents, including drawings and specifications, with submittals at 60%, 90% and 100%.
- Developing an engineer's opinion of probable construction cost (EOPCC) at 30% design level, updates at each milestone deliverable, including revised equipment pricing at each.
- Obtaining construction bids through a public bid phase.

The scope is limited to the Design Development and Bid Phases. A separate proposal and scope of services will be provided when the Project continues to construction and startup.

KFA's Scope of Basic Services

A. Design Development

KFA will provide engineering services for the design development for the process mechanical components of the influent lift station, tertiary filters and Solids Processing Building. The Scope of Services generally includes the following:

1. Prepare Design Information Memorandums (DIM) that will include a written description of the treatment objectives, design criteria, regulatory requirements, design recommendations, EOPCC and drawings.
2. Develop drawings at each submittal phase. A total of 30 drawings are estimated.
3. Develop equipment specifications for the components designed by KFA.
4. Develop an EOPCC for the components designed by KFA. KFA will provide formatting, edits and updates as requested by Garver for cohesiveness in estimates. EOPCC to be updated at each submittal milestone with updated vendor pricing.
5. Support/participate in a Process Control SCADA Workshop.
6. Support development and participate in one workshop at the 30%, 60% and 90% submittal phases.
7. Support development and participate in 12 monthly coordination meetings with GARVER and the Owner.
8. Participate/support 24 virtual meetings with the design team.
9. Internal QA/QC review of all KFA work at various stages of progress as well as review of all deliverables to GARVER.

10. KFA will follow Garver QA/QC quality program and edit designs per mutually agreeable recommendations from Garver reviewers.

The Scope of Services and Fee are based on the following assumptions.

a) The design is based on the decisions made during the Design Development Phase.
b) The dewatering system for the Project includes the sludge pump station and centrifuge process.
c) KFA will provide professional engineering services for the process mechanical design of the items listed in the Scope of Services. Other design disciplines, such as architectural, civil, electrical, instrumentation, structural, geotechnical, environmental, survey, plumbing, and HVAC (Disciplines) will be conducted by GARVER or a subconsultant contracted by GARVER.
d) Odor control, if required, will be designed by GARVER.
e) Chemical storage and dosing, except dewatering polymer, will be part of the chemical system for the WWTP and will be designed by GARVER.
f) Process piping will be designed to a point approximately five feet from the edge of the basin. Piping beyond this limit will be considered yard piping and designed by GARVER.
g) KFA will prepare the lower portion of the Piping & Instrumentation Diagram drawings that includes the equipment and piping. The upper portion and control will be prepared by the instrumentation engineer.
h) KFA will coordinate with other design disciplines as required.
i) KFA assumed two people will attend the client meetings in person.
j) KFA assumed three people will attend the design team meetings in a virtual online setting.
k) KFA assumed three people will attend the SCADA Workshop in person with a meeting duration of less than 4 hours. The meeting will be in Austin, Pflugerville or College Station.
l) KFA assumed three people will attend the Submittal Workshop in person with a meeting duration of less than 4 hours. The meeting will be in Austin, Pflugerville or College Station.
m) Drawings will be developed in 3D versions of Autodesk Revit.
n) Equipment, valve and piping library will be developed by GARVER and provided to KFA. Items not included in the library (such as a centrifuge) will be drawn to the general shape of the equipment with minimal detail.
o) KFA will prepare specifications in Microsoft Word for the major equipment associated with the components design by KFA. Specifications for contract requirements, general requirements, and general plant components, will be prepared by GARVER.
p) Specifications will be sent to selected equipment vendors prior to the 60% and 90% submittals for review.
q) EOPCC at the 100% submittal will be comparable to a Class 2 estimate as defined by the Association for the Advancement of Cost Engineering.
r) The EOPCC is not a guarantee of construction cost and can vary due to a variety factors beyond the control of KFA.
s) Deliverables to GARVER will be electronic in searchable pdf format. GARVER will assemble and submit to Client and all applicable permitting agencies.
t) One submittal for QC review will be provided to GARVER prior to the submittal for the client.

u) Work conducted by KFA will be signed and sealed by an engineer registered in the State of Texas.

v) The anticipated drawing list is provided in the Table 1. The level of detail of each drawing will be advanced at each submittal.

Table 1: Drawing List

Drawing	Notes
Influent Lift Station Isometric View	1, 2
Influent Lift Station Upper Plan View	1
Influent Lift Station Lower Plan View	1
Influent Lift Station Section View	1
Influent Lift Station Details	3
Influent Lift Station Details	3
Filter Isometric Model	1, 2
Filter Plan View	1
Filter Section View I	1
Filter Section View II	3
Filter Details II	3
Filter Details II	4
Sludge Processing Building Upper Plan	1, 2
Sludge Process Building Lower Plan	1, 2
Sludge Pump Station Isometric Model	1, 2
Sludge Pump Station Enlarged Plan and Section	1
Centrifuge Isometric Model	1, 2
Centrifuge Enlarged Plan and Section	1
Sludge Load-Out Enlarged Plan and Section	1
Polymer Storage and Feed Enlarged Plan and Section	1
Sludge Processing Building Sections I	1
Sludge Processing Building Sections II	3
Sludge Processing Building Sections III	3
Sludge Processing Building Details I	4
Influent Lift Station P&ID	1, 5
Filter P&ID 1	1, 5
Filter P&ID 2	1, 5
Sludge Pump Station P&ID	1, 5
Centrifuge P&ID	1, 5
Container Load-out P&ID	1, 5

Drawing List Notes

1. Included in Design Information Memorandum 30% Submittal.
2. KFA responsible for the process mechanical components. Structure modeled by structural engineer.
3. Included in 60% Submittal.
4. Included in 90% Submittal.
5. KFA will prepare the piping and process portion. Instrumentation engineer will prepare the signal and control portion.

B. Bid Phase and Conformed Documents

KFA will assist Garver throughout the Bid Phase. The Scope of Services generally includes the following:

1. Interpret plans and specifications and answer questions submitted by potential bidders.
2. Prepare addenda responses as necessary.
3. Develop conformed construction documents that incorporate changes made during the Bid Phase.

The Scope of Services and Fee are based on the following assumptions.

a) Advertising the project will be conducted by others.
b) Attendance at the Prebid meeting is not required.
c) Attendance at the bid opening is not required.
d) Bid evaluation and contractor evaluation will be conducted by GARVER.

C. Project Management and Controls

Oversight of the KFA team, monitoring budgets and schedules, communications, and other tasks directly associated with the Project.

Basic Services Schedule

The estimated schedule for the Design Development Phase and Bidding Phase submittals to the Owner is below. Internal milestones will be in advance of the dates presented and subject to specification by Garver design team. Expectation is that all process mechanical design is complete 3-4 weeks prior to internal QA/QC dates to facilitate work by other disciplines and meet QA/QC schedules.

30% Design Development - June 1, 2021 – October 18, 2021
60% Design Development - October 19, 2021 – February 8, 2022
90% Design Development - February 9, 2022 – May 25, 2022
100% Design Development - May 26, 2022 – July 1, 2022
Bid Phase – July 5, 2022 – September 15, 2022

Basic Services Fee

KFA will conduct the Scope of Basic Services in accordance with the Scope Assumptions for a lump sum fee of $411,040. Table 2 provides a breakdown of the fee.

Table 2: Basic Services Fee Summary

Phase	Fee
30% Design Development (Design Information Memorandum)	$123,060
60% Design Development	$123,060
90% Design Development	$70,320
100% Design Development	$35,160
Bid Phase & Conformed Documents	$20,910
Project Management & Controls	$38,530

KFA's Scope of Supplemental Services

A. Major Equipment Preselection and Procurement

KFA will assistance with the preselection and procurement of the process mechanical equipment. It is anticipated the procurement process will occur near the 60% design submittal. The Scope of Services generally includes the following:

1. Assist with the preparation of the procurement package, including drawings and specifications.
2. Attend the pre-submittal conference.
3. Interpret plans and specifications and answer questions submitted by potential equipment suppliers.
4. Prepare addenda responses, as necessary.
5. Assist with the evaluation of the equipment proposals.

The Scope of Services and Fee are based on the following assumptions.

a) KFA will prepare specifications for the major equipment associated with the components designed by KFA. Specifications for contract requirements, general requirements, and general plant components, will be prepared by GARVER.

Supplemental Services Fee

KFA will conduct the Scope of Supplemental Services in accordance with the Scope Assumptions for a lump sum fee of $16,000 for each equipment type preselected. The services will be authorized individually for each preselected equipment type.

KFA FEE SCHEDULE
DESIGN DEVELOPMENT AND BID PHASE
GARVER
WILBARGER CREEK REGIONAL WASTEWATER TREATMENT FACILITY PROJECT

	Task	Technical Advisor / Quality Consultant $ 275.00	Senior Project Manager $ 260.00	Technical Lead $ 260.00	Senior Engineer $ 175.00	Graduate Engineer $ 120.00	Designer Revit $ 130.00	General Office Clerk Hours $ 80.00	Total Labor	KFA Total Labor Cost	Expenses	Total Cost
A. Design Development Phase		*38*	*0*	*336*	*456*	*750*	*540*	*44*	***2164***	***$341,330***	***$10,270***	***$351,600***
1	Design Information Memorandum	14		100	120	200	0	20	454	$76,450	$1,530	$77,980
2	Drawings								0	$0	$0	$0
	Influent Lift Station Isometric			4	8	16	22		50	$7,220	$220	$7,440
	Influent Lift Station Upper Plan View			4	8	16	22		50	$7,220	$220	$7,440
	Influent Lift Station Lower Plan View			4	8	16	20		48	$6,960	$210	$7,170
	Influent Lift Station Section View			4	8	16	20		48	$6,960	$210	$7,170
	Influent Lift Station Details			4	4	8	16		32	$4,780	$140	$4,920
	Influent Lift Station Details			4	4	8	16		32	$4,780	$140	$4,920
	Filter Isometric			4	8	16	22		50	$7,220	$220	$7,440
	Filter Plan View			4	8	16	22		50	$7,220	$220	$7,440
	Filter Section View I			4	8	16	22		50	$7,220	$220	$7,440
	Filter Section View II			4	8	16	22		50	$7,220	$220	$7,440
	Filter Details II			4	4	8	16		32	$4,780	$140	$4,920
	Filter Details II			4	4	8	16		32	$4,780	$140	$4,920
	Sludge Processing Building Upper Plan			4	8	16	22		50	$7,220	$220	$7,440
	Sludge Processing Building Lower Plan			4	8	16	22		50	$7,220	$220	$7,440
	Sludge Pump Station Isometric			4	8	16	22		50	$7,220	$220	$7,440
	Sludge Pump Station Enlarged Plan and Section			4	8	16	22		50	$7,220	$220	$7,440
	Centrifuge Isometric			4	8	16	22		50	$7,220	$220	$7,440
	Centrifuge Enlarged Plan and Section			4	8	16	22		50	$7,220	$220	$7,440
	Sludge Load-Out Enlarged Plan and Section			4	8	16	22		50	$7,220	$220	$7,440
	Polymer Feed and Storage Enlarged Plan and Section			4	8	16	22		50	$7,220	$220	$7,440
	Sludge Process Building Sections I			4	8	16	22		50	$7,220	$220	$7,440
	Sludge Process Building Sections II			4	8	16	22		50	$7,220	$220	$7,440
	Sludge Process Building Sections III			4	8	16	22		50	$7,220	$220	$7,440
	Sludge Processing Building Details			4	4	16	20		44	$6,260	$190	$6,450
	Influent Lift Station P&ID			4	4	8	6		22	$3,480	$100	$3,580
	Filter P&ID 1			4	4	8	6		22	$3,480	$100	$3,580
	Filter P&ID 2			4	4	8	6		22	$3,480	$100	$3,580
	Sludge Pump Station P&ID			4	4	6	8		22	$3,500	$110	$3,610
	Centrifuge P&ID			4	4	6	8		22	$3,500	$110	$3,610
	Container Loadout P&ID			4	4	6	8		22	$3,500	$110	$3,610
3	Specifications & Equipment Coordination			12	24	36		16	88	$12,920		$12,920
4	Engineer's Opinion of Probable Construction Cost			12	24	48			84	$13,080		$13,080
5	SCADA Workshop (1)			6		12			18	$3,000	$450	$3,450
6	Submittal Workshops (3)			18		36			54	$9,000	$450	$9,450
7	Client Coordination Meetings (12)			36	36				72	$15,660	$2,000	$17,660
8	Team Coordination Meetings (24)			24	24	24			72	$13,320		$13,320
9	Quality Assurance / Quality Control	24		8	32			8	72	$14,920	$300	$15,220
B. Bid Phase		*4*	*0*	*19*	*14*	*48*	*48*	*4*	***137***	***$20,810***	***$100***	***$20,910***
1	Respond to Contractor's Questions			7	8	16			31	$5,140		$5,140
2	Prepare Addenda	2		5	6	8	16	4	41	$6,260	$50	$6,310
3	Conformed Documents	2		7		24	32		65	$9,410	$50	$9,460
C. Project Management & Controls		*0*	*119*	*12*	*0*	*0*	*0*	*47*	***178***	***$37,820***	***$710***	***$38,530***
1	Design Information Memorandum		36					6	42	$9,840	$200	$10,040
2	Design Development Drawings		80	12				40	132	$27,120	$510	$27,630
2	Bid Phase		3					1	4	$860		$860
	Base Services Totals	**42**	**119**	**367**	**470**	**798**	**588**	**95**	**2479**	**$399,960**	**$11,080**	**$411,040**

City of Pflugerville Wilbarger Regional Wastewater Treatment Plant
Design and Construction Project
Electrical Engineering Project Scope

1. Overview and Understanding:

This project will provide the detailed design and the advertisement/bidding phase services (Project) for the City of Pflugerville (Owner) Wilbarger Regional Wastewater System Wastewater Treatment Plant (Plant). Gupta & Associates, Inc. (GAI) will perform both the electrical distribution and controls (ED&C) as well as the instrumentation and controls (I&C) design as a subconsultant to Garver.

1.1. Project Description – Design Phase Services

1.1.1. 30% Design Development Phase

1. Includes the following Design Information Memoranda (DIM):
   a. DIM for Electrical Distribution and Controls
   b. DIM for Instrumentation and Controls
   c. Control Narratives for the following process units:
      i. Influent Lift Station
      ii. Screening System
      iii. Grit System
      iv. Aeration System (Basins and Blowers)
      v. Secondary Clarifiers
      vi. RAS/WAS Pump Station
      vii. Filters
      viii. UV Disinfection
      ix. Chemical Feed Facility
      x. Non-Potable Water System
      xi. Sludge Thickening and Aerobic Storage
      xii. Anaerobic Digestion
      xiii. Dewatering

      Process units are still be finalized.

2. Plan drawings that generally consist of:
   a. Overall site plans of major load areas including main ductbanks to padmount transformers.
   b. Floor plans of electrical rooms.
   c. One-Line Diagrams down to the 480V motor control centers (MCCs); not including wire/conduit sizing.
   d. P&IDs of the process areas listed above.
   e. SCADA System Architecture.
   f. GAI will provide PDF copies and Microsoft Word files of the DIMs and full-size PDF and Revit plan drawings for the 30% design review submittal:
      i. The design review submittal process will consist of an initial quality check set of documents sent to Garver for internal review.
      ii. Garver review comments will be incorporated into the design documents and then resubmitted to Garver for submittal to the Owner.
      iii. A response to each Owner review comment from the 30% submittal will be addressed in a spreadsheet format and correspondingly incorporated into the design package for the next submittal.

3. Anticipated design elements will include:
   a. Coordinating with Oncor Electric and Bluebonnet Electric for new service to the Plant.
   b. Standby generator design.
   c. Overall electrical distribution system showing main switchgear, major load centers, electrical rooms, etc.
   d. Development of 30% ED&C and I&C opinion of probable construction costs (OPCC).

1.1.2. Final Design Development Phase

1. The 60% design review submittal will generally consist of:

a. Plan drawings that incorporate Owner review comments from the 30% design review submittal and build upon the detail provided at the 30% design review submittal. Drawings will include:
   i. All drawings from 30% (more fully developed).
   ii. Building interior lighting, instrumentation, and power layouts.
   iii. Grounding.
   iv. Area Lighting.
   v. Ductbank routing.
   vi. Light fixture schedules.
   vii. 480V panel schedules.
   viii. Instrumentation panel details.
   ix. General installation details.

b. Table of contents for the anticipated construction specifications.
c. Preliminary construction specifications for major pieces of equipment such as:
   i. Switchgear and MCCs.
   ii. Padmount transformers.
   iii. Motors.
   iv. Variable frequency drives.
   v. PLC control panels.
   vi. Standby generator and automatic transfer switch.

d. Additional anticipated design elements will include:
   i. Equipment and instrumentation tags.
   ii. Feeder circuit wiring/conduit sizing.

e. 60% OPCC.
f. Support development of two deductive alternates.
g. Support development of three pre-selected equipment packages.
h. A response to each Owner review comment from the 60% submittal will be addressed in a spreadsheet format and correspondingly incorporated into the design package for the next submittal.

2. The 90% design review submittal will generally consist of:
   a. Plan drawings that incorporate Owner review comments from the 60% design review submittal and to be considered complete except for incorporating final review comments. Drawings will include:
      i. All drawings from 60% (more fully developed)
      ii. Riser Diagrams.
      iii. PLC Interface Diagrams.
      iv. Low voltage (120V) panel schedules.
      v. Schematics.

   b. Full set of construction specifications provided in PDF format and Microsoft Word files.
   c. Additional anticipated design elements will include:
      i. Branch circuit wiring/conduit sizing.
      ii. Ductbank sections

   d. 90% OPCC.
   e. A response to each Owner review comment from the 90% submittal will be addressed in a spreadsheet format and correspondingly incorporated into the design package for the next submittal.

