Exhibit 1

CITY OF SAN MARCOS HIGHWAY 80 UTILITY PROJECT
SCOPE OF SERVICES - AMENDMENT NO. 1

PROJECT UNDERSTANDING

Freese and Nichols, Inc. (FNI) will provide engineering design, bid and construction phase services for the City of San Marcos (City) related to the HWY 80 Utility Project. This scope of work is based on the recommendations in the Preliminary Engineering Report Highway 80 Utility Project, March 2022, prepared by Freese and Nichols, Inc. (PER).

The Scope of Work pertains to the following facilities:

1. A new 6.0 million gallons per day (MGD) lift station with an initial firm pumping capacity of 4.0 MGD located along Highway 80 in east San Marcos (Highway 80 Lift Station CIP #555).
2. Approximately 15,500 linear feet of new 18-inch HDPE force main from the lift station to the existing City wastewater treatment facility (CIP #555 / WWMP#1).
3. Approximately 6,000 linear feet of new 12-inch water line extending from the existing 30-inch water line along Highway 80 to the Canyon Regional Water Authority (CRWA) Hays/Caldwell Water Treatment Plant on Old Martindale Road.
4. Funding for the construction of the project may be through the Texas Water Development Board (TWDB) Clean Water State Revolving Fund or the American Rescue Plan Act Economic Adjustment Assistance grant. Funds will only be used for construction and not for procurement of FNI's engineering services.

General Assumptions:

1. FNI will provide the scope of services for any geotechnical engineering and the City will procure a qualified firm to provide the geotechnical engineering services.
2. City will select an odor control system for FNI to design around and an evaluation of odor control systems will not be required. Construction of odor control system is not anticipated with this project.
3. The City will coordinate and provide property acquisition services.
4. Lift station will be designed around a maximum of four (4) pump manufacturers. Wet well may be a round or rectangular design as determined during design and approved by the City. Wet well must be exhausted per NFPA 820. Design will include hose bibb and eyewash at the wet well.
5. No landscaping will be required at the site other than any required vegetation establishment.
6. Electrical building will be constructed of CMU or precast concrete panels and be equipped with packaged rooftop A/C units with no special corrosion-resistance requirements.
7. Gravity sewer(s) will extend approximately 30-feet outside of the lift station fence and terminate at a manhole for future connection.
8. FNI will provide a traffic control plan (TCP) for the project. Any changes to the TCP required by the Contractor to facilitate their means and methods will be their responsibility.
9. Project will be designed, bid and constructed as a single bid package.

10. US Army Corps of Engineers (USACE) authorization for the project would be covered with Nationwide Permit (NWP 58) for Utility Line Activities for Water and Other Substances, and the project would not require a Pre-Construction Notification (PCN).
11. Crossing of the Blanco River would be executed with trenchless technologies and would avoid USACE permitting and potential impacts to protected aquatic species.

ARTICLE I

BASIC SERVICES: FNI shall render the following professional services in connection with the development of the Project:

1. PROJECT MANAGEMENT: FNI shall provide professional services in this phase as follows:
   A. Project Setup and Accounting: FNI will setup the project in FNI's accounting software and monitor it on a monthly basis.
   B. Prepare subconsultant agreements.
   C. Quality Assurance (QA)/Quality Control (QC): FNI will develop and implement a QA/QC plan for the project.
   D. Baseline Schedule – Engineer will provide a detailed schedule prepared in Microsoft Project™ 2016 or more recent version.
   E. Project Planning and Monitoring – An internal project execution plan, quality assurance plan, and field safety instructions will be prepared at the beginning of the project.
   F. Status Reporting/Invoicing – FNI will provide monthly status reports, summarizing current budget and schedule status, along with outstanding contracting issues, will be prepared. The status report will be attached to a monthly invoice and submitted to the City.
   G. Project Team Coordination – FNI will direct and coordinate FNI and Subconsultant staff for initiation of contracts, completion of required tasks, deliverables, scheduling, and QA/QC management.
   H. Meetings:
      1) Conduct Project Kickoff Meeting with City Staff and Internal Kickoff Meeting: Purpose of this meeting is to identify project team members, establish project communications protocols, confirm project goals and objectives, review scope, schedule and budget, and coordinate initial project tasks. FNI will prepare and distribute a kickoff meeting agenda prior to the meeting and prepare and distribute meeting minutes following meeting.
      2) Project Status Meeting: During the design of the project, team will meet monthly with the City via video conference. FNI will prepare the meeting agenda, and meeting minutes following the meetings. (maximum of 12 meetings)
      3) Public Meeting: FNI will support the City during two (2) public meetings. FNI will provide a PowerPoint presentation and up to two project posters mounted on gatorboard in support of the meetings. FNI is not responsible for coordinating the venue, refreshments, etc. for the public meetings.
      4) Site Visits: Up to one (1) visit for data collection and product coordination.