3. GAI will provide full-size plan drawings for the 60% and 90% design review submittals in PDF format and Revit files.
   a. Each design review submittal will consist of an initial quality check set of documents sent to Garver for internal review.

b. Garver review comments will be incorporated into the design documents and then resubmitted to Garver for submittal to the Owner.
c. A response to each Owner review comment from each submittal will be addressed in a spreadsheet format and correspondingly incorporated into the design package for the next submittal.

4. The 90% design effort will include development of a preliminary power study for purposes of determining the available short circuit duties and potential arc flash hazards. The final power system study is to be provided by the Construction Contractor to include final protective device coordination and arc flash labeling.
5. The 90% design review submittal will be provided as a sealed and signed set for permitting (TCEQ) purposes (not for advertisement).
6. The bid ready set of plans will be signed and sealed full-sized PDF format (plans and specs), Microsoft Word files (specifications) and Revit files (drawings).

1.1.3. Workshops

GAI will provide the following:

1. Support development and participation in teleconference Design Phase Kickoff Meeting with the Owner.
2. Support development and participation in an in-person Process Control I&C Workshop.
3. Support development and participation in an in-person ED&C Workshop.
4. Support development and participation in 30%, 60%, and 90% in-person workshops (one per phase) with the Owner.
5. Support development and participation in 12 monthly coordination meetings with the Owner.
6. Support and participate in 24 teleconference meetings with Garver and the Design Team.

1.1.4. Design Clarifications

GAI requests the following:

1. All civil, mechanical, and structural reference files to be provided to GAI for incorporation into the design documents.
2. GAI will provide internal quality reviews prior to each submittal. However, recognizing that the input to GAI's design effort is dependent upon other disciplines, adequate time is required between modifications by other disciplines and submittal milestones to allow GAI to perform these quality reviews. A minimum of two weeks is requested during which no further changes to reference files, HP sizing, etc. will be incorporated.
3. Equipment load lists to be provided by Garver to include:
   a. Motor HP sizes, control means (constant versus variable speed), and RPM.
   b. Motorized valves HP sizes and control means (open/close versus modulating).
   c. Which loads are to be backed up by generator including how many are expected to run on the generator at any one time.
4. Manufacturer shop drawing submittals to be provided for major equipment packages such as blowers, screens, washer/compactors, conveyors, etc.
5. Process control strategies for each process area listed above to be provided by Garver to be used as the basis for developing control narratives.
6. Process flow diagrams for each process area listed above to be provided by Garver to be used as the basis for developing P&IDs.
7. Equipment tagging convention to be defined by Garver and assigned by Garver to mechanical equipment. GAI will assign equipment tags and instrumentation tags to ED&C and I&C equipment based upon the provided convention.
8. Garver to provide construction specification format template and design drawing formats.
9. OPCCs are engineering estimates and are not warranted. Garver to provide the format for developing OPCCs.

1.2. Advertisement/Bidding Phase

GAI will provide the following:

1. Provide sealed and signed plans and specifications to Garver (Garver will incorporate these documents into the overall project documents and handle all advertisement, receipt of bids, and opening of bids).
2. Participate in two pre-bid meetings.
3. Respond to Bidders' requests for information (RFIs), issue addenda as required, and provide conformed documents in PDF format, Microsoft Word files, and Revit files.

2. Administrative

2.1. Schedule

This work will include the following administrative services:

1. GAI will provide monthly invoicing for this work to Garver. The duration of this Project is expected to be:
   a. 30% Design Phase: 4 months
   b. 60% Design Phase: 3.5 months
   c. 90% Design Phase: 3.5 months
   d. 100% Design Phase: 2 months
   e. Advertisement and Bidding Phase: 3 months
2. GAI will conduct site surveys after notice to proceed is received as needed.

2.2. Fee:

GAI will perform these services on a fixed fee basis, based upon the following:

Phase	ED&C	I&C	Total
Project Management	$17,364	$6,818	$24,182
30% Design Phase	$102,518	$40,250	$142,768
60% Design Phase	$205,036	$80,500	$285,536
90% Design Phase	$153,777	$60,375	$214,152
100% Design Phase	$51,259	$20,125	$71,384
Advertisement/Bidding Phase	$13,587	$5,334	$18,921
Total	$543,541	$213,402	$756,943

2.3. Clarifications:

The following items apply to this proposal:

1. GAI has not included any software licenses or hardware in this proposal.
2. This proposal is valid for 60 days.
3. This proposal is based upon the issuance of an amendment to the existing subconsultant agreement between Garver and GAI.

Pflugerville Wilbarger Creek Regional WWTP
Design Phase

Gupta & Associates, Inc.		Principal		Project Manager		Engineer - Senior		Engineer		Project Engineer		Designer - Senior		Designer		CAD Tech - Senior		CAD Tech		Admin		Subtotal		ODCs	SUBs	Markup	TOTAL
		Rate:	$ 232	Rate:	$ 216	Rate:	$ 186	Rate:	$ 139	Rate:	$ 108	Rate:	$ 145	Rate:	$ 96	Rate:	$ 93	Rate:	$ 72	Rate:	$ 75					5%	
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost				
TASK SUMMARY - BASIC SERVICES																											
1.0	**Project Management/Administration**	24	$ 5,568	60	$ 12,960	12	$ 2,232	0	$ -	0	$ -	12	$ 1,740	0	$ -	0	$ -	0	$ -	12	$ 900	120	$ 23,400	$782	$0	$0	$ 24,182
1.1	Project Management/Administration	24	$ 5,568	48	$ 10,368		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	72	$ 15,936	$319	$0	$0	$ 16,255
1.2	Invoice Processing		$ -		$ -	12	$ 2,232		$ -		$ -	12	$ 1,740		$ -		$ -		$ -	12	$ 900	36	$ 4,872	$91	$0	$0	$ 4,963
1.3			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
1.4	Meetings		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
1.5	Pre-Design Kickoff Meeting		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
1.6	Design Progress Meetings (with Owner)		$ -	12	$ 2,592		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	12	$ 2,592	$372	$0	$0	$ 2,964
1.7	Pre-Construction Meeting		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
1.8			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
1.9			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
1.10			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
3.0	**Design Phase - ED&C**	0	$ -	94	$ 20,304	475	$ 88,350	1579	$ 219,481	144	$ 15,552	80	$ 11,600	0	$ -	405	$ 37,665	1483	$ 106,776	12	$ 900	4272	$ 500,628	$11,963	$0	$0	$ 512,591
3.1	Site Investigation		$ -		$ -	24	$ 4,464	24	$ 3,336	24	$ 2,592		$ -		$ -		$ -		$ -		$ -	72	$ 10,392	$1,183		$0	$ 11,575
3.2	Bi-Weekly Design Team Coor Meetings (Design		$ -		$ -	12	$ 2,232	12	$ 1,668	12	$ 1,296		$ -		$ -		$ -		$ -		$ -	36	$ 5,196	$104		$0	$ 5,300
3.3	Plan Drawings		$ -		$ -	371	$ 69,006	1483	$ 206,137		$ -		$ -		$ -	371	$ 34,503	1483	$ 106,776		$ -	3708	$ 416,422	$8,328		$0	$ 424,750
3.4	Preliminary Power Study		$ -		$ -		$ -		$ -		$ -	80	$ 11,600		$ -		$ -		$ -		$ -	80	$ 11,600	$232		$0	$ 11,832
3.5	Construction Specifications		$ -		$ -		$ -	48	$ 6,672	60	$ 6,480		$ -		$ -		$ -		$ -	12	$ 900	120	$ 14,052	$281		$0	$ 14,333
3.6			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0		$0	$ -
3.7	OPCC		$ -		$ -		$ -	12	$ 1,668	48	$ 5,184		$ -		$ -		$ -		$ -		$ -	60	$ 6,852	$137		$0	$ 6,989
3.8	Submittal - 30% (Packaging and Quality Reviews)		$ -	10	$ 2,160	20	$ 3,720		$ -		$ -		$ -		$ -	10	$ 930		$ -		$ -	40	$ 6,810	$136		$0	$ 6,946
3.9	Design Review Meeting		$ -	20	$ 4,320		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	20	$ 4,320	$411		$0	$ 4,731
	Review Comments Response		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0		$0	$ -
3.10	Submittal - 60% (Packaging and Quality Reviews)		$ -	10	$ 2,160	20	$ 3,720		$ -		$ -		$ -		$ -	10	$ 930		$ -		$ -	40	$ 6,810	$136		$0	$ 6,946
3.11	Design Review Meeting		$ -	20	$ 4,320		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	20	$ 4,320	$411		$0	$ 4,731
	Review Comments Response		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0		$0	$ -
3.12	Submittal - 90% (Packaging and Quality Reviews)		$ -	10	$ 2,160	20	$ 3,720		$ -		$ -		$ -		$ -	10	$ 930		$ -		$ -	40	$ 6,810	$136		$0	$ 6,946
3.13	Design Review Meeting		$ -	20	$ 4,320		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	20	$ 4,320	$411		$0	$ 4,731
	Review Comments Response		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0		$0	$ -
3.14	Submittal - Issued for Bid (Packaging and Quality		$ -	4	$ 864	8	$ 1,488		$ -		$ -		$ -		$ -	4	$ 372		$ -		$ -	16	$ 2,724	$54		$0	$ 2,778
4.0	**Design Phase - I&C**	0	$ -	27.5	$ 5,940	282	$ 52,452	469	$ 65,191	224	$ 24,192	40	$ 5,800	0	$ -	130.5	$ 12,137	413	$ 29,736	12	$ 900	1598	$ 196,348	$4,902	$0	$0	$ 201,249
4.1	Site Investigation		$ -		$ -	24	$ 4,464		$ -		$ -		$ -		$ -		$ -		$ -		$ -	24	$ 4,464	$1,064		$0	$ 5,528
4.2	Bi-Weekly Design Team Coor Meetings (Design		$ -		$ -	12	$ 2,232		$ -		$ -		$ -		$ -		$ -		$ -		$ -	12	$ 2,232	$45		$0	$ 2,277
4.3	Plan Drawings		$ -		$ -	103	$ 19,158	413	$ 57,407		$ -		$ -		$ -	103	$ 9,579	413	$ 29,736		$ -	1032	$ 115,880	$2,318		$0	$ 118,198
4.4	Preliminary Radio Path Study		$ -		$ -		$ -		$ -		$ -	40	$ 5,800		$ -		$ -		$ -		$ -	40	$ 5,800	$116		$0	$ 5,916
4.5	Construction Specifications		$ -		$ -		$ -	48	$ 6,672	60	$ 6,480		$ -		$ -		$ -		$ -	12	$ 900	120	$ 14,052	$281		$0	$ 14,333
4.6	Control Narrative		$ -		$ -	88	$ 16,368		$ -	132	$ 14,256		$ -		$ -		$ -		$ -		$ -	220	$ 30,624	$612		$0	$ 31,236
4.7	OPCC		$ -		$ -		$ -	8	$ 1,112	32	$ 3,456		$ -		$ -		$ -		$ -		$ -	40	$ 4,568	$91		$0	$ 4,659
4.8	Submittal - 30% (Packaging and Quality Reviews)		$ -	7.5	$ 1,620	15	$ 2,790		$ -		$ -		$ -		$ -	7.5	$ 698		$ -		$ -	30	$ 5,108	$102		$0	$ 5,210
4.9	Design Review Meeting		$ -	0	$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0		$0	$ -
	Review Comments Response		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0		$0	$ -
4.10	Submittal - 60% (Packaging and Quality Reviews)		$ -	7.5	$ 1,620	15	$ 2,790		$ -		$ -		$ -		$ -	7.5	$ 698		$ -		$ -	30	$ 5,108	$102		$0	$ 5,210
4.11	Design Review Meeting		$ -	0	$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0		$0	$ -
	Review Comments Response		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0		$0	$ -
4.12	Submittal - 90% (Packaging and Quality Reviews)		$ -	7.5	$ 1,620	15	$ 2,790		$ -		$ -		$ -		$ -	7.5	$ 698		$ -		$ -	30	$ 5,108	$102		$0	$ 5,210
4.13	Design Review Meeting		$ -	0	$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0		$0	$ -
	Review Comments Response		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0		$0	$ -
4.14	Submittal - Issued for Bid (Packaging and Quality		$ -	5	$ 1,080	10	$ 1,860		$ -		$ -		$ -		$ -	5	$ 465		$ -		$ -	20	$ 3,405	$68		$0	$ 3,473
6.0	**Advertisement & Bidding**	0	$ -	0	$ -	20	$ 3,720	24	$ 3,336	48	$ 5,184	0	$ -	0	$ -	61	$ 5,673	0	$ -	0	$ -	153	$ 17,913	$1,008	$0	$0	$ 18,921
6.1	Front End Documents		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
6.2	Pre-Bid Meeting		$ -		$ -	12	$ 2,232		$ -		$ -		$ -		$ -		$ -		$ -		$ -	12	$ 2,232	$695	$0	$0	$ 2,927
6.3	RFI Review		$ -		$ -	4	$ 744	8	$ 1,112	24	$ 2,592		$ -		$ -		$ -		$ -		$ -	36	$ 4,448	$89	$0	$0	$ 4,537
6.4	Addenda		$ -		$ -	4	$ 744	16	$ 2,224	24	$ 2,592		$ -		$ -	24	$ 2,232		$ -		$ -	68	$ 7,792	$156	$0	$0	$ 7,948
6.5			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
6.6			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
6.7			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
6.8	Conformed Drawings (ED&C)		$ -		$ -		$ -		$ -		$ -		$ -		$ -	30	$ 2,790		$ -		$ -	30	$ 2,790	$56	$0	$0	$ 2,846
6.9	Conformed Drawings (I&C)		$ -		$ -		$ -		$ -		$ -		$ -		$ -	7	$ 651		$ -		$ -	7	$ 651	$13	$0	$0	$ 664
6.10	Conformed Drawings (HVAC)		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
6.11			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
6.12			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
6.13			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
6.14			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
6.15			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
6.16			$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -	$0	$0	$0	$ -
		24	$5,568	181.5	$39,204	789	$146,754	2072	$288,008	416	$44,928	132	$19,140	0	$0	596.5	$55,475	1896	$136,512	36	$2,700	6143	$738,289	$18,655	$0	$0	$ 756,943

CITY OF PFLUGERVILLE WILBARGER WATER TREATMENT PLANT

PUBLIC INFORMATION AND ENGAGEMENT SCOPE OF WORK

Phase II Proposal - Revised

Updated May 24, 2021

Purpose and Goals

The City of Pflugerville wants to ensure that their internal stakeholders and external stakeholders have a meaningful role in the creation of the new water treatment facility. The purpose of the public information and engagement program is to provide relevant information on the design and construction of the Wilbarger Creek Regional Wastewater Treatment Facility Project.

The purpose of the project is to support the population growth the City of Pflugerville continues to experience. The project team communications goal is to ensure transparency and engagement throughout the life of the project.

Project Timeframe

18 months

Project Background

The City of Pflugerville owns a 159-acre tract of land on the west side of Wilbarger Creek and on the north side of Gregg Lane for the new Wilbarger Creek Regional Wastewater Treatment Facility (RWWTF). Master planning documents have projected Pflugerville service area growth that supports a 24.0 MGD wastewater treatment plant, with a phased implementation strategy beginning with 8.0 MGD by Oct 2024. A Texas Pollution Discharge Elimination System (TPDES) permit has been obtained from TCEQ for a Final Phase Annual Average Flow (AAF) of 15.75 MGD.

Recent planning and implementation information requires validation of growth projections from the 2020 Wastewater Master Plan and update as necessary. Based on updated flow projections, a strategic analysis of the Wilbarger service area to determine an optimum transition schedule for the lift stations that maximizes use of existing infrastructure while providing opportunity for long-term growth. Based on the updated flow projections, the project team will determine the ultimate flow capacity of the treatment plant based on site feasibility, including the discharge stream. An evaluation of wastewater treatment alternatives required to meet the ultimate flow capacity will include non-cost factor and costs, both annual operating and present worth costs.

Consideration of current wastewater technologies employed at the City of Pflugerville's Central WWTP will be given during the development of treatment alternatives, as well as treatment, site development and stream quality considerations documented in previous preliminary engineering efforts. This project includes an evaluation of wastewater treatment alternatives for the ultimate site development and preliminary engineering, design, bidding and construction of the recommended alternative for the initial phase of the treatment plant, based on the updated flow projections and optimum lift station flow transfer. This project is anticipated to be funded by the 2020 Texas Water Development Board (TWDB) Clean Water State Revolving Fund (CWSRF). This project will include the Environmental Information Document (EID) required by the TWDB for the treatment plant.

Phase I: Scope Review and Project Status - COMPLETED

Public Information and Engagement Plan

The 'Original Goal' of the WCRWWTF Public Engagement strategy was to:

- Provide relevant information on the WCRWWTF project's design and construction to property owners/businesses located near the project site.