I. Deliverables:

1) Monthly 1-Page Reports

2) Project schedule

2. DESIGN PHASE: FNI shall provide professional services in this phase as follows:

A. Funding Support

FNI will make minor changes to the project PER as required to meet funding agency requirements, i.e. the TWDB requirements for an Engineering Feasibility Report (EFR) and provide coordination of project submittals to the funding agency throughout the design. Development of funding applications, exhibits, etc. have not been included within this scope.

B. Canyon Regional Water Authority

FNI will coordinate with CRWA throughout the design for the water line connection within their facility.

C. Lift Station Drainage Design

FNI will develop the drainage and Erosion and Sedimentation (E&S) control design for the lift station site and downstream infrastructure. FNI will perform a hydrologic impact analysis to verify that the increase in impervious cover associated with the lift station will not result in any adverse impacts downstream of the site. It is assumed that no detention will be required due to the location of the site within the watershed and given that the site is located within the floodplain. If required, developing flood mitigation needs will be an additional service. The drainage design will include the following:

1) Obtain available GIS data for use in the hydrologic analysis.

2) Utilize the most recent hydrologic and hydraulic models provided by the City for Bypass Creek, Blanco River, and San Marcos River.

3) Delineate pre-project and project conditions drainage basins intersecting the site.

4) Calculate the time of concentration for each basin.

5) Delineate the pre-project and project conditions impervious cover within each basin and calculate the runoff curve numbers for each basin.

6) Perform a hydrologic analysis using the SCS Curve Number methodology to calculate peak flow rates at the site.

7) Compare the pre-project conditions peak flow rates with the project conditions peak flow rates at each point discharging from the site as well as at the outfall into Bypass Creek to determine if any mitigation will be required.

8) Perform a hydraulic analysis to size the required drainage infrastructure downstream of the site to convey site flows to Bypass Creek (if needed). It is assumed that flow from the site will be conveyed to Bypass Creek via open channel.

D. Blanco River Force Main Crossing Scour Analysis

FNI will perform an erosion hazard zone analysis at the proposed force main crossing of the Blanco River to inform the required depth of the force main and horizontal extents of the

proposed bore and receiving pits. The erosion hazard zone development will include the following:

1) Obtain the most recent readily available LiDAR data and develop a contour map (two-foot contours) for measuring and mapping stream features. Assemble contour data and planimetric data into a base map.

2) Define the top of banks for the high bank and low bank on the base map at the location where the proposed pipeline crosses the stream and measure the width between the two banks. Identify and delineate the meander belt width using aerial photography.

3) Measure a cross section at the pipeline crossing using a total station. Endpoints will be approximately 20 feet landward of the top of bank. Combine the total station measured cross section with LiDAR data and extend the cross section a hundred feet in either direction. Obtain two additional cross sections, one upstream and one downstream of the utility crossing. During the field visit, map features (bedrock, anthropogenic features, dense clay, etc.) that would influence channel incision.

4) Delineate the Erosion Hazard Zone following the City of Austin (COA) Drainage Criteria Manual (DCM) methodology.

3. 30% DESIGN PHASE: FNI shall provide professional services in this phase as follows:

   A. Project phase will be in accordance with Attachment A – Engineering Scope of Services Checklist Plans. Project plans will be in accordance with Attachment B – Engineering/CIP Plan Review Checklist.

   B. Provide up to sixteen (16) aerial exhibits showing extents of the proposed easements to support easement acquisition.

   C. Meetings/Site Visits

      1) Project Kickoff Meeting with the City

      2) Project site visit for environmental permitting

      3) Project site visit for survey coordination, maximum of 2.

      4) Site visits for data collection and coordination, maximum of 2.

      5) Storm Water/Drainage Review Site Visit

      6) Miscellaneous stakeholder meetings with CRWA, TxDOT, etc.

      7) Attend 30% design review meeting with the City

   D. Deliverables

      1) Monthly Status Report in PDF

      2) Draft and Final Environmental Memorandum in PDF

      3) Submittal will be in accordance with Attachment A – Engineering Scope of Services Checklist, Attachment B – Engineering/CIP Plan Review Checklist and Attachment C – GIS Submittal Checklist.