Aligned with the 'Original Goal' of the WCRWWTF, Adisa Communications executed to completion of an approved Public Information and Engagement Plan to include the following deliverables:

Public Information and Engagement Plan, Draft, Revised, Final **- COMPLETED**

Project Messaging, Project Fact Sheet Design Template, Social Media Design Template **- COMPLETED**

Adisa Communications successfully collaborated with City of Pflugerville staff to develop the approved plan which includes the goals, objectives, specific strategies, and tactics for the project and addresses the following audiences:

- City of Pflugerville residents
- Regulatory entities, such as the TWDB
- City Council

After the completion of the Phase I Scope deliverables, the original goal evolved into the 'Current Perceived Goal" in April 2021, which was adopted to reflect a growing stakeholder community and the inclusion of strategies to incorporate STEM related outreach and education. The updated goal is to:

- Provide relevant information on the WCRWWTF project's design and construction to property owners/businesses located near the project site *as well as City of Pflugerville taxpayers/ratepayers. Include a separate task for Pflugerville STEM program activities*

Adisa Communications proposes the adoption of the following Phase II WCRWWTF Public Engagement goal:

- *Maintain a high level of communication by informing and engaging City of Pflugerville taxpayers/ratepayers, local regulatory entities, special interest groups, businesses, communities, and the general public, located near the project site, about the Project status throughout the design and construction period***.**

Phase II Scope – PROPOSED

Over the next eighteen (18) months, Adisa Communications will coordinate with the City of Pflugerville to *facilitate public outreach activities to include:* ***(I.) Stakeholder Engagement and (II) Community Meetings Support.***

I. OUTREACH – STAKEHOLDER ENGAGEMENT

Adisa Communication will provide dedicated assistance with developing in-meeting interactivity for virtual public meetings, post meeting engagement and stakeholder engagement. The elements listed below represent the approach, tools, and tactics Adisa Communications will be responsible for when engaging the public and stakeholders. They are designed to result in

equitable, innovative, and convenient stakeholder participation across participant segments in the targeted community.

a. **Project Management**

Deliverables:

1.1 Client and Project Related Meetings

1.2. Project Reports and Invoicing

b. **Project Content Development –** Adisa Communications will coordinate the research and recommendation of topics for social media/web content related to the project. In conjunction with critical meetings and milestones for the project, Adisa Communications will provide educational information about the project on a monthly basis. This information can be shared visually, through narrative or video. The deliverables will be provided to the PIO/Communications Department for publishing. Below, we have provided draft ideas for social media/web content about the project and the team:

    - Meet the Project Team: Backgrounds on the Experts working on the project (Video and article)
    - Top 10 Reasons Why We Need WCRWWTF (article and social media gif)
    - Engineering Facts about WCRWWTF (articles)
    - History of Wilbarger Creek and its role in the development of Pflugerville/Central Texas
    - Education/STEM Content
        - WWTF Design Elements + Formulas
        - Construction Equipment
        - Geological Exploration
        - Water Reuse Programs
        - Collection + Transmission Systems
        - Stormwater Regulation
        - What are Biosolids?
        - Habitat of Wilbarger Creek
        - WCRWWFT Funding

Deliverables:

1.3 Project Fact Sheet (2 versions), Draft Revised and Final (includes project overview, timeline/milestones, project team, project contact information, media inquiries contact and social media information)

1.4 Blog Post Topics Lists, Draft, Revised, for budgeting purposes a total of 8 articles is proposed (300 – 500 word count)

c. **Educational Outreach** – Adisa Communications will support engagement and educational activities and opportunities for students and the general public. Educational activities can include but are not limited to:
    - Coordinate youth engagement with existing City of Pflugerville youth, family and community special events such as Nature PFest + PFun Camp in Spring/Summer 2022
        - Provide educational display or engagement activity about WCRWWTF
        - Coordinate with engineering subject matter experts to participate in career development seminars, project design presentations, or other STEM-related informationals
    - Host student-led interviews with members of the project team via FB live, and IG TV
        - Partner with City of Pflugerville Youth Advisory Council to develop a cohort Project Ambassadors that are well-positioned to educate other youth and the general public about the WCRWWTF and other CoPf public works infrastructure programs and projects
        - Integrate web/digital series on existing CoPf communication platforms to increase traffic and visibility
    - In partnership with an educator, we can support the development of a curriculum guide/brochure on STEM topics related to facility design and construction, such as:
        - Water and wastewater treatment practices
        - Hydrology
        - Construction
        - Reclaimed water
        - Biosolids
        - Composting
    - Create a social media educational series on STEM topics related to facility design, construction, water/wastewater and beneficial use.

- ~~Conduct a virtual site tour to highlight geography, environmental science, and the environmental approval process~~

Deliverables:

1.5 Education/STEM Contact List of Schools to Engage

1.6 Curriculum Brochure on RWWTF (working in partnership with an educator)

1.7 Special Event Plan, Draft, Revised, Final (2) - Nature Fest + Fun Camp (includes facilitation of event logistics, materials, presentation development and promotional/swag items)

~~*1.8 Project Site Tour Video, Draft, Revised, Final*~~

1.9 Social Media Topics List, Prompts and Platform for proposed series Draft, Revised, Final

d. **Stakeholder Database** – Adisa Communications will help maintain a stakeholder database that includes contact information of, stakeholders, affected jurisdictions and agencies, residents, businesses, property owners, schools, and churches within the defined project area. **NOTE: This section has been removed pending further approval.**

Deliverables:

~~*1.10 Excel database updated monthly*~~

II. STAKEHOLDER + COMMUNITY MEETINGS

e. **Presentation Prep + Development** – Adisa Communications will work with the team to develop strategies for increased in-meeting engagement during virtual public meeting.

The City of Pflugerville uses WebEx as their platform for public meetings. Our team will also suggest software tools to utilize during virtual meetings to foster interaction.

Deliverables:

2.1 EID Meeting Attendance

~~*2.2 Draft, Revised, Final Discussion Guide*~~

f. **Virtual Public Meetings** –Adisa Communications will support the planning, promotion and facilitation of up to four (4) Community Meetings, to be held during the design phase of the project. The meetings will be held virtually due to COVID-19. Each meeting will include an agenda developed by the project team. ~~Feedback, questions, and ideas will be documented in a one-page meeting summary for each meeting.~~

Deliverables:

2.3 Meeting Strategy/Agenda for Each Meeting, Draft, Revised, Final

2.4 Public Meeting Attendance

~~*2.5 Talking Points for Speakers Draft, Revised, Final*~~

~~*2.6 Meeting Summary Report for each meeting*~~

g. **Stakeholder Meetings** — ~~During the design phase of the project, Adisa Communication will support the facilitation of small-scale community meetings with stakeholder groups and affected agencies to provide information on the project, process, and timeline. For budgeting purposes, a total of ten (10) meetings is anticipate.~~ **NOTE: This section has been removed pending further approval.**

Deliverables:

~~*2.7 Scheduling of Stakeholder Meetings Draft, Revised, Final*~~

~~*2.8 Meeting Strategy/Agenda for Each Meeting, Draft, Revised, Final*~~

~~*2.9 Meeting Summary for Each Meeting, Draft, Revised, Final*~~

h. **Post Meeting Engagement** – As part of this project, Adisa Communication will support the public feedback process through internet accessible surveys and polls; and track input received. Also, our team will keep a record of the number of participants in the input processes and help track media coverage of the project. Specifically, the project team will:
    - Create online survey questionnaire - Document inquiries about the project, one for each public meeting (4 total)

Deliverables:

2.10 Online Survey Draft, Revised, Final (4 total)

~~*2.11 Project Stakeholder Engagement Report, 10-12 pages in length, 3 charts/tables*~~

GAR102 - Wilbarger Creek Regional Wastewater Treatment Plan

Adisa Communications

May 17, 2021 v.2

Phase II

Element	GAR102 Tasks	Principal $165.09 Hours	Rate Cost	Creative Director $150.10 Hours	Rate Cost	Project Manager $81.90 Hours	Rate Cost	Project Assistant $54.97 Hours	Rate Cost	Subtask Hours	Cost	Expenses - see next tab for breakdown	TOTAL COST
1	**OUTREACH - Stakeholder Engagement**												
1.1	Client and Project Related Meetings	6	$990.54	6	$900.60	24	$1,965.60	16	$879.52				$4,736.26
1.2	Project Reports and Invoicing	1	$165.09	0	$0.00	18	$1,474.20	9	$494.73				$2,134.02
1.3	Project Fact Sheet (2 versions)	4	$660.36	16	$2,401.60	36	$2,948.40	18	$989.46				$6,999.82
1.4	Blog Post Topics Lists (8)	4	$660.36	0	$0.00	80	$6,552.00	40	$2,198.80				$9,411.16
1.5	Education/STEM Content and List of Schools	12	$1,981.08	4	$0.00	48	$3,931.20	36	$1,978.92				$7,891.20
1.6	Curriculum Brochure on RWWTF	0	$0.00	0	$0.00	4	$327.60	0	$0.00				$327.60
1.7	Special Event Plan (2)	6	$990.54	24	$3,602.40	120	$9,828.00	120	$6,596.40				$21,017.34
1.8	Project Site Tour Video	0	$0.00	0	$0.00	0	$0.00	0	$0.00				$0.00
1.9	Social Media Topics and Content	1	$165.09	8	$1,200.80	12	$982.80	24	$1,319.28				$3,667.97
1.10	Database	0	$0.00	0	$0.00	0	$0.00	0	$0.00				$0.00
	Element 1: Sub-Total	**34**	**$5,613.06**	**58**	**$8,105.40**	**342**	**$28,009.80**	**263**	**$14,457.11**	**$0.00**	**$0.00**	**$0.00**	**$56,185.37**
2	**STAKEHOLDER + COMMUNITY MEETINGS**												
2.1	EID Meeting Attendance	0	$0.00	0	$0.00	3	$245.70	0	$ -				$245.70
2.2	Stakeholder Meeting Discussion Guide (1)	0	$0.00	0	$0.00	0	$0.00	0	$ -				$0.00
2.3	Stakeholder Meeting Strategy/Agenda for Each Meeting	0	$0.00	0	$0.00	4	$327.60	0	$ -				$327.60
2.4	Public Meeting Attendance	4	$660.36	0	$0.00	12	$982.80	12	$ 659.64				$2,302.80
2.5	Talking Points for Speakers	0	$0.00	0	$0.00	0	$0.00	0	$ -				$0.00
2.6	Public Meeting Summary Report for each meeting	0	$0.00	0	$0.00	0	$0.00	0	$ -				$0.00
2.7	Scheduling/Coordination of Stakeholder Meetings	0	$0.00	0	$0.00	0	$0.00	0	$ -				$0.00
2.8	Public Meeting Strategy/Agenda for Each Meeting	0	$0.00	0	$0.00	0	$0.00	0	$ -				$0.00
2.9	Public Meeting Summary for Each Meeting	0	$0.00	0	$0.00	0	$0.00	0	$ -				$0.00
2.10	Online Survey Template (4)	0	$0.00	0	$0.00	4	$327.60	0	$ -				$327.60
2.11	Media and Coverage Reports	0	$0.00	0	$0.00	0	$0.00	0	$ -				$0.00
	Element 2: Sub-Total	**4**	**$660.36**	**0**	**$0.00**	**23**	**$1,883.70**	**12**	**$659.64**	**0**	**0.00**	**$0.00**	**$3,203.70**
	Subtotal	**38**	**$6,273.42**	**58**	**$8,105.40**	**365**	**$29,893.50**	**275**	**$15,116.75**			**$-**	**$ 59,389.07**

Expenses

TOTAL $ 59,389.07

JH ENGINEERING, LLC
Lincoln, TX
Texas Registered Engineering Firm No. F-19850

May 2, 2021

Garver
3755 S Capital of Texas Highway
Suite 325
Austin, TX 78704

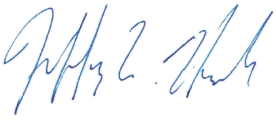
ATTN: Greg T. Swoboda, PE - Senior Project Manager

RE: **City of Pflugerville, TX**
Wilbarger Wastewater Treatment Plant Project
Design and Bid Phase Services Level of Effort Estimate

Mr. Swoboda,

We are pleased to provide you with the following cost proposal for Design and Bid Phase Services for the City of Pflugerville's Wilbarger Wastewater Treatment Plant Project. We have assembled the cost proposal to cover supporting the project per our discussions and correspondence. If you have any questions or concerns that arise during your review, please do not hesitate to reach out to me at, 702-355-6194. We would be happy to schedule a meeting to discuss the overall scope and answer any questions you may have. We look forward to hearing from you and working with you on this project.

Sincerely,



Jeff Haasch, PE, PMP
Owner/Principal Engineer

City of Pflugerville
Wilbarger Wastewater Treatment Plant
Design and Bid Phase Services
Scope & Fee Proposal

Introduction

Garver has engaged JH Engineering, LLC (JHE) to provide Design and Bidding Phase Services in supporting Garver and the City of Pflugerville in delivering the Wilbarger Wastewater Treatment Plant Project. JHE has developed this cost proposal using information provided by Garver and assumes a design and bid phase duration of sixteen (16) months. The purpose of this document is to provide a short narrative clarifying the intent of each task to ensure our vision and interpretation of the required level of effort meets the Project Team's expectations. If there are any items in question, please bring them to our attention so we can provide further explanation to the task clarification. Please see the following narrations below for each of the tasks listed on the attached Level of Effort cost sheet (Attachment B).

Task 1 – Project Management and Administration

1.1 Project Administration and Monthly Reporting – This task covers standard project management and administration time needed to manage and monitor the overall scope of work. Examples include setting up the project within our internal project management software and updating the tools monthly, budget management, and HR management.

1.2 Internal Coordination Meetings – This task accounts for JHE's Principal Engineer and Process Engineer to attend twelve (12) internal coordination meetings with the design team. Internal coordination meetings are anticipated to be held virtually and anticipated to be two (2) hours in duration.

1.3 Monthly Progress Meetings – This task accounts for JHE's Principal Engineer and Process Engineer to attend four (4) monthly progress meetings with the design team and the City of Pflugerville. Monthly progress meetings are anticipated to be held at the City's Public Works office other location and anticipated to be two (2) hours in duration. Travel time has been included in the fee estimate.

1.4 30%/60%/90% Design Workshops - This task accounts for JHE's Principal Engineer and Process Engineer to attend three (3) design workshops with the design team and the City of Pflugerville. Design workshops are anticipated to be held at the City's Public Works office other location and anticipated to be three (3) hours in duration. Travel time has been included in the fee estimate.

1.5 Process Controls/SCADA Workshop - This task accounts for JHE's Principal Engineer and Process Engineer to attend one (1) process controls/SCADA workshop with the design team and the City of Pflugerville. The workshop is anticipated to be held at the City's Public Works office other location and anticipated to be three (3) hours in duration. Travel time has been included in the fee estimate.

Task 2 – Design Phase Services - Development, Writing, & Publication of a Startup and Commissioning Plan

2.1 – 30% Functionality / Operability Review – This task will include time anticipated for JHE's staff to review the 30% design deliverable for overall functionality ad operability. JHE will focus on the review of the Process and Instrumentation Diagrams and Control Narratives. JHE will also review Electrical Control Diagrams, the I/O List, and the Conduit and Conductor schedules to be sure consistency throughout. Review comments will be provided digitally use traditional pdf markup tools or in another format as directed by Garver.

2.2 – 60% SCADA Controls Review – This task will include time anticipated for JHE's staff to review the SCADA Control deliverable at the 60% milestone. JHE will focus on the review of the Process and Instrumentation Diagrams and Control Narratives to ensure they are progressing in alignment with review comments made at the 30% deliverable. Review comments will be provided digitally use traditional pdf markup tools or in another format as directed by Garver.

2.3 – 90% Operability/Functionality/SCADA Controls Review – This task will include time anticipated for JHE's staff to review the 90% design deliverable for overall functionality ad operability. JHE will focus on the review of the Process and Instrumentation Diagrams and Control Narratives. JHE will also review Electrical Control Diagrams, the I/O List, and the Conduit and Conductor schedules to be sure consistency throughout and to ensure they are progressing in alignment with review comments made in previous reviews. Review comments will be provided digitally use traditional pdf markup tools or in another format as directed by Garver.

2.4 – Develop Commissioning and Startup Plan – Towards the end of the design phase and after reviewing the 90% design milestone, JHE will begin preparing an overall commissioning and startup plan. The commissioning and startup plan will be the guiding document, intended to be utilized by the project team, to understand the recommended approach for transitioning the project from construction to operations with a fully trained operations and maintenance staff.

Exclusions:

- PMIS or any other software licenses needed to integrate and support the project.
- Level of Effort required to complete any services not specifically identified above.

Attachment B

City of Pflugerville
Wilbarger Wastewater Treatment Plant
Level of Effort Estimate - Labor Cost
Design and Bidding Phase

Item/Description	Principal Engineer / Commissioning & Startup SME	Engineering & Construction Inspection Coordinator	Senior Commissioning Specialist IV (Instrumentation & Controls)	Process / Commissioning Engineer II	Commissioning Specialist IV (Electrical)	Total Labor Hours	Subtotal / Task
	Jeff Haasch, PE, PMP	Kirkland Fordham	Watt Durden	Olivia Beck, PE	Matt Hladik		
Billable Hourly Rate	**$ 232.30**	**$ 136.65**	**$ 198.14**	**$ 165.00**	**$ 164.25**		
Task 1 - Project Management and Administration							
1.1 Project Administration and Monthly Reporting	18	-	-	-	-	18	$ 4,181
1.1 Internal Coordination Meetings (12 meetings)	24	-	-	24	-	48	$ 9,535
1.2 Monthly Progress Meetings (6 meetings)	24	-	-	24	-	48	$ 9,535
1.3 30%/60%/90% Design Workshops	15	-	-	15	-	30	$ 5,960
1.4 Process Controls/SCADA Workshop	5	-	-	5	-	10	$ 1,987
Task 1 Sub-Total	**86**	**-**	**-**	**68**	**-**	**154**	**$ 31,198**
Task 2 - Design Phase Services							
2.1 30% Functionality / Operability Review	10	10	10	40	10	80	$ 13,913
2.2 60% SCADA Controls Review	20	20	20	80	20	160	$ 27,827
2.3 90% Operability/Functionality/SCADA Controls Review	20	20	20	80	20	160	$ 27,827
2.4 Startup and Commissioning Plan	20	20	20	120	40	220	$ 37,712
Task 2 Sub-Total	**70**	**70**	**70**	**320**	**90**	**620**	**$ 107,279**
Total Hours	**156**	**70**	**70**	**388**	**90**	**774**	**$ 138,477**

Billable Labor	**$ 138,477**
Reimbursable Expenses	**$ 1,228**
Total	**$ 139,705**

Assumptions:
Progress Meetings and Workshops will be held in Pflugerville and include travel time.
Internal Coordination Meetings will be virtual.

City of Pflugerville
Wilbarger Wastewater Treatment Plant
Commissioning and Startup Services
Other Direct Costs

Travel Expenses and Other Direct Costs (ODCs) Assumptions:		
Mileage Reimbursement	$0.56	per mile
Distance (Lincoln to Pflugerville - roundtrip)	90	miles
Distance (Austin to Pflugerville - roundtrip)	40	miles

Task	# of Travelers (Lincoln/Pflugerville)	# of Travelers (Austin/Pflugerville)	# of Trips	ODC Subtotal
Task 1 - Project Management and Administration	1	1	10	$ 728
Task 2 - Design Phase Services	1	1	0	$ -
Reprographic Services				$ 500
			Total	**$ 1,228**

INLAND GEODETICS, LLC
PROFESSIONAL LAND SURVEYORS

1504 Chisholm Trail Road
Suite 103
Round Rock, TX 78681
512-238-1200
512-238-1251 fax
TBPELS Firm Reg. No. 10059100

3 May 2021
18 May 2021 (revised)
24 May 2021 (revised)

Greg T. Swoboda, P.E.
Garver
Austin, Texas 78746

RE: Engineering Design Surveying
Project: City of Pflugerville – Wilbarger WWTP Easement Survey

Mr. Swoboda:

Inland Geodetics, LLC (Inland) is pleased to submit our proposal for professional land surveying services related to the above referenced project. Our proposal is to generate a survey plat and metes and bounds description for an area of survey as discussed in email dated 30 Apr 2021 along with another survey plat with metes and bounds description for the area along the length of the frontage of the north side Gregg Lane. Below is a specific list of our proposed Scope of Services and estimated costs.

SCOPE OF SERVICES

1. Inland will recover and/or establish and utilize established control (projects in vicinity). The values will be relative to NAD 83 Texas State Plane Coordinates, Central Zone 4203 (GRID values scaled to surface position).
2. Inland will perform sufficient field and office surveying to locate the existing property corners and develop the existing property configurations. Inland will prepare 1 parcel exhibits with survey plat and metes and bounds description.
3. Inland will also prepare 1 easement which will be a 20 ft wide and approx.. 2,500-3,000' along the frontage on the north side of Gregg Lane for the Manville Water Corp. The parcel will include a survey plat and metes and bounds description.

The ESTIMATED fee for the above services: **$ 7,540.00**

NOTE: This proposal understands that Garver will provide a VALID and CURRENT Tax Exempt Resale Certificate issued from the City of Pflugerville for the purchase of taxable land surveying services as a component of their deliverables. A copy of this certificate will be forwarded to Inland Geodetics, LLC in lieu of incurring sales tax charges for the boundary surveying portion of this proposal.

The estimated fee proposed above are based on personnel time required to perform the described Scope of Services. Additional time requirements resulting from project scope changes, plan revisions, field recovery of or discrepancies of control provided will be considered reasonable cause for us to seek additional compensation for services not included in these amounts.

Sincerely,

M. Stephen Truesdale
Registered Professional Land Surveyor
Licensed State Land Surveyor
Inland Geodetics, LLC

Exhibit B

City of Pflugerville
Wilbarger Creek Regional WWTF
Design and Bid Phase Services

Proposed Milestone Schedule
Wednesday, June 9, 2021

Milestone	Milestone / Deliverable	Duration[1,2]	Anticipated Delivery to Client[3]
1	Project NTP	--	Thursday, June 24, 2021
2	Draft DIM Package A (Influent)	Within 30 working days of NTP	Thursday, August 5, 2021
3	Draft DIM Package B (Secondary Treatment)	Within 50 working days of NTP	Thursday, August 26, 2021
4	Draft DIM Package C (Tertiary Treatment + Site)	Within 70 working days of NTP	Friday, October 1, 2021
5	Draft DIM Package D (Solids)	Within 70 working days of NTP	Friday, September 24, 2021
6	Draft Building Package DIMs	Within 70 working days of NTP	Wednesday, September 22, 2021
7	Draft Electrical and SCADA DIMs	Within 70 working days of NTP	Friday, September 17, 2021
8	Design Criteria/Process Control Workshop	8 working days (min) from receipt of Client/OR written Draft DIM comments	Thursday, October 28, 2021
9	Draft 30% Design Submittal (DIMs, Drawings)	10 working days from receipt of Design Criteria/Process Control Comments	Tuesday, November 16, 2021
10	Final 30% Design Submittal (DIMs, Drawings)	10 working days from receipt of comments on Draft 30% submittal	Monday, January 10, 2022
11	60% Review Submittal (Front End Documents, Drawings, Specifications)	75 working days from receipt of comments on Draft 30% submittal	Monday, April 4, 2022
12	90% Review Submittal (Front End Documents, Drawings, Specifications)	75 working days from receipt of comments on 60% review submittal	Monday, September 12, 2022
13	Regulatory Review Submittal (Front End Documents, Drawings, Specifications)	10 working days from submittal of 90% Review Submittal	Monday, September 26, 2022
14	100% Bid-Set Documents (Front End Documents, Drawings, Specifications, Details)	20 working days from receipt of Regulatory Review Comments from TWDB and Receipt of City/OR Comments on 90% Submittal	Thursday, December 8, 2022
15	Bidding Phase	Per Bid Phase schedule adopted during design and bidding process	Through February 2023
16	Draft TCEQ Permit Amendment Application for City/OR Review	Within 100 working days of NTP	Friday, October 8, 2021

1. Duration shown is intended to be the contractual delivery date.

2. Working days do not include weekends (Saturday/Sunday) and standard Garver Holidays/observed holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Thanksgiving Friday, Christmas Eve, Christmas Day).

3. Anticipated delivery date shown is based on durations noted. Reference detailed, critical path schedule attached. It is noted that delays in preceding milestones (such as extended client review periods or delays in Regulatory Reviews) could delay delivery of subsequent submittals.

EXHIBIT C

City of Pflugerville
Wilbarger Creek RWWTF

FEE SUMMARY

Design and Bid Phase	Estimated Fees	Garver	Kfriese	Adisa	GAI	JHE	Inland
Basic Services							
TASK I - Project Management and Quality Assurance	$495,675	$409,212	$38,530	$0	$24,182	$23,751	$0
TASK II - Preliminary (30%) Design	$1,828,062	$1,543,983	$123,060	$0	$142,768	$18,251	$0
TASK III - Design Development (60% Design)	$1,928,260	$1,489,668	$123,060	$0	$285,536	$29,996	$0
TASK IV - Final Design (90% Design)	$2,182,050	$1,867,583	$70,320	$0	$214,152	$29,995	$0
TASK V - Contract Documents (100%)	$578,539	$471,995	$35,160	$0	$71,384	$0	$0
TASK VI - Bid Phase Services	$392,524	$352,693	$20,910	$0	$18,921	$0	$0
Sub-Total Basic Services	***$7,405,110***	***$6,135,134***	***$411,040***	***$0***	***$756,943***	***$101,993***	***$0***
Special Services							
TASK VII - Regulatory/Agency Review Set	$54,347	$54,347	$0	$0	$0	$0	
TASK VIII - Permitting	$39,380	$39,380	$0	$0	$0	$0	$0
TASK IX - Regulatory/Agency Coordination (T&M)	$168,687	$161,147	$0	$0	$0	$0	$7,540
TASK X - Startup and Commissioning Plan	$102,525	$64,813	$0	$0	$0	$37,712	$0
TASK XI - Public Outreach Plan (T&M)	$126,132	$66,743	$0	$59,389	$0	$0	$0
Sub-Total Special Services	***$491,071***	***$386,430***	***$0***	***$59,389***	***$0***	***$37,712***	***$7,540***
TOTAL	**$7,896,181**	**$6,521,564**	**$411,040**	**$59,389**	**$756,943**	**$139,705**	**$7,540**

EXHIBIT C

City of Pflugerville
Wilbarger Creek RWWTF

DESIGN AND BID PHASE

WORK TASK DESCRIPTION	QA/QC/TA/ PIC	Senior Project Manager	Project Manager, Group Leader, Discipline Leader	Senior Process/ Discipline Engineer	PM/PE	PE	EIT	Designer Revit	Designer I	Admin/Doc Processing/ Tech	Planner 3	Planner 4	Senior Env. Sci / Planner	GARVER ODC	Kfriese	Adisa	GAI	JHE	Inland	MARKUP	GARVER	SUB-CO TOTAL	TOTAL
1. TASK I - Project Management and Quality Assurance																							
1.1 Project Work Plan	5	45	45				45	8		16										$0	$30,252	$0	$30,252
1.2 Regular Coordination Meetings	15	90	30	45	180	100	100	100		90					$38,530		$24,182	$9,535		$3,612	$120,232	$72,247	$192,479
1.3 Progress Meetings (Up to 15)	45	90	90	150	150	80	80	30		80								$9,535		$477	$135,072	$9,535	$144,607
1.4 Monthly Project Reports		60	80				80		24	80								$4,681		$234	$51,166	$4,681	$55,847
1.4.1 Monthly Project Schedule Update		30	30				80													$0	$23,300	$0	$23,300
1.5 QA QC	44	44	73	45					12	18										$0	$49,190	$0	$49,190
Subtotal - TASK I - Project Management and Quality Assurance	**109**	**359**	**348**	**240**	**330**	**180**	**385**	**138**	**36**	**284**	**0**	**0**	**0**	**$0**	**$38,530**	**$0**	**$24,182**	**$23,751**	**$0**	**$4,323**	**$409,212**	**$86,463**	**$495,675**
2. TASK II - Preliminary (30%) Design																							
2.1 Preliminary Design Drawings															$123,060		$142,768			$13,291	$13,291	$265,828	$279,119
Process Mechanical		44	100	100	158	158	347													$0	$133,842	$0	$133,842
Architectural		30	45	45	59	59	89													$0	$51,832	$0	$51,832
Building Mechanical			45		59		80													$0	$26,825	$0	$26,825
Structural		74		101	124		420													$0	$104,988	$0	$104,988
Electrical/I&C		15				30														$0	$8,115	$0	$8,115
Civil				117			220		367											$0	$85,411	$0	$85,411
BIM								651	579											$0	$155,655	$0	$155,655
QA QC	31	31	51	32					8	13										$0	$34,603	$0	$34,603
2.2 Preliminary Design Document (Up to 26 DIMs)																				$0	$0	$0	$0
Process Mechanical		155	152	172	176	296	598													$0	$236,903	$0	$236,903
Architectural		23	23	23	34	56	111													$0	$40,148	$0	$40,148
Building Mechanical			74		89		80													$0	$36,980	$0	$36,980
Structural		86		116	160		648													$0	$142,470	$0	$142,470
Electrical/I&C		23				65														$0	$14,970	$0	$14,970
Civil				174			365		215											$0	$95,645	$0	$95,645
BIM								274	386	570										$0	$131,030	$0	$131,030
QA QC	53	53	88	54					14	22										$0	$59,208	$0	$59,208
2.3. Functionality/Operability Review		8	24	24		40		40	40	40								$13,913		$696	$30,656	$13,913	$44,569
2.4 Preliminary Workshops														$527						$0	$527	$0	$527
a. Building Workshop		8	4	8	8	8	8	16												$0	$9,852	$0	$9,852
b. Electrical and SCADA Workshop		8	4	16	8	16	16	16		8										$0	$13,940	$0	$13,940
c. Design Criteria and Process Control Workshop		8	4	8	8	16	16			8								$2,169		$108	$10,360	$2,169	$12,529
2.5 Operations and Maintenance Discussion		8	4	8	8	16	16			8										$0	$10,252	$0	$10,252
2.6 Front-End Documents Coordinaiton		8	8	16	32		24			16										$0	$15,528	$0	$15,528
2.7 Preparation of 30% Design Submittal		4	4	8		8	8	40	40	80										$0	$22,344	$0	$22,344
2.8 Response to Comments - 30% Design Submittal		8	16	40	16	32	32	40	40	40										$0	$36,216	$0	$36,216
2.9 Coordination with TCEQ		8	8	8			16			8										$0	$7,704	$0	$7,704
2.10 30% Design Workshop		8	4	16	8	16	16	16		8				$639				$2,169		$108	$14,687	$2,169	$16,856
																				$0	$0	$0	$0
Subtotal - TASK II - Preliminary (30%) Design	**84**	**610.2845**	**658**	**1086.3623**	**947**	**816**	**3110.3873**	**1093.4742**	**1688.6508**	**821**	**0**	**0**	**0**	**$1,166**	**$123,060**	**$0**	**$142,768**	**$18,251**	**$0**	**$14,204**	**$1,543,983**	**$284,079**	**$1,828,062**
3. TASK III - Design Development (60% Design)																							
3.1 60% Development - Drawings, Specifications, OPCC															$123,060		$285,536			$20,430	$20,430	$408,596	$429,026
Process Mechanical		140	112	187	230	362	854													$0	$273,921	$0	$273,921
Architectural		59	45	74	118	118	162													$0	$89,974	$0	$89,974
Building Mechanical			280		346		240													$0	$134,100	$0	$134,100
Structural		165	215	338	0	0	1416													$0	$309,290	$0	$309,290
Electrical/I&C		59				89														$0	$28,062	$0	$28,062
Civil				320			564		584											$0	$183,932	$0	$183,932
BIM								770	986	582										$0	$267,814	$0	$267,814
QA QC	57	57	95	59					16	23										$0	$63,952	$0	$63,952
3.2 60% Front-End Documents Coordination and Revisions		4	8	12	24		16			12										$0	$11,256	$0	$11,256
3.3 SCADA Controls Review		8	8	16	8	16	16	16		8								$27,827		$1,391	$16,111	$27,827	$43,938
3.4 Develop up to three (3) equipment preselection packages		4	8	8	16	24	24		24	24										$0	$17,116	$0	$17,116
3.5 60% Design Review Workshop		8	4	8	8	16	16			8				$639				$2,169		$108	$10,999	$2,169	$13,168
3.6 Preparation of 60% Design Submittal		8	4	8		8	8	40	40	80										$0	$23,444	$0	$23,444
3.7 Response to Comments - 60% Design Submittal		8	16	40	16	32	32	40	40	40										$0	$36,216	$0	$36,216
3.8 Develop construction phasing sheet for construction equipment heights					5		20													$0	$3,050	$0	$3,050
Subtotal TASK III - Design Development (60%)	**57**	**520**	**795**	**1070**	**771**	**665**	**3368**	**866**	**1690**	**777**	**0**	**0**	**0**	**$639**	**$123,060**	**$0**	**$285,536**	**$29,996**	**$0**	**$21,930**	**$1,489,668**	**$438,592**	**$1,928,260**