4. 60% DESIGN PHASE: FNI shall provide professional services in this phase as follows:

   A. Hydraulic Impact Assessment

FNI will perform a hydraulic impact assessment to verify that the lift station design does not result in any adverse impacts upstream or downstream of the project area. The hydraulic analysis will utilize the effective hydraulic model obtained from the City. It is assumed that any floodplain impacts will be mitigated by excavating onsite to provide compensatory storage and therefore a CLOMR or LOMR will not be required. The hydraulic impact assessment will include the following:

1) Develop the pre-project conditions hydraulic model by revising the effective FEMA hydraulic model to reflect the survey data obtained for the project. It is assumed that the effective model hydrology will be updated with Atlas 14 flows (as developed in the HEC-HMS models provided by the City) for the purposes of this analysis.

2) Develop a project conditions hydraulic model by revising the pre-project conditions hydraulic model to reflect the proposed lift station improvements.

3) Compare the water surface elevations of the pre-project conditions model to those of the project conditions model for the 2-, 10-, 25-, and 100-year storm events to determine the extent of the floodplain impacts caused by the project and determine the amount of excavation required to mitigate any increases in water surface elevation.

4) Perform a floodway analysis to verify there are no changes to the regulatory floodway.

5) Summarize the results of the H&H analysis and no adverse impact verification in a technical memorandum and prepare the Floodplain Development Permit Application and Watershed Protection Plan Application.

B. Phase effort will be in accordance with Attachment A – Engineering Scope of Services Checklist Plans. Project plans will be in accordance with Attachment B – Engineering/CIP Plan Review Checklist.

C. Meetings/Site Visits

1) Attend 60% design review meeting with the City

2) Miscellaneous stakeholder meetings with CRWA, TxDOT, etc.

D. Deliverables

1) Monthly 1-Page Reports in PDF

2) H&H Impact Study Technical Memorandum

3) Floodplain Development Permit Application

4) Watershed Protection Plan Application

5) Parcel/easement documents, as required

6) Submittal will be in accordance with Attachment A – Engineering Scope of Services Checklist and Attachment B – Engineering/CIP Plan Review Checklist.

5. <u>90% DESIGN PHASE:</u> FNI shall provide professional services in this phase as follows:

A. Project plans for this phase shall be substantially completed drawings, all sheets: general site drawings, civil drawings, structural drawings with reinforcement details, mechanical and electrical drawings. Contract documents and project specifications will be provided during this phase.

B. After City review of 90% complete submittal, FNI will issue complete signed and sealed drawings, issued for bid and agency review. FNI will provide engineering reports, plans, and required documentation required for applicable agency review, including the TCEQ, TxDOT and other agencies.

C. Meetings/Site Visits

1) Attend 90% design review meeting with the City

2) Miscellaneous stakeholder meetings with CRWA, TxDOT, etc.

D. Deliverables

Deliverables will be in accordance with Attachment A – Engineering Scope of Services Checklist Plans. Project plans will be in accordance with Attachment B – Engineering/CIP Plan Review Checklist.

6. 100% DESIGN PHASE: FNI shall provide professional services in this phase as follows:

Project effort and deliverables will be in accordance with Attachment A – Engineering Scope of Services Checklist Plans. Project plans will be in accordance with Attachment B – Engineering/CIP Plan Review Checklist.

7. BID PHASE: Upon completion of the design services and approval of 100% drawings and specifications by City, FNI shall provide professional services in this phase as follows:

A. Assist City by responding to questions and interpreting bid documents. Prepare and issue addenda to the bid documents to plan holders if necessary.

B. At City request, FNI will assist City in opening, tabulating, and analyzing the bids received. Review the qualification information provided by the apparent low bidder to determine if, based on the information available, they appear to be qualified to construct the project. Recommend award of contracts or other actions as appropriate to be taken by City. Pre-qualification of all prospective bidders and issuing a list of eligible bidders prior to the bid opening is an additional service.

C. Assist the City in conducting a pre-bid conference for the construction projects and coordinate responses with City. Response to the pre-bid conference will be in the form of addenda issued after the conference. Attend the tour of the project site after the pre-bid conference.

D. Assist City in the preparation of Construction Contract Documents for construction contracts. Provide one (1) set of Construction Contract Documents to the City which include information from the apparent low bidders bid documents, legal documents, and addenda bound in the documents for execution by the City and construction contractor.

E. No hard copies of the plans and specifications will be provided to the contractor.

F. Deliverables

1) Addendum(s), as required.