	WORK TASK DESCRIPTION	QA/QC/TA/ PIC	Senior Project Manager	Project Manager, Group Leader, Discipline Leader	Senior Process/ Discipline Engineer	PM/PE	PE	EIT	Designer Revit	Designer I	Admin/Doc Processing/ Tech	Planner 3	Planner 4	Senior Env. Sci / Planner	GARVER ODC	Kfriese	Adisa	GAI	JHE	Inland	MARKUP	GARVER	SUB-CO TOTAL	TOTAL
4	**TASK IV - Final Design (90% Design)**																							
	4.1 90% Development - Drawings, Specifications, OPCC															$70,320		$214,152			$14,224	$14,224	$284,472	$298,696
	Process Mechanical		108	108	95	107	325	716													$0	$209,000	$0	$209,000
	Architectural		45	45	74	89	111	236													$0	$89,353	$0	$89,353
	Building Mechanical			383		566		400													$0	$205,585	$0	$205,585
	Structural		163	0	295	472	0	1624													$0	$354,010	$0	$354,010
	Electrical/I&C		45				118														$0	$28,069	$0	$28,069
	Civil				300			912		590											$0	$221,100	$0	$221,100
	BIM								1166	1480	588										$0	$378,322	$0	$378,322
	QA QC	229	229	380	234					62	94										$0	$255,968	$0	$255,968
	4.2 Operability/Functionality/SCADA Controls Review		8	8	16	8	16	16	16		8								$27,827		$1,391	$16,111	$27,827	$43,938
	4.3 90% Design Review Workshop		8	4	8	8	16	16			8				$639				$2,168		$108	$10,999	$2,168	$13,167
	4.4 90% Front-End Documents Coordination & Revisions		6	8	12	20		24			12										$0	$12,126	$0	$12,126
	4.5 O&M Workshop		8	8	8	8	24	16			8										$0	$12,096	$0	$12,096
	4.6 Preparation of 90% Design Submittal		4	4	8		8	8	40	40	80										$0	$22,344	$0	$22,344
	4.7 Response to Comments - 90% Design Submittal		8	16	40	16	32	32	40	40	40										$0	$36,216	$0	$36,216
	4.8 Finalize construction phasing sheet for construction equipment heights					3		14													$0	$2,060	$0	$2,060
	Subtotal TASK IV - Final Design (90%)	**229**	**632**	**964**	**1090**	**1297**	**650**	**4014**	**1262**	**2212**	**838**	**0**	**0**	**0**	**$639**	**$70,320**	**$0**	**$214,152**	**$29,995**	**$0**	**$15,723**	**$1,867,583**	**$314,467**	**$2,182,050**
5	**TASK V - Contract Documents (100%)**																							
	5.1 Finalize Drawings, Specifications and OPCC															$35,160		$71,384			$5,327	$5,327	$106,544	$111,871
	Process Mechanical		60	62	91		158	328													$0	$103,249	$0	$103,249
	Architectural		15	15	30	30	30	89													$0	$31,025	$0	$31,025
	Building Mechanical			81		108															$0	$31,995	$0	$31,995
	Structural		58		70	136		380													$0	$92,300	$0	$92,300
	Electrical/I&C		24				53														$0	$13,649	$0	$13,649
	Civil				92			211		194											$0	$61,317	$0	$61,317
	BIM								158	370	310										$0	$89,834	$0	$89,834
	QA QC	26	26	43	26					8	10										$0	$28,979	$0	$28,979
	5.2 Finalize Front-End Documents		8	8	16	16		16			40										$0	$14,320	$0	$14,320
	Subtotal TASK V - Contract Documents (100%)	**26**	**191**	**209**	**325**	**290**	**241**	**1024**	**158**	**572**	**360**	**0**	**0**	**0**	**$0**	**$35,160**	**$0**	**$71,384**	**$0**	**$0**	**$5,327**	**$471,995**	**$106,544**	**$578,539**
6	**TASK VI - Bid Phase Services**																							
	6.1 Contractor Pre-Qualification Assistance																				$0	$0	$0	$0
	6.1.1 Draft Pre-qualification Packet		8	8				24			16										$0	$7,928	$0	$7,928
	6.1.2 Final Pre-qualification Packet		8	8				40			16										$0	$9,768	$0	$9,768
	6.1.3 Prepare Advertisement for Pre-qualification for Contractors		2	4				4			4										$0	$2,142	$0	$2,142
	6.1.4 Assist Owner in CivCast Advertisement			24				24			16										$0	$8,848	$0	$8,848
	6.1.5 Develop Addenda for Pre-qualification Packet			16				16			16										$0	$6,368	$0	$6,368
	6.1.6 Prepare for and lead Pre-Qualification Mtg		4	4				8		8	8										$0	$4,368	$0	$4,368
	6.1.7 Prepare Pre-qualification Meeting Memo		2	2				4			4										$0	$1,752	$0	$1,752
	6.1.8 Lead a Construction Site Tour for Contractors		4	4				4			2										$0	$2,516	$0	$2,516
	6.1.9 Attend the Pre-Qualification Submittal Opening		2	2				2			4										$0	$1,522	$0	$1,522
	6.1.10 Prepare a Review of each Contractor Submittal		4	8			24	24			8										$0	$9,316	$0	$9,316
	6.1.10.1 Check Contractor Certifications & Licenses		2	2			24	24			8										$0	$7,596	$0	$7,596
	6.1.10.2 Survey the Submitted Project References		2	2			24	24			8										$0	$7,596	$0	$7,596
	6.1.10.3 Survey the Submitted References for Key Staff		2				24	24			8										$0	$7,206	$0	$7,206
	6.1.10.4 Evaluate the Submittals and Recommend a list of Pre-Qualified Contractors		4	4			8	8			8										$0	$4,568	$0	$4,568
	6.1.11 Prepare Pre-qualification Notices to Short-Listed Contractors	2	4	4			4	4			12					$20,910		$18,921			$1,992	$6,470	$39,831	$46,301
	6.2 Bidding Assistance														$2,775						$0	$2,775	$0	$2,775
	6.2.1 Prepare Advertisement for Bids	2	2	4				4			4										$0	$2,692	$0	$2,692
	6.2.2 Assist Owner in posting Advertiment for Bids		2	4				4			4										$0	$2,142	$0	$2,142
	6.2.3 Develop Addenda for the Bids	40	40	80	120	120	100	100	80	80	60										$0	$126,760	$0	$126,760
	6.2.4 Prepare for and lead Pre-Bid Meeting			24				24			16										$0	$8,848	$0	$8,848
	6.2.5 Prepare Pre-Bid Meeting Memo			16				16			16										$0	$6,368	$0	$6,368
	6.2.6 Lead a Construction Site Tour for Contractors		4	4				8		8	8										$0	$4,368	$0	$4,368
	6.2.7 Attend the Bid Opening	4	4	4				4			4										$0	$3,792	$0	$3,792
	6.2.8 Prepare Bid Tabulation		2	2				8			2										$0	$2,036	$0	$2,036
	6.2.9 Evaluate Bids and Recommend Award	4	8	8				16			16										$0	$8,108	$0	$8,108
	6.2.10 Attend Recommendation of Award to Council		4	8							8										$0	$3,364	$0	$3,364
	6.2.11 Prepare Construction Contracts	4	8	4				16			16										$0	$7,328	$0	$7,328
	6.2.12 Prepare Conformed Documents	16	24	40	40	40	100	100	60	60	80										$0	$78,700	$0	$78,700
	6.2.13 Coordinate with and Distribute Construction Documents to State Agencies and Funding Agencies		8	8				16	8		8										$0	$7,448	$0	$7,448
	Subtotal TASK VI - Bid Phase Services	**72**	**154**	**298**	**160**	**160**	**308**	**550**	**148**	**156**	**380**	**0**	**0**	**0**	**$2,775**	**$20,910**	**$0**	**$18,921**	**$0**	**$0**	**$1,992**	**$352,693**	**$39,831**	**$392,524**

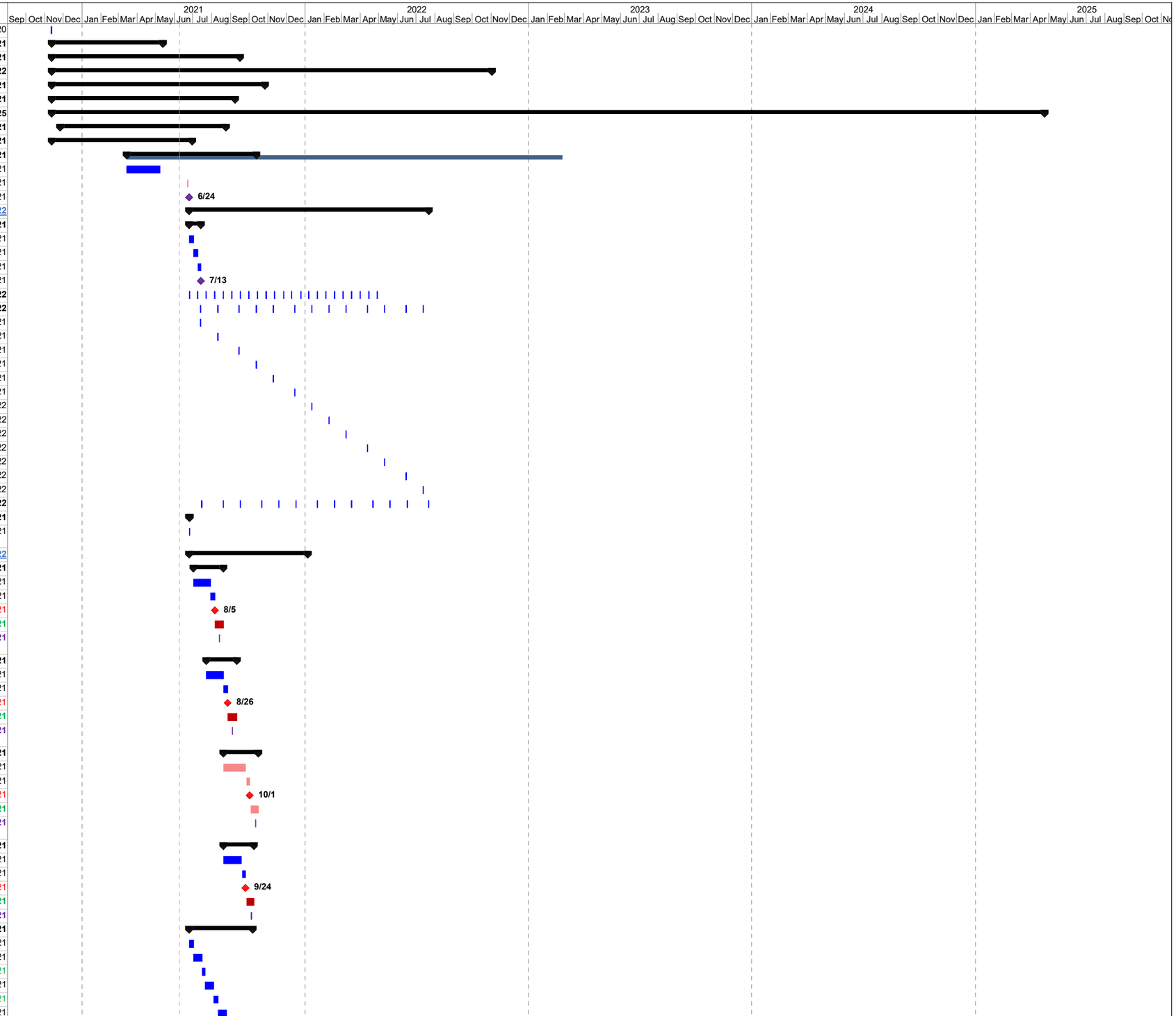
	WORK TASK DESCRIPTION	QA/QC/TA/ PIC	Senior Project Manager	Project Manager, Group Leader, Discipline Leader	Senior Process/ Discipline Engineer	PM/PE	PE	EIT	Designer Revit	Designer I	Admin/Doc Processing/ Tech	Planner 3	Planner 4	Senior Env. Sci / Planner	GARVER ODC	Kfriese	Adisa	GAI	JHE	Inland	MARKUP	GARVER	SUB-CO TOTAL	TOTAL
7	**TASK VII - Regulatory/Agency Review Set**																							
	7.1 Submittal of Final PDR & Construction Documents. Reponses to TWDB documents														$2,775						$0	$2,775	$0	$2,775
	Process Mechanical	8	28	6	8	8	12	40													$0	$19,866	$0	$19,866
	Building Mechanical			8		12															$0	$3,360	$0	$3,360
	Structural		14		8	8		18													$0	$8,520	$0	$8,520
	Electrical/I&C		6				8														$0	$2,714	$0	$2,714
	Civil				12			16		16											$0	$5,668	$0	$5,668
	BIM								18	32	24										$0	$8,142	$0	$8,142
	7.2 Development of Summary Letter and Plans and Specifications as required by TCEQ		4		**4**		6				**8**										$0	$3,302	$0	$3,302
	Subtotal TASK VII - Regulatory/Agency Review Set	**8**	**52**	**14**	**32**	**28**	**26**	**74**	**18**	**48**	**32**	**0**	**0**	**0**	**$2,775**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$54,347**	**$0**	**$54,347**
8	**TASK VIII - Permitting**																							
	8.1 Prepare Minor Amendment Permit Application		4	4				8	8		16				$100						$0	$5,452	$0	$5,452
	8.1.1 Initiate Application and Gather/Develop Information		4	4			4	4													$0	$2,872	$0	$2,872
	8.1.2 Prepare Permit Application		8	8				8	8		16										$0	$7,232	$0	$7,232
	8.1.3 Respond to TCEQ - Administrative process		8	8				8	8		16										$0	$7,232	$0	$7,232
	8.1.4 Assist - Response to Comments - TCEQ Technical Review		8	8			8	8	8		16										$0	$8,296	$0	$8,296
	8.1.5 Review and Comment on Draft TPDES Permit		8	8			8	8	8		16										$0	$8,296	$0	$8,296
	Subtotal TASK VIII- Permitting	**0**	**40**	**40**	**0**	**0**	**20**	**44**	**40**	**0**	**80**	**0**	**0**	**0**	**$100**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$39,380**	**$0**	**$39,380**
9	**TASK IX - Regulatory/Agency Coordination (T&M)**																							
	9.1 Assist in coordinating technical requirements as administered by TWDB														$1,050						$0	$1,050	$0	$1,050
	9.1.1 Organize TWDB's review comments and provide responses		16	32							16										$0	$12,048	$0	$12,048
	9.1.2 Meet and collaborate with TWDB reviewers to refine responses		16	32							16											$12,048	$0	$12,048
	9.2 Assist in cooordinating funding program requirements of TWDB's CWSRF																					$0	$0	$0
	9.2.1 Develop contractural language for contractor environmental compliance		8	8				16			16											$7,008	$0	$7,008
	9.2.2 Conduct nest survey for regulatory		4	4				16			4	8	14	2								$8,716	$0	$8,716
	9.2.3 Provide environmental informaton for the pre-bid meeting		4	4	16	16		12		8			16									$12,492	$0	$12,492
	9.2.4 Update for design change for compliance		8	16	8	8		16		16	8	2	30	8								$20,610	$0	$20,610
	9.3 City of Pflugerville Permitting																				$0	$0	$0	$0
	City Permitting	8	16	24	24	40	40	80	42	40	24										$0	$48,438	$0	$48,438
	9.4 Survey and Documentaion for Outfall Maintenance easement and easement along Gregg Lane		4	4			8	8		16	8								$7,540	$377		$6,673	$7,540	$14,213
	9.5 Travis County Coordination for Project Registration		8	12	12	12	12	24	24	20	16										$0	$19,796	$0	$19,796
	9.6 Coordination and Document Development for Manville WSC		8	8			12	16	16	16	12										$0	$12,268	$0	$12,268
	Subtotal TASK IX - Regualtory/Agency Coordination	**8**	**92**	**144**	**60**	**76**	**72**	**188**	**82**	**116**	**120**	**10**	**60**	**10**	**$1,050**	**$0**	**$0**	**$0**	**$0**	**$7,540**	**$377**	**$161,147**	**$7,540**	**$168,687**
10	**TASK X - Startup and Commissioning Plan**																							
	10.1 Develop Startup and Commissioning Plan	8	8	8	16	16	24	16	24		40				$1,439				$37,712		$1,886	$26,469	$37,712	$64,181
	10.2 Update the annual operating costs for City budgetary costs		8	8		8		40			8											$10,264	$0	$10,264
	10.3 Project coordination of the Wilbarger System with other design teams		24	24		24		80		24	16										$0	$28,080	$0	$28,080
	Subtotal - TASK X - Startup and Commissioning Plan	**8**	**40**	**40**	**16**	**48**	**24**	**136**	**24**	**24**	**64**	**0**	**0**	**0**	**$1,439**	**$0**	**$0**	**$0**	**$37,712**	**$0**	**$1,886**	**$64,813**	**$37,712**	**$102,525**
11	**TASK XI - Public Outreach Plan (T&M)**																							
	Client and project related meetings																$4,736				$237	$237	$4,736	$4,973
	Project reports and invoicing																$2,134				$107	$107	$2,134	$2,241
	11.1 Stakeholder Engagement																				$0	$0	$0	$0
	11.1.1 Project Content Development		26	26				16	24		24						$41,096				$2,055	$21,659	$41,096	$62,755
	11.1.2 Education Outreach		8	8				8			8						$8,219				$411	$5,795	$8,219	$14,014
	11.1.3 Stakeholder Database																$0				$0	$0	$0	$0
	11.2 Stakeholder and Community Meetings																						$0	
	11.2.1 Presentation Preparation and Development																				$0	$0	$0	$0
	11.2.2 Virtual Public Meetings - Up to 4		16	16					16		16						$2,876				$144	$11,360	$2,876	$14,236
	11.2.3 Post Meeting Engagement		4	4				4									$328				$16	$2,356	$328	$2,684
	11.3 City Council Reporting																							
	11.3.1 Presentation Preparation and Development	4	16	16				32		10	12										$0	$14,436	$0	$14,436
	11.3.2 City Council Meetings	6	12	12							4										$0	$7,642	$0	$7,642
	11.3.3 Post Meeting Follow-up		4	4				8			4										$0	$3,152	$0	$3,152
	Subtotal - TASK XI - Public Outreach Plan	**10**	**86**	**86**	**0**	**0**	**0**	**68**	**40**	**10**	**68**	**0**	**0**	**0**	**$0**	**$0**	**$59,389**	**$0**	**$0**	**$0**	**$2,969**	**$66,743**	**$59,389**	**$126,132**
		0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$0**	**$0**	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$0**
															$10,583	**$411,040**	**$59,389**	**$756,943**	**$139,705**	**$7,540**	**$68,731**	**$6,521,564**	**$1,374,617**	**$7,896,181**
	Hours	**611**	**2776**	**3596**	**4079**	**3947**	**3002**	**12961**	**3869**	**6553**	**3824**	**10**	**60**	**10**										