2) Contractor reference verification documentation

3) Recommendation of Award Letter

4) Documentation in accordance with Attachment C – GIS Submittal Checklist

5) Conformed Construction Plans in accordance with Attachment A – Engineering Scope of Services Checklist.

8. CONSTRUCTION PHASE GENERAL REPRESENTATION: Upon completion of the bid or negotiation phase services, FNI will proceed with the performance of construction phase general representation services as described below.

   In performing these services, it is understood that FNI does not guarantee the Contractor's performance, nor is FNI responsible for the supervision of the Contractor's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, or any safety precautions and programs relating in any way to the condition of the premises, the work of the Contractor or any Subcontractor. FNI shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project.

   The City agrees to include provisions in the General Conditions that require Contractor to include FNI: (1) as an additional insured and in any waiver of subrogation rights with respect to such liability insurance purchased and maintained by Contractor for the Project (except workers' compensation and professional liability policies); and (2) as an indemnified party in the Contractor's indemnification provisions where the City is named as an indemnified party.

   A. Assist City in conducting preconstruction conference with the Contractor, review construction schedules prepared by the Contractor pursuant to the requirements of the construction contract and prepare a proposed estimate of monthly cash requirements of the Project from information provided by the Construction Contractor.

   B. Establish communication procedures with the City and contractor. Submit monthly reports of construction progress. Reports will describe construction progress in general terms and summarize project costs, construction schedule and pending and approved contract modifications.

   C. Establish and maintain a project documentation system consistent with the requirements of the construction contract documents. Monitor the processing of contractor's submittals and provide for filing and retrieval of project documentation. Produce monthly reports indicating the status of all submittals in the review process. Review contractor's submittals, including, requests for information, modification requests, shop drawings, schedules, and other submittals in accordance with the requirements of the construction contract documents for the projects. Monitor the progress of the contractor in sending and processing submittals to see that documentation is being processed in accordance with schedules.

   D. Based on FNI's observations as an experienced and qualified design professional and review of the Payment Requests and supporting documentation submitted by Contractor, determine the amount that FNI recommends Contractor be paid on monthly and final estimates, pursuant to the General Conditions of the Construction Contract.

   E. Construction Site Visits

      1) Attend up to thirty (30) biweekly construction progress meetings via Microsoft Teams.

      2) Attend up to fifteen (15) visits to the project site to coordinate with the Contractor and City as required to discuss challenges during construction.

      3) Attend up to ten (10) miscellaneous project review and coordination meetings.

4) Attend up to three (3) site visits to the project site prior to coating the wet well and provide coating quality assurance inspection of the wet well during construction.

5) Attend up to two (2) site visits to inspect project for substantial completion and prepare a list of deficiencies to be corrected by the contractor before accepting the project as substantially complete.

6) Conduct, in company with City's representative, a final review of the Project for conformance with the design concept of the Project and general compliance with the Construction Contract Documents. Prepare a list of deficiencies to be corrected by the contractor before recommendation of final payment. Assist the City in obtaining legal releases, permits, warranties, spare parts, and keys from the contractor. Review and comment on the certificate of completion and the recommendation for final payment to the Contractor(s). Visiting the site to review completed work in excess of two (2) trips are an Additional Service.

7) Attend up to two (2) site visits prior to the expiration of the project warranty period and prepare a list of deficiencies to be corrected by the contractor.

F. Notify the City of non-conforming work observed on site visits. Review quality related documents provided by the contractor such as test reports, equipment installation reports or other documentation required by the Construction contract documents.

G. Work with Contractor to coordinate the work of testing laboratories and inspection bureaus required for the testing or inspection of materials, witnessed tests, factory testing, etc. for quality control of the Project. The cost of such quality control shall be paid by City and is not included in the services to be performed by FNI.

H. Interpret the drawings and specifications for City and Contractor(s). Investigations, analyses, and studies requested by the Contractor(s) and approved by City, for substitutions of equipment and/or materials or deviations from the drawings and specifications is an additional service.

I. Establish procedures for administering constructive changes to the construction contracts. Process contract modifications and negotiate with the contractor on behalf of the City to determine the cost and time impacts of these changes. Prepare change order documentation for approved changes for execution by the City. Documentation of field orders, where cost to City is not impacted, will also be prepared. Investigations, analyses, studies, or design for substitutions of equipment or materials, corrections of defective or deficient work of the contractor or other deviations from the construction contract documents requested by the contractor and approved by the City are an additional service. Substitutions of materials or equipment or design modifications requested by the City are an additional service.