Wilbarger Creek RWWTF - Expenses

Task I: Project Management and Quality Assurance	1.1	1.2	1.3	1.4	1.5	1.6		Totals
Document Printing/Reproduction/Assembly								$ -
Postage/Freight/Courier								$ -
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs								$ -
							TOTAL	**$ -**
Task II: Preliminary Design Development (30%)	2.1	2.2	2.3	2.4	2.5	2.6	2.10	Totals
Document Printing/Reproduction/Assembly								$ -
Postage/Freight/Courier								$ -
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs				$ 527.00			$ 639.00	$ 1,166.00
							TOTAL	**$ 1,166.00**
Task III: Final Design Development (60%)	3.1	3.2	3.3	3.4	3.5	3.6	3.7	Totals
Document Printing/Reproduction/Assembly								$ -
Postage/Freight/Courier								$ -
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs					$ 639.00			$ 639.00
							TOTAL	**$ 639.00**
Task IV: Final Design Development (90%)	4.1	4.2	4.3	4.4	4.5	4.6	4.7	Totals
Document Printing/Reproduction/Assembly								$ -
Postage/Freight/Courier								$ -
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs			$ 639.00					$ 639.00
							TOTAL	**$ 639.00**
Task V: Contract Documents (100%)	5.1	5.2	5.3	5.4	5.5	5.6	5.7	Totals
Document Printing/Reproduction/Assembly								$ -
Postage/Freight/Courier								$ -
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs								$ -
							TOTAL	**$ -**
Task VI: Bid Phase Services	6.1	6.2						Totals
Document Printing/Reproduction/Assembly		$ 2,775.00						$ 2,775.00
Postage/Freight/Courier								$ -
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs								$ -
							TOTAL	**$ 2,775.00**
Task VII: Regulatory/Agency Review Set	7.1	7.2						Totals
Document Printing/Reproduction/Assembly	$ 2,700.00							$ 2,700.00
Postage/Freight/Courier	$75.00							$ 75.00
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs								$ -
							TOTAL	**$ 2,775.00**
Task VIII: Permitting	8.1	8.2	8.3	8.4	8.5	8.6	8.7	Totals
Document Printing/Reproduction/Assembly	$ 100.00							$ 100.00
Postage/Freight/Courier								$ -
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs								$ -
							TOTAL	**$ 100.00**
Task IX: Regulatory/Agency Coordination	9.1	9.2	9.3	9.4	9.5	9.6	9.7	Totals
Document Printing/Reproduction/Assembly	$ 975.00							$ 975.00
Postage/Freight/Courier	$ 75.00							$ 75.00
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs								$ -
							TOTAL	**$ 1,050.00**
Task X: Startup and Commissioning Plan	10.1	10.2	10.3	10.4	10.5	10.6	10.7	Totals
Document Printing/Reproduction/Assembly								$ -
Postage/Freight/Courier								$ -
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs	$ 1,439.00							$ 1,439.00
							TOTAL	**$ 1,439.00**
Task XI: Public Outreach Plan	11.1	11.2	11.3	11.4	11.5	11.6	11.7	Totals
Document Printing/Reproduction/Assembly								$ -
Postage/Freight/Courier								$ -
Office Supplies/Equipment								$ -
Photography								$ -
Computer Modeling/Software Use								$ -
Travel Costs								$ -
							TOTAL	**$ -**

Total **$ 10,583.00**

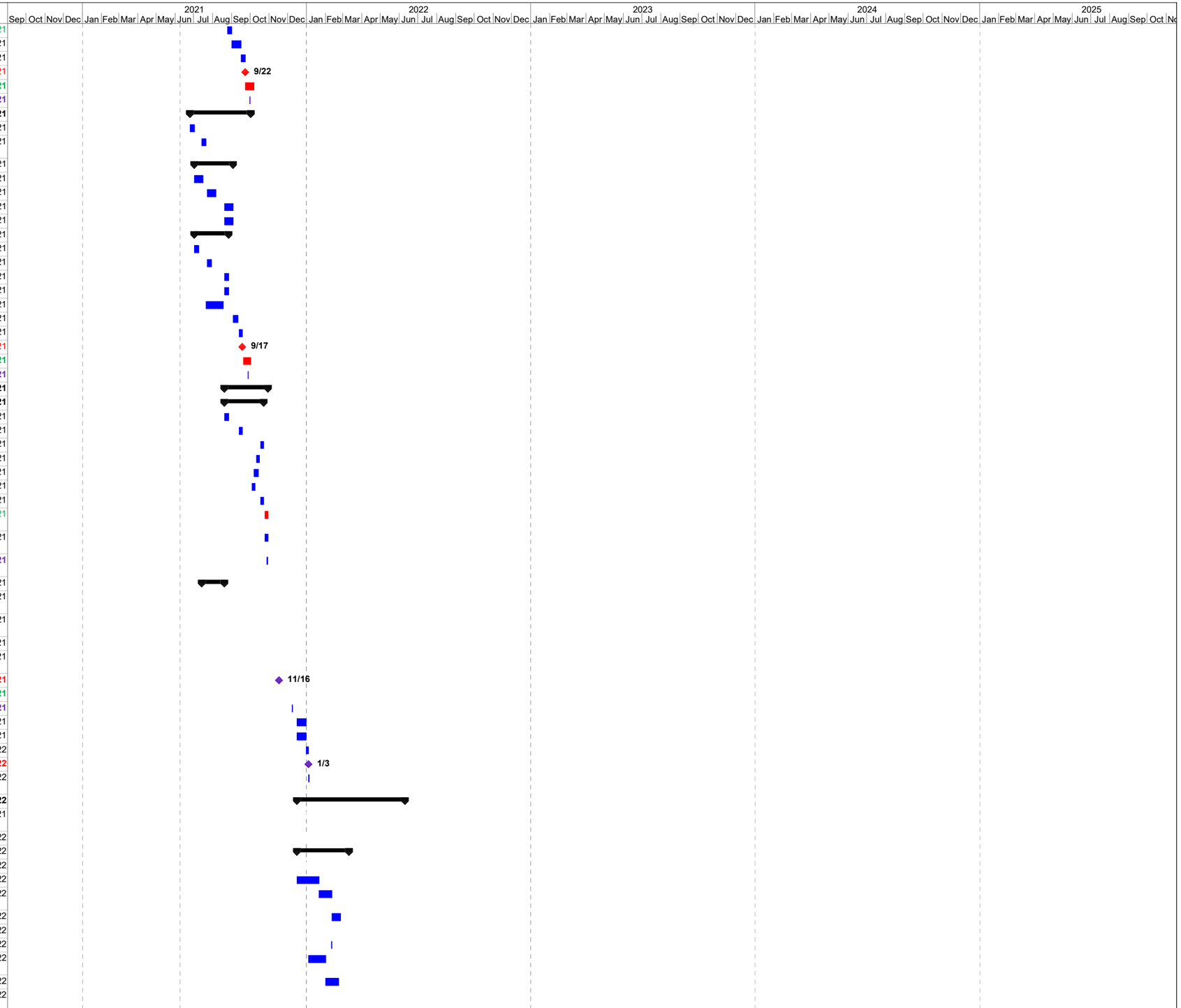
ID	Task Name	Duration	Start	Predecessors	Finish
1	Notice to Proceed	1 day	Wed 11/11/20		Wed 11/11/20
2	**Task 1 - Project Management**	**130 days**	**Thu 11/12/20**		**Wed 5/12/21**
11	**Task 2 - Geotechnical**	**218 days**	**Thu 11/12/20**	**1**	**Wed 9/15/21**
25	**Task 3 - Public Outreach Plan**	**507 days**	**Thu 11/12/20**	**1**	**Tue 11/1/22**
50	**Task 4 - Environmental Services**	**247 days**	**Thu 11/12/20**	**1**	**Tue 10/26/21**
83	**Task 5 - Hydrologic and Hydraulic Studies**	**212 days**	**Thu 11/12/20**	**1**	**Tue 9/7/21**
95	**Task 6 - Permitting Services**	**1142 days**	**Thu 11/12/20**	**1**	**Wed 4/23/25**
114	**Task 7 - Survey**	**192 days**	**Thu 11/26/20**	**1**	**Mon 8/23/21**
123	**Task 8 - Conceptual Design Phase**	**163 days?**	**Thu 11/12/20**	**1**	**Tue 6/29/21**
183	**Design and Bid Phase Services Contract**	**150 days?**	**Mon 3/15/21**		**Tue 10/12/21**
184	Develop Scoping and Fee for Design	40 days	Mon 3/15/21		Fri 5/7/21
185	Design Scope and Fee to City Council	1 day	Tue 6/22/21		Tue 6/22/21
186	Design Phase NTP	0 days	Thu 6/24/21	185FS+2 days	Thu 6/24/21
187	Task 1: Project Management	275 days?	Fri 6/25/21	186	Thu 7/21/22
188	**1.1 Prepare Project Work Plan**	**13 days**	**Fri 6/25/21**		**Tue 7/13/21**
189	Garver prepare work plan	5 days	Fri 6/25/21	186	Thu 7/1/21
190	OR/City Review work plan	5 days	Fri 7/2/21	189	Thu 7/8/21
191	Respond to Comments	3 days	Fri 7/9/21	190	Tue 7/13/21
192	Final Work Plan Submittal	0 days	Tue 7/13/21	191	Tue 7/13/21
193	**1.2 Garver Internal Design Team Meetings**	**217 days**	**Fri 6/25/21**		**Thu 4/28/22**
218	**1.3 Monthly Status Meetings**	**256 days**	**Tue 7/13/21**	**186**	**Tue 7/12/22**
219	1.3 Monthly Status Meetings 1	1 day	Tue 7/13/21		Tue 7/13/21
220	1.3 Monthly Status Meetings 2	1 day	Tue 8/10/21		Tue 8/10/21
221	1.3 Monthly Status Meetings 3	1 day	Tue 9/14/21		Tue 9/14/21
222	1.3 Monthly Status Meetings 4	1 day	Tue 10/12/21		Tue 10/12/21
223	1.3 Monthly Status Meetings 5	1 day	Tue 11/9/21		Tue 11/9/21
224	1.3 Monthly Status Meetings 6	1 day	Tue 12/14/21		Tue 12/14/21
225	1.3 Monthly Status Meetings 7	1 day	Tue 1/11/22		Tue 1/11/22
226	1.3 Monthly Status Meetings 8	1 day	Tue 2/8/22		Tue 2/8/22
227	1.3 Monthly Status Meetings 9	1 day	Tue 3/8/22		Tue 3/8/22
228	1.3 Monthly Status Meetings 10	1 day	Tue 4/12/22		Tue 4/12/22
229	1.3 Monthly Status Meetings 11	1 day	Tue 5/10/22		Tue 5/10/22
230	1.3 Monthly Status Meetings 12	1 day	Tue 6/14/22		Tue 6/14/22
231	1.3 Monthly Status Meetings 13	1 day	Tue 7/12/22		Tue 7/12/22
232	**1.4 Monthly Reports and Invoicing**	**261 days**	**Thu 7/15/21**		**Thu 7/21/22**
246	**1.5 Quality Assurance / Quality Control**	**1 day?**	**Fri 6/25/21**		**Fri 6/25/21**
247	Ongoing per design reviews listed below	1 day?	Fri 6/25/21		Fri 6/25/21
248	Task 2: 30% Design Development	135 days	Fri 6/25/21	186	Tue 1/4/22
249	**Package A (Influent + Hydraulics) DIMs**	**35 days**	**Fri 7/2/21**		**Thu 8/19/21**
250	Package A DIMs Development	20 days	Fri 7/2/21	186FS+5 days	Thu 7/29/21
251	Package A DIMs Internal QAQC + Revisions	5 days	Fri 7/30/21	250	Thu 8/5/21
252	Package A DIMs to Client	0 days	Thu 8/5/21	251	Thu 8/5/21
253	**Package A DIMs Client Review Period**	**10 days**	**Fri 8/6/21**	**252**	**Thu 8/19/21**
254	**Package A DIMs Client Meeting Presentation**	**1 day**	**Fri 8/13/21**	**253SS+5 days**	**Fri 8/13/21**
255	**Package B (Secondary Treatment) DIMs**	**35 days**	**Fri 7/23/21**		**Fri 9/10/21**
256	Package B DIMs Development	20 days	Fri 7/23/21	186FS+20 days	Thu 8/19/21
257	Package B DIMs Internal QAQC + Revisions	5 days	Fri 8/20/21	256	Thu 8/26/21
258	Package B DIMs to Client	0 days	Thu 8/26/21	257	Thu 8/26/21
259	**Package B DIMs Client Review Period**	**10 days**	**Fri 8/27/21**	**258**	**Fri 9/10/21**
260	**Package B DIMs Client Meeting Presentation**	**1 day**	**Fri 9/3/21**	**259SS+5 days**	**Fri 9/3/21**
261	**Package C (Tertiary Treatment + Site) DIMs**	**40 days**	**Fri 8/20/21**		**Fri 10/15/21**
262	Package C DIMs Development	25 days	Fri 8/20/21	186FS+40 days	Fri 9/24/21
263	Package C DIMs Internal QAQC + Revisions	5 days	Mon 9/27/21	262	Fri 10/1/21
264	Package C DIMs to Client	0 days	Fri 10/1/21	263	Fri 10/1/21
265	**Package C DIMs Client Review Period**	**10 days**	**Mon 10/4/21**	**264**	**Fri 10/15/21**
266	**Package C DIMs Client Meeting Presentation**	**1 day**	**Mon 10/11/21**	**265SS+5 days**	**Mon 10/11/21**
267	**Package D (Solids) DIMs**	**35 days**	**Fri 8/20/21**		**Fri 10/8/21**
268	Package D DIMs Development	20 days	Fri 8/20/21	257SS	Fri 9/17/21
269	Package D DIMs Internal QAQC + Revisions	5 days	Mon 9/20/21	268	Fri 9/24/21
270	Package D DIMs to Client	0 days	Fri 9/24/21	269	Fri 9/24/21
271	**Package D DIMs Client Review Period**	**10 days**	**Mon 9/27/21**	**270**	**Fri 10/8/21**
272	**Package D DIMs Client Meeting Presentation**	**1 day**	**Mon 10/4/21**	**271SS+5 days**	**Mon 10/4/21**
273	**Buildings Package DIMs**	**73 days**	**Fri 6/25/21**		**Wed 10/6/21**
274	Functionality Surveys	5 days	Fri 6/25/21	186	Thu 7/1/21
275	Garver prepare facility relation diagrams	10 days	Fri 7/2/21	274	Thu 7/15/21
276	City/OR Review relation diagrams	3 days	Fri 7/16/21	275	Tue 7/20/21
277	Incorporate City comments, prepare floorplans	10 days	Wed 7/21/21	276	Tue 8/3/21
278	City/OR review floorplans	5 days	Wed 8/4/21	277	Tue 8/10/21
279	Incorporate comments, prepare Elevations	10 days	Wed 8/11/21	278	Tue 8/24/21



Project: Pflugerville Willbarger Crk RWWTF - Est Schedule
Design and Bid Phase Scope Development
June 9, 2021

Task
Split
Milestone
Summary
Project Summary
External Tasks
External Milestone
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Critical
Critical Split
Progress
Deadline

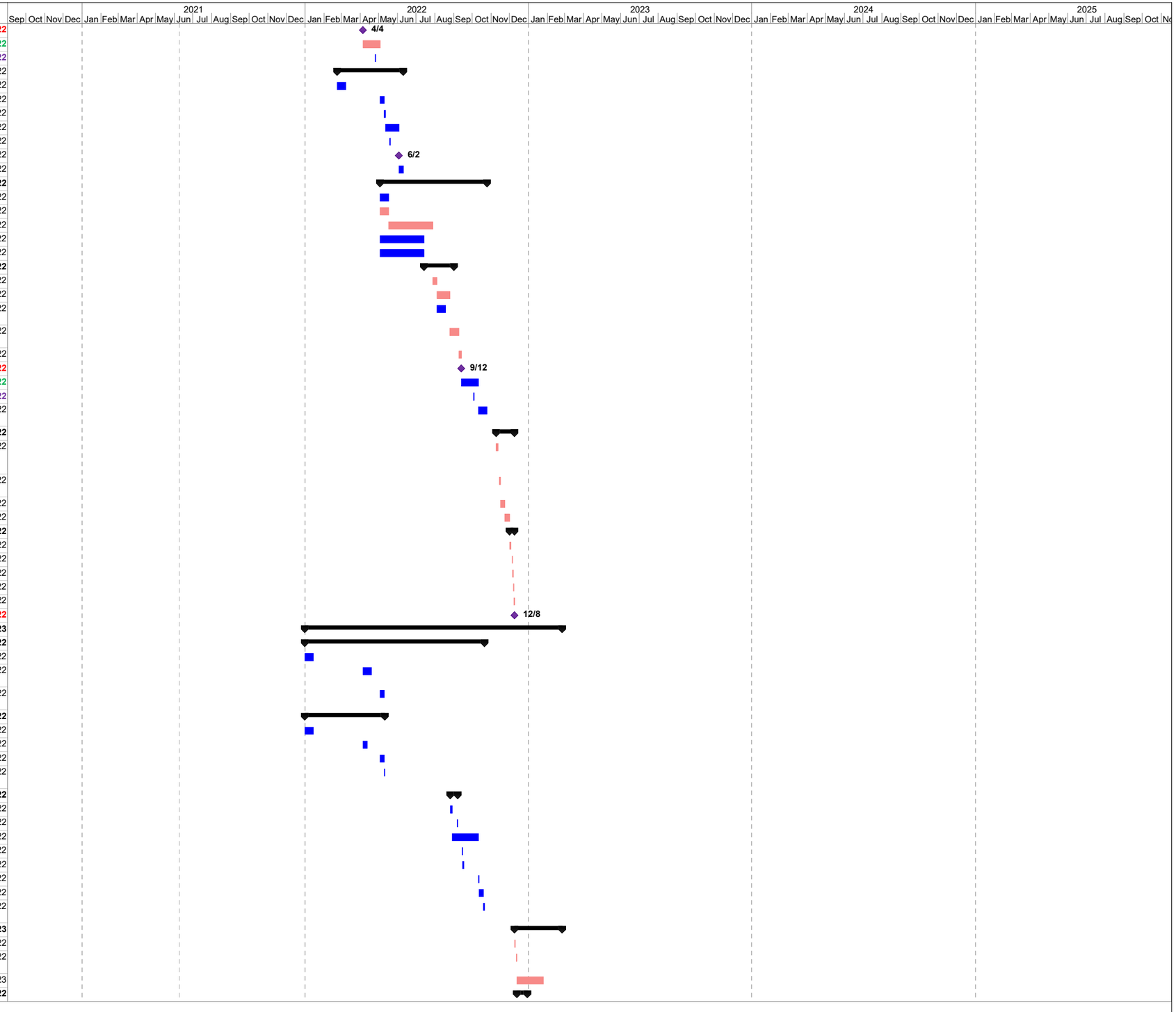
ID	Task Name	Duration	Start	Predecessors	Finish
280	City/OR review Elevations	5 days	Wed 8/25/21	279	Tue 8/31/21
281	Buildings Package DIMs Development	10 days	Wed 9/1/21	18,280	Wed 9/15/21
282	Buildings Package DIMs Internal QAQC + Revisions	5 days	Thu 9/16/21	281	Wed 9/22/21
283	Buildings Package DIMs to Client	0 days	Wed 9/22/21	282	Wed 9/22/21
284	**Buildings Package DIMs Client Review Period**	**10 days**	**Thu 9/23/21**	**283**	**Wed 10/6/21**
285	**Buildings Workshop**	**1 day**	**Thu 9/30/21**	**284SS+5 days**	**Thu 9/30/21**
286	**Electrical and SCADA DIMs and Workshop**	**70 days**	**Fri 6/25/21**		**Fri 10/1/21**
287	SCADA Network Diagram Development	5 days	Fri 6/25/21		Thu 7/1/21
288	City Electrical, SCADA, and IT Planning Discussions	5 days	Wed 7/14/21	219	Tue 7/20/21
289	P&IDs Development	45 days	Fri 7/2/21		Thu 9/2/21
290	Package A P&IDs & Control Descriptions	10 days	Fri 7/2/21	250SS	Thu 7/15/21
291	Package B P&IDs & Control Descriptions	10 days	Fri 7/23/21	256SS	Thu 8/5/21
292	Package C P&IDs & Control Descriptions	10 days	Fri 8/20/21	262SS	Thu 9/2/21
293	Package D P&IDs & Control Descriptions	10 days	Fri 8/20/21	268SS	Thu 9/2/21
294	Electrical Load List Development	40 days	Fri 7/2/21		Thu 8/26/21
295	Package A Electrical Load Updates	5 days	Fri 7/2/21	250SS	Thu 7/8/21
296	Package B Electrical Load Updates	5 days	Fri 7/23/21	256SS	Thu 7/29/21
297	Package C Electrical Load Updates	5 days	Fri 8/20/21	262SS	Thu 8/26/21
298	Package D Electrical Load Updates	5 days	Fri 8/20/21	268SS	Thu 8/26/21
299	Power Company Coordination	20 days	Wed 7/21/21	288	Tue 8/17/21
300	Electrical/SCADA DIM Development	5 days	Fri 9/3/21	289,294,299	Fri 9/10/21
301	Electrical/SCADA DIMs Internal QAQC + Revisions	5 days	Mon 9/13/21	300	Fri 9/17/21
302	Electrical/SCADA DIMs to Client	0 days	Fri 9/17/21	301	Fri 9/17/21
303	**Electrical/SCADA DIMs Client Review Period**	**10 days**	**Mon 9/20/21**	**302**	**Fri 10/1/21**
304	**Electrical/SCADA Workshop**	**1 day**	**Mon 9/27/21**	**303SS+5 days**	**Mon 9/27/21**
305	**Design Criteria and Process Control Workshop**	**50 days**	**Fri 8/20/21**		**Fri 10/29/21**
306	Respond to initial Client/OR DIM Comments	**45 days**	**Fri 8/20/21**		**Fri 10/22/21**
307	Package A DIMs	5 days	Fri 8/20/21	253	Thu 8/26/21
308	Package B DIMs	5 days	Mon 9/13/21	259	Fri 9/17/21
309	Package C DIMs	5 days	Mon 10/18/21	265	Fri 10/22/21
310	Package D DIMs	5 days	Mon 10/11/21	271	Fri 10/15/21
311	Building DIMs	5 days	Thu 10/7/21	284	Wed 10/13/21
312	Electrical/SCADA DIMs	5 days	Mon 10/4/21	303	Fri 10/8/21
313	Compile/Prepare for O&M Workshop Session	5 days	Mon 10/18/21	306FF	Fri 10/22/21
314	Pflugerville Staff Review of Design Criteria/Process Control Workshop	5 days	Mon 10/25/21	313	Fri 10/29/21
315	Task 2.3 Internal 30% Functionality/Operability Review	5 days	Mon 10/25/21	314SS	Fri 10/29/21
316	**Hold Design Criteria and Process Control Workshop (Tasks 2.4 and 2.5)**	**1 day**	**Thu 10/28/21**	**314SS+3 days**	**Thu 10/28/21**
317	Task 2.6 Front End Document Planning	27 days	Wed 7/14/21		Thu 8/19/21
321	Respond to DIM Comments in Preparation of 30% submittal	5 days	Mon 10/18/21	253,259,265,27	Fri 10/22/21
322	Prepare Exec. Summary, OPCC, and Maintenance Cost DIMs	15 days	Mon 10/4/21	321FF	Fri 10/22/21
323	Prepare Internal 30% Submittal	2 days	Mon 10/25/21	322	Tue 10/26/21
324	Internal QAQC and Revisions of 30% Submittal	15 days	Wed 10/27/21	323,316FF-5 days	Tue 11/16/21
325	**Task 2.7 30% Submittal to OR/City**	**0 days**	**Tue 11/16/21**	**324**	**Tue 11/16/21**
326	**OR/City Review of 30% Submittal**	**20 days**	**Wed 11/17/21**	**325**	**Wed 12/15/21**
327	**Task 2.10 30% Design Submittal Workshop**	**1 day**	**Wed 12/8/21**	**326FF-5 days**	**Wed 12/8/21**
328	Task 2.8 Respond to City/OR Comments on 30%	10 days	Thu 12/16/21	326	Thu 12/30/21
329	Revise 30% DIMs per Client Comments	10 days	Thu 12/16/21	326	Thu 12/30/21
330	Finalize and Sign 30% DIMs	2 days	Fri 12/31/21	329	Mon 1/3/22
331	**Final 30% DIMs to Client**	**0 days**	**Mon 1/3/22**	**330**	**Mon 1/3/22**
332	Task 2.9 Coordinate with TCEQ by Phone (Design Criteria)	1 day	Tue 1/4/22	331	Tue 1/4/22
333	**Task 3: 60% Design Development**	**124 days**	**Thu 12/16/21**		**Thu 6/9/22**
334	Incorporate City/OR comments on 30% drawings	10 days	Thu 12/16/21	326	Thu 12/30/21
335	Progress Drawings to 60% Design Level	50 days	Fri 12/31/21	334	Thu 3/10/22
336	Specification development	60 days	Thu 12/16/21		Thu 3/10/22
337	Technical Specification Development	60 days	Thu 12/16/21	334SS	Thu 3/10/22
338	Equipment Specification Development	25 days	Thu 12/16/21	334SS	Thu 1/20/22
339	Vendor review of draft equip. specifications	15 days	Fri 1/21/22	338	Thu 2/10/22
340	Incorporate vendor comments	10 days	Fri 2/11/22	339	Thu 2/24/22
341	Standard Detail Development	30 days	Fri 1/28/22	335FF	Thu 3/10/22
342	60% SCADA Controls Review	1 day	Thu 2/10/22	335FF-20 days	Thu 2/10/22
343	Identify and Incorporate up to 3 pre-selected equipment packages	20 days	Tue 1/4/22	330	Mon 1/31/22
344	Develop Front-End Documents	15 days	Tue 2/1/22	320,343	Mon 2/21/22
345	Internal QAQC and Revisions of 60% Deliverable	15 days	Fri 3/11/22	335,336,341,34	Thu 3/31/22
346	Print and prepare 60% design package	2 days	Fri 4/1/22	345	Mon 4/4/22



Project: Pflugerville Willbarger Crk RWWTF - Est Schedule
Design and Bid Phase Scope Development
June 9, 2021

Task	Summary	External Milestone	Manual Task	Manual Summary	External Tasks	Critical Split
Split	Project Summary	Inactive Milestone	Duration-only	Start-only	External Milestone	Progress
Milestone	External Tasks	Inactive Summary	Manual Summary Rollup	Finish-only	Critical	Deadline

ID	Task Name	Duration	Start	Predecessors	Finish
347	**Submit 60% Review Package**	**0 days**	**Mon 4/4/22**	**346**	**Mon 4/4/22**
348	**City/OR Review of 60% Design delieverable**	**20 days**	**Tue 4/5/22**	**347**	**Mon 5/2/22**
349	**Task 3.5 60% Design Workshop**	**1 day**	**Mon 4/25/22**	**348FF-5 days**	**Mon 4/25/22**
350	Task 3.4 Equipment Preselection Bid Process	77 days	Tue 2/22/22		Thu 6/9/22
351	Prepare draft procurement package documents	10 days	Tue 2/22/22	343,344	Mon 3/7/22
352	Incorporate comments from 60% submittal	5 days	Tue 5/3/22	348	Mon 5/9/22
353	Finalize package documents	2 days	Tue 5/10/22	352	Wed 5/11/22
354	Advertisement for packages	15 days	Thu 5/12/22	353	Thu 6/2/22
355	Presubmittal conference	1 day	Thu 5/19/22	354SS+5 days	Thu 5/19/22
356	Proposal Deadline	0 days	Thu 6/2/22	354	Thu 6/2/22
357	Evaluate proposals and recommend award	5 days	Fri 6/3/22	356,482	Thu 6/9/22
358	**Task 4: 90% Design Development**	**122 days**	**Tue 5/3/22**		**Mon 10/24/22**
359	Respond to City/OR 60% Design Comments	10 days	Tue 5/3/22	348	Mon 5/16/22
360	Incorporate 60% comments into design	10 days	Tue 5/3/22	348	Mon 5/16/22
361	Progress Drawings to 90% Design level	50 days	Tue 5/17/22	360	Wed 7/27/22
362	Progress Specifications to 90% Design level	50 days	Tue 5/3/22	348	Wed 7/13/22
363	Progress Front-End Documents to 90% Design Level	50 days	Tue 5/3/22	348	Wed 7/13/22
364	Prepare 90% OPCC	**35 days**	**Thu 7/14/22**	**363**	**Wed 8/31/22**
368	90% Internal QAQC Printing/compiling	5 days	Thu 7/28/22	361,362,363	Wed 8/3/22
369	Hold 90% Internal QAQC	15 days	Thu 8/4/22	368	Wed 8/24/22
370	Task 4.1 90% Operability/Functionality/SCADA Controls Review	10 days	Thu 8/4/22	368	Wed 8/17/22
371	Respond to and incorporate 90% Internal QAQC + Operability review comments	10 days	Thu 8/25/22	370,369	Thu 9/8/22
372	90% Client Submittal printing + compiling	2 days	Fri 9/9/22	371	Mon 9/12/22
373	**90% Client Submittal**	**0 days**	**Mon 9/12/22**	**372**	**Mon 9/12/22**
374	**90% City and OR Review Period**	**20 days**	**Tue 9/13/22**	**373**	**Mon 10/10/22**
375	**Task 4.2 and 4.4 Final Design Workshop**	**1 day**	**Mon 10/3/22**	**374FF-5 days**	**Mon 10/3/22**
376	Task 4.6 - Respond to City/OR Comments on 90% Submittal	10 days	Tue 10/11/22	374	Mon 10/24/22
377	**Task 5: Contract Documents (100%)**	**21 days**	**Wed 11/9/22**		**Thu 12/8/22**
378	Incorporate OR/City and TWDB Comments from 90% submittal into drawings, specifications, and front end documents	3 days	Wed 11/9/22	374,432	Fri 11/11/22
379	Progress drawings, specifications, and OPCC into Bid-Set documents	2 days	Mon 11/14/22	378	Tue 11/15/22
380	Internal QAQC of 100% Set drawings	5 days	Wed 11/16/22	379	Tue 11/22/22
381	Respond to Internal QAQC Comments on 100% Drawings	5 days	Wed 11/23/22	380	Wed 11/30/22
382	**Final Processing of Bid-Set Documents**	**6 days**	**Thu 12/1/22**		**Thu 12/8/22**
383	Compile Bid-set documents	2 days	Thu 12/1/22	381	Fri 12/2/22
384	Final City/OR Check of Bid-Set documents	1 day	Mon 12/5/22	383	Mon 12/5/22
385	Incorporate Final City/OR Comments	1 day	Tue 12/6/22	384	Tue 12/6/22
386	Engineering Signatures for Bid-Set documents	1 day	Wed 12/7/22	385	Wed 12/7/22
387	Print and ship Bid Set Documents	1 day	Thu 12/8/22	386	Thu 12/8/22
388	**Bid Documents Submittal**	**0 days**	**Thu 12/8/22**	**387**	**Thu 12/8/22**
389	**Task 6: Bidding Phase Services**	**296 days**	**Fri 12/31/21**		**Fri 2/24/23**
390	**Task 6.1: Contractor Pre-Qualification Assistance**	**207 days**	**Fri 12/31/21**		**Thu 10/20/22**
391	6.1.1 - Prepare draft prequalification package	10 days	Fri 12/31/21	334	Thu 1/13/22
392	6.1.1 - City/OR Review of draft prequalification package	10 days	Tue 4/5/22	348SS	Mon 4/18/22
393	6.1.2 - Revise pre-qualification package per City/OR Comments + 90% Design Progression	5 days	Tue 5/3/22	360SS	Mon 5/9/22
394	6.1.3 Advertisement for Pre-Qual of Contractors	**93 days**	**Fri 12/31/21**		**Tue 5/10/22**
395	Prepare draft advertisement	10 days	Fri 12/31/21	334	Thu 1/13/22
396	City/OR review and provide comments on ad	5 days	Tue 4/5/22	348SS	Mon 4/11/22
397	Revise advertisement per comments	5 days	Tue 5/3/22	360SS	Mon 5/9/22
398	Submit approved advertisement to owner for publishing	1 day	Tue 5/10/22	397	Tue 5/10/22
399	6.1.4 Advertisement for Pre-Qualification	**7 days**	**Fri 8/26/22**		**Tue 9/6/22**
400	First Advertisement	1 day	Fri 8/26/22	432SF-50 days	Mon 8/29/22
401	Second Advertisement	1 day	Tue 9/6/22	400FS+5 days	Tue 9/6/22
402	6.1.5 Pre-Qualification Support (Addenda, Questions)	30 days	Mon 8/29/22	400	Mon 10/10/22
403	6.1.6, 6.1.8 - Pre-Qualification Meeting and Site Tour	1 day	Wed 9/14/22	401FS+5 days	Wed 9/14/22
404	6.1.7 Prepare pre-qual meeting memorandum	2 days	Thu 9/15/22	403	Fri 9/16/22
405	6.1.9 Pre-Qualification of Submittals Opening	1 day	Tue 10/11/22	402	Tue 10/11/22
406	6.1.10 Review Submittals of interested contractors	5 days	Wed 10/12/22	405	Tue 10/18/22
407	6.1.11 Prepare prequalification notices to short-listed contractors	2 days	Wed 10/19/22	406	Thu 10/20/22
408	**Task 6.2: Bidding Assistance**	**55 days**	**Fri 12/9/22**		**Fri 2/24/23**
409	6.2.1 Prepare and Submit Advertisements to Owner	1 day	Fri 12/9/22	388	Fri 12/9/22
410	6.2.2 Advertisements, Construction Documents to Owner for posting to CivCast	1 day	Mon 12/12/22	407,409	Mon 12/12/22
411	6.2.3 Bid Period (Addenda, Questions, etc.)	30 days	Tue 12/13/22	410	Tue 1/24/23
412	6.2.4 Pre-Bid Meeting	**12 days**	**Tue 12/13/22**		**Thu 12/29/22**