J. Prepare documentation for contract modifications required to implement modifications in the design of the project. Receive and evaluate notices of contractor claims and make recommendations to the City on the merit and value of the claim on the basis of information submitted by the contractor or available in project documentation. Endeavor to negotiate a settlement value with the Contractor on behalf of the City if appropriate. Providing these services to review or evaluate construction contractor(s) claim(s), supported by causes not within the control of FNI are an additional service.

9. <u>RECORD DRAWING PHASE:</u> Upon completion of the construction phase services, FNI will proceed with the performance of record phase services as described below:

A. Record drawing survey will be performed in accordance with Special Services Item No. 2.

B. Project plans will be updated with survey data from post-construction survey and as-built drawings provided by the Contractor documenting changes during construction.

C. Deliverables

Deliverables for this phase will be in accordance with Attachment A – Engineering Scope of Services Checklist and Attachment C – GIS Submittal Checklist.

ARTICLE II

SPECIAL SERVICES: FNI shall render the following professional services, which are not included in the Basic Services described above, in connection with the development of the Project:

1. GEOTECHNICAL ENGINEERING

FNI will prepare a scope of work and provide an exhibit indicating the proposed geotechnical bores required for the design of the project. The City will contract with a qualified geotechnical engineer to perform the bores, testing and recommendations for construction of the project. FNI will review the geotechnical engineer's work and identify if any additional documentation is required to complete the project.

2. SURVEY AND EASEMENT PREPARATION

The proposed survey scope of work will consist of topographical survey. This work will be performed by a subconsultant under the direction of FNI.

A. Provide topographical survey and survey of existing features and structures within the project limits as indicated in the PER.

B. Provide survey of geotechnical borings locations.

C. Research utilities and easements within the project boundaries. Obtain drawings of existing agency and municipal owned utilities and include locations of these utilities in the survey.

D. Coordinate utility marking with Dig Tess (level B), conduct survey and locate utilities within the project boundary. Obtain the services of a utility locator service (such as DIGTESS) and coordinate flagging of existing franchise utilities. Tie in the locations of the existing utilities on the survey.

E. Subsurface utility exploration (SUE) may be provided by the City as directed by the Engineer. Surveyor shall coordinate and survey uncovered utilities.

F. Provide control staking for the project. Construction staking shall be provided by the Contractor.

G. Parcels and Field Notes:

1) Perform deed, plat and courthouse record research and prepare metes and bounds descriptions, survey parcels and field notes for up to 16 possible impacted parcels of land for permanent and temporary easement acquisition. The descriptions shall each contain drawing Attachment A and verbal description Attachment B, in accordance with State surveying standards.

2) Obtain copies of deeds and easement documents.

3) Survey existing property corners, fences and appurtenant property evidence along the alignment route.

4) Stake Final easement corridor from alignment data.

5) Show ownership and adjoiner ownership data for properties along the route.

6) Revise parcel descriptions and field notes per comments and final title report.

7) Stake all parcels.

H. Perform record drawing survey after construction is complete in accordance with the City's GIS submittal checklist.

3. TRANSIENT ANALYSIS

A transient model and analysis will be conducted for steady state conditions and for a pump failure at the lift station to locate and size air release and vacuum valves for surge mitigation and for providing proper hydraulics for flow. A brief technical memorandum will be provided documenting the model and recommendations.

4. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A Texas Pollutant Discharge Elimination System (TPDES) General Permit for Construction Activity (Permit No. TXR150000) is required for projects or activities that disturb equal to or greater than one acre. FNI shall prepare a SWP3 that describes BMPs that will be used to minimize the discharge of pollutants in stormwater from construction activity and non-stormwater discharges. The SWP3 will also identify any potential sources of pollution to surface waters in the state from stormwater discharges associated with construction activities and construction support activities. Where potential sources of these pollutants are present at a construction site, the SWP3 must also include a description of the management practices that will be used to prevent these pollutants from entering into surface water in the state or WOTUS.

5. ENVIRONMENTAL DOCUMENTATION AND SUPPORT FOR GRANT APPLICATION OR FUNDING

FNI understands that City of San Marcos will apply for grant funding from either the Economic Development Administration (EDA) or the Texas Water Development Board (TWDB). For either funding source, environmental documentation will be required. Specifically, this scope of services addresses the effort required to produce and submit an EDA Environmental Narrative or TWDB Environmental Information Document. Each document has some similar components as they are both intended to address National Environmental Policy Act (NEPA) compliance of the project to release funds. To prepare either document, FNI proposes to perform the following tasks where applicable:

A. Gather and Review Existing Information – For the EDA Environmental Narrative or TWDB EID, FNI will assemble and review data such as aerial