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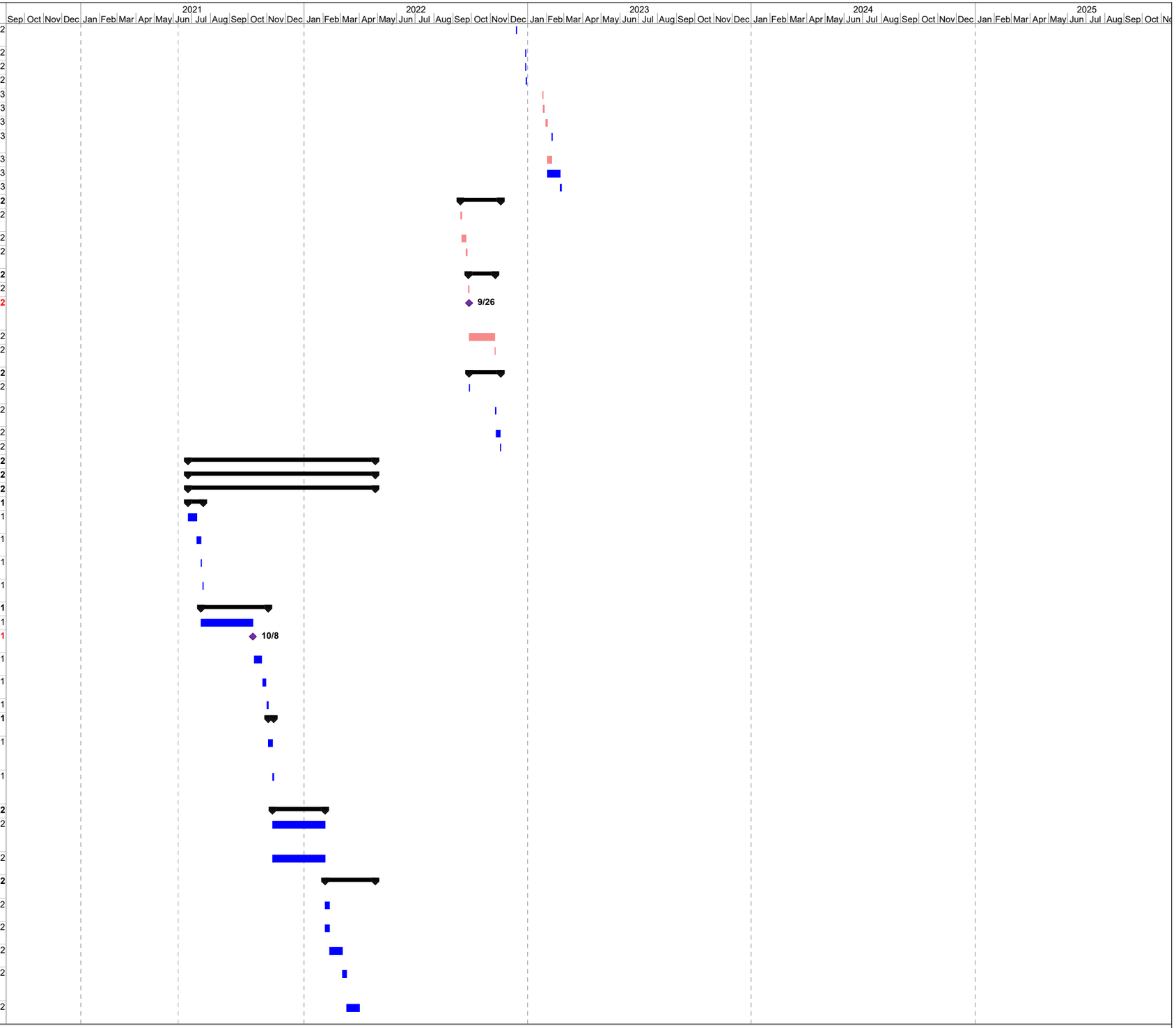
ID	Task Name	Duration	Start	Predecessors	Finish
413	Prepare Agenda, send to owner to post on CivCast (6.2.5)	1 day	Tue 12/13/22	411SS	Tue 12/13/22
414	Attend Pre-Bid Meeting (6.2.4)	1 day	Wed 12/28/22	411SS+10 days	Wed 12/28/22
415	Participate in Construction Site Tour (6.2.6)	1 day	Wed 12/28/22	414SS	Wed 12/28/22
416	Provide attendance record and memo (6.2.5)	1 day	Thu 12/29/22	414,415	Thu 12/29/22
417	6.2.7 Bid Opening	1 day	Wed 1/25/23	411	Wed 1/25/23
418	6.2.8 Prepare Bid Tab	2 days	Thu 1/26/23	417	Fri 1/27/23
419	6.2.9 Evaluate Bids and Recommend Award	3 days	Mon 1/30/23	418	Wed 2/1/23
420	6.2.10 Attand and Participate in reporting recommendation of award to Owner Council	1 day	Thu 2/9/23	421	Thu 2/9/23
421	6.2.11 Prepare Construction Contracts	5 days	Thu 2/2/23	419	Wed 2/8/23
422	6.2.12 Prepare Conformed Documents	15 days	Thu 2/2/23	419	Wed 2/22/23
423	6.2.13 Distribute Conformed Documents as required	2 days	Thu 2/23/23	422	Fri 2/24/23
424	**Task 7: Regulatory/Agency Review Set**	**48 days**	**Tue 9/13/22**		**Thu 11/17/22**
425	Compile 90% Drawings & Specifications for Regulatory Review	2 days	Tue 9/13/22	373	Wed 9/14/22
426	Internal QAQC of TWDB Submittal	5 days	Thu 9/15/22	425	Wed 9/21/22
427	Engineering Signatures for Regulatory Review Drawings and Specs	2 days	Thu 9/22/22	426	Fri 9/23/22
428	**Task 7.1 TWDB Submittal**	**32 days**	**Mon 9/26/22**	**427**	**Tue 11/8/22**
429	Prepare Cover Letter to TWDB	1 day	Mon 9/26/22		Mon 9/26/22
430	**Submit Final 30% DIM Report and 90% Regulatory Review Drawings/Specs to TWDB for Review**	**0 days**	**Mon 9/26/22**	**429**	**Mon 9/26/22**
431	TWDB Review of 30% DIM Report and Drawings	30 days	Tue 9/27/22	430	Mon 11/7/22
432	Receive comments and approval for construction from TWDB	1 day	Tue 11/8/22	431	Tue 11/8/22
433	**Task 7.2 TCEQ Notification**	**38 days**	**Tue 9/27/22**		**Thu 11/17/22**
434	Prepare letter to TCEQ notifying that drawings/specs have been sent to TWDB	1 day	Tue 9/27/22	430	Tue 9/27/22
435	Prepare letter to TCEQ notifying that TWDB has approved construction per 30 TAC 217.9	1 day	Wed 11/9/22	432	Wed 11/9/22
436	TCEQ Review of TWDB Notification	5 days	Thu 11/10/22	435	Wed 11/16/22
437	Receive TCEQ approval for construction	1 day	Thu 11/17/22	436	Thu 11/17/22
438	**Task 8: Permitting**	**215 days**	**Fri 6/25/21**		**Tue 4/26/22**
439	**Task 8.1: TCEQ TPDES Permitting**	**215 days**	**Fri 6/25/21**		**Tue 4/26/22**
440	Task 8.1.1 Minor Amendment Permit Application	**215 days**	**Fri 6/25/21**		**Tue 4/26/22**
441	8.1.1.1 Initiate Application Process	**17 days**	**Fri 6/25/21**		**Mon 7/19/21**
442	Review previous permit application	10 days	Fri 6/25/21	186	Thu 7/8/21
443	Prepare information request from owner	5 days	Fri 7/9/21	442	Thu 7/15/21
444	Prepare/participate in project meeting with Owner/OR	1 day	Fri 7/16/21	443	Fri 7/16/21
445	Prepare/participate in project meeting with Owner/OR	1 day	Mon 7/19/21	444	Mon 7/19/21
446	8.1.1.2 Prepare Permit Application Documents	**77 days**	**Fri 7/16/21**		**Tue 11/2/21**
447	Prepare permit application	60 days	Fri 7/16/21	443	Fri 10/8/21
448	**Submit Draft Permit Application to City / OR for Review**	**0 days**	**Fri 10/8/21**	**447**	**Fri 10/8/21**
449	City/OR review of draft permit application	10 days	Mon 10/11/21	448	Fri 10/22/21
450	Revise permit application per City/OR comments	5 days	Mon 10/25/21	449	Fri 10/29/21
451	Submit application to TCEQ	2 days	Mon 11/1/21	450	Tue 11/2/21
452	8.1.1.3 Respond to TCEQ During Administrative Review Process	**7 days**	**Wed 11/3/21**		**Thu 11/11/21**
453	Provide additional information until application is deemed adminstratively complete	5 days	Wed 11/3/21	451	Tue 11/9/21
454	Prepare notice of application; provide hard copy for public viewing	2 days	Wed 11/10/21	453	Thu 11/11/21
455	8.1.1.4 Assist with Responding to Comments	**60 days**	**Wed 11/10/21**		**Thu 2/3/22**
456	Provide technical responses, as needed during TCEQ review process	60 days	Wed 11/10/21	453	Thu 2/3/22
457	Track Application Status during technical review period	60 days	Wed 11/10/21	453	Thu 2/3/22
458	8.1.1.5 Review and Comment on TCEQ TPDES Draft Permit	**58 days**	**Fri 2/4/22**		**Tue 4/26/22**
459	Review initial draft permit (Version 1)	5 days	Fri 2/4/22	456,457	Thu 2/10/22
460	Prepare response-to-draft letter (Version 1)	5 days	Fri 2/4/22	459SS	Thu 2/10/22
461	TCEQ review of response-to-draft letter (Version 1)	15 days	Fri 2/11/22	460	Thu 3/3/22
462	Review draft permit (Version 2) and prepare response-to-draft letter (Version 2)	5 days	Fri 3/4/22	461	Thu 3/10/22
463	TCEQ review of response-to-draft letter (Version 2)	15 days	Fri 3/11/22	462	Thu 3/31/22



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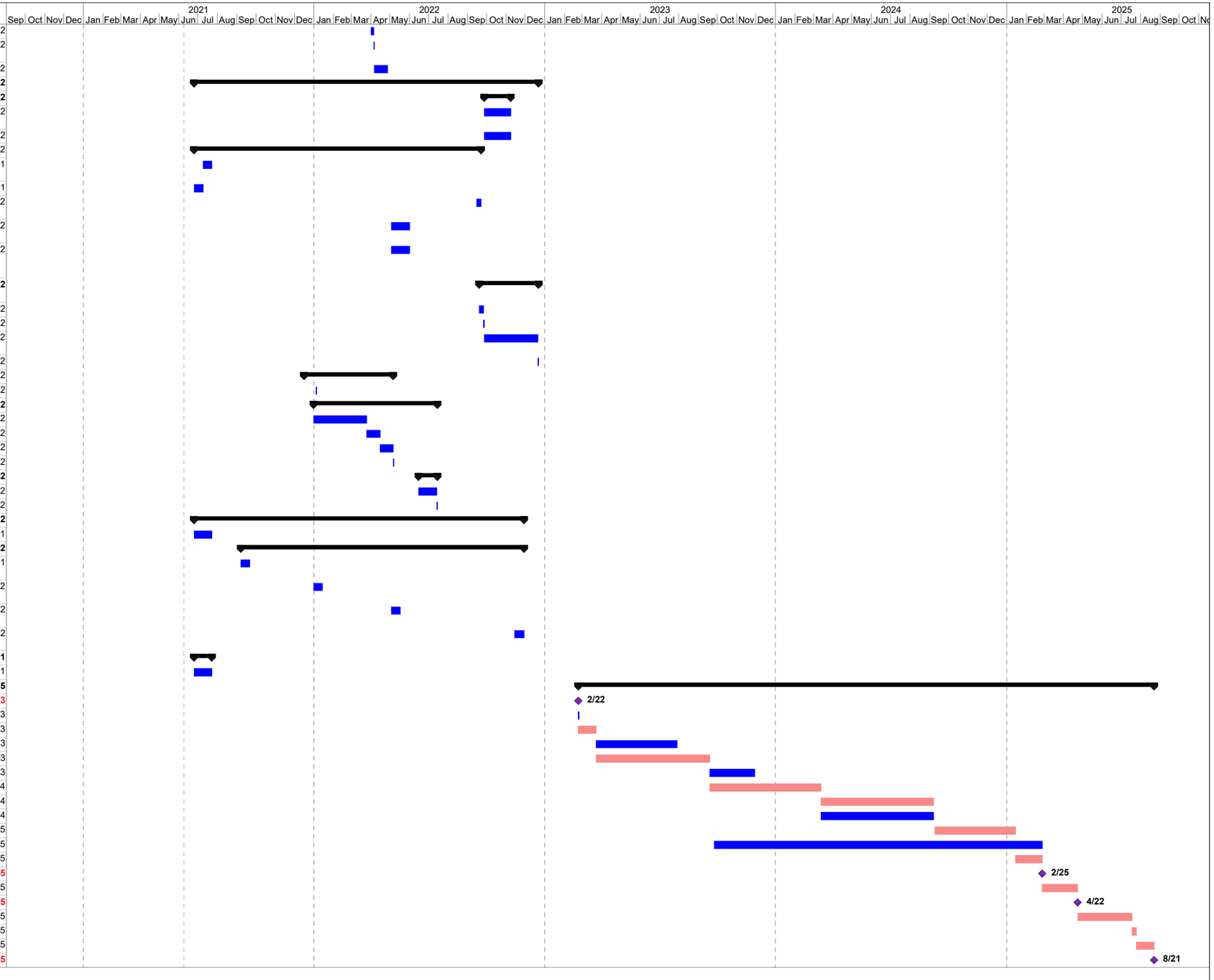
ID	Task Name	Duration	Start	Predecessors	Finish
464	Review Final Draft Permit	2 days	Fri 4/1/22	463	Mon 4/4/22
465	Publish 2nd Notices of Final Draft Permit	1 day	Tue 4/5/22	464	Tue 4/5/22
466	TCEQ finalizes permit	15 days	Wed 4/6/22	465	Tue 4/26/22
467	**Task 9: Regulatory/Agency Coordination**	**382 days**	**Fri 6/25/21**		**Wed 12/21/22**
468	**Task 9.1 Coordination for TWDB**	**30 days**	**Tue 9/27/22**		**Mon 11/7/22**
469	TWDB Comment coordination and submittal (as needed)	30 days	Tue 9/27/22	430	Mon 11/7/22
470	TWDB meetings and collaboration (as needed)	30 days	Tue 9/27/22	430	Mon 11/7/22
471	Task 9.2 Coordination for CWSRF	318 days	Fri 6/25/21		Wed 9/21/22
472	9.2.1 Contract language into specs for migratory bird and listed species	10 days	Fri 7/9/21	473	Thu 7/22/21
473	9.2.2 Conduct nest survey of migratory birds	10 days	Fri 6/25/21	186	Thu 7/8/21
474	9.2.3 Prepare environmental information for pre-bid meeting	5 days	Thu 9/15/22	403FF+5 days	Wed 9/21/22
475	9.2.4 Perform review of environmental documentation/design change	20 days	Tue 5/3/22	359SS	Tue 5/31/22
476	9.1.5 Develop plans and specifications for WWTF construction to address FAA compliance	20 days	Tue 5/3/22	359SS	Tue 5/31/22
477	**Task 9.3 City of Pflugerville Permitting/Building Code/Enforcement Permitting**	**67 days**	**Mon 9/19/22**		**Wed 12/21/22**
478	Prepare permit applications	5 days	Mon 9/19/22	479SF	Mon 9/26/22
479	Submit permit applications	1 day	Mon 9/26/22	427	Mon 9/26/22
480	Respond to permit application comments	60 days	Tue 9/27/22	479	Tue 12/20/22
481	Receive permits	1 day	Wed 12/21/22	480	Wed 12/21/22
482	Task 9.4 Plant Outfall Maintenance Easement	100 days	Thu 12/16/21		Thu 5/5/22
486	Task 9.5 Travis County Project Registration	1 day	Tue 1/4/22	330	Tue 1/4/22
487	**Task 10: Startup and Commissioning Planning**	**138 days**	**Fri 12/31/21**		**Thu 7/14/22**
488	Prepare draft commissioning plan	60 days	Fri 12/31/21	334	Thu 3/24/22
489	Internal QAQC of Commissioning Plan	15 days	Fri 3/25/22	488	Thu 4/14/22
490	City/OR Review of commissioning plan	15 days	Fri 4/15/22	489	Thu 5/5/22
491	Final draft of commissioning plan	1 day	Fri 5/6/22	490	Fri 5/6/22
492	Task 10.3: Wilbarger System Coordination	**21 days**	**Wed 6/15/22**		**Thu 7/14/22**
493	Miscellaneous Coordination (ongoing)	20 days	Wed 6/15/22	360FS+20 days	Wed 7/13/22
494	Participate in Wilbarger System Workshop	1 day	Thu 7/14/22	493	Thu 7/14/22
495	**Task 11: Public Outreach Plan**	**365 days**	**Fri 6/25/21**	**186**	**Mon 11/28/22**
496	As needed	20 days	Fri 6/25/21		Thu 7/22/21
497	**11.3 City Council Meetings**	**314 days**	**Tue 9/7/21**		**Mon 11/28/22**
498	City Council Update Meeting #1 (Preliminary Design 1)	10 days	Tue 9/7/21	260	Mon 9/20/21
499	City Council Update Meeting #2 (Preliminary Design 2)	10 days	Fri 12/31/21	328	Thu 1/13/22
500	City Council Update Meeting #3 (60% Design)	10 days	Tue 5/3/22	348	Mon 5/16/22
501	City Council Update Meeting #4 (Final Design/Start of Bidding)	10 days	Mon 11/14/22	378	Mon 11/28/22
502	**Task 12: Extra Work**	**20 days**	**Fri 6/25/21**	**186**	**Thu 7/22/21**
503	As needed	20 days	Fri 6/25/21		Thu 7/22/21
504	**Construction Phase**	**640 days**	**Wed 2/22/23**		**Thu 8/21/25**
505	**Contractor Notice to Proceed**	**0 days**	**Wed 2/22/23**	**421FS+10 days**	**Wed 2/22/23**
506	Pre-Construction Meeting	1 day	Thu 2/23/23	505	Thu 2/23/23
507	Mobilization	20 days	Thu 2/23/23	505	Wed 3/22/23
508	Submittals	90 days	Thu 3/23/23	507	Fri 7/28/23
509	Earthwork, Preliminary Grading	125 days	Thu 3/23/23	507	Mon 9/18/23
510	Buried Yard Piping and Site Electrical	50 days	Tue 9/19/23	509	Tue 11/28/23
511	Structural Foundations Construction	125 days	Tue 9/19/23	509	Tue 3/12/24
512	Major Concrete Basin Construction	125 days	Wed 3/13/24	511	Fri 9/6/24
513	Building Construction	125 days	Wed 3/13/24	511	Fri 9/6/24
514	Equipment Installation and Testing	90 days	Mon 9/9/24	508,511,512	Tue 1/14/25
515	Offsite Interceptor and Influent Lift Station	365 days	Tue 9/26/23	516FF,514FF	Tue 2/25/25
516	Pre-startup Punchlist	30 days	Wed 1/15/25	514	Tue 2/25/25
517	**Construction Completion (Plant) Milestone**	**0 days**	**Tue 2/25/25**	**516,515**	**Tue 2/25/25**
518	Startup and Plant Seeding	40 days	Wed 2/26/25	516	Tue 4/22/25
519	**Plant Official Startup/Operation**	**0 days**	**Tue 4/22/25**	**518**	**Tue 4/22/25**
520	Final site grading and finishing	60 days	Wed 4/23/25	519	Thu 7/17/25
521	Post-startup Punchlist	5 days	Fri 7/18/25	520	Thu 7/24/25
522	Complete Punchlist Items, Demobilize, and Commissioning	20 days	Fri 7/25/25	521	Thu 8/21/25
523	**Complete Construction**	**0 days**	**Thu 8/21/25**	**522**	**Thu 8/21/25**



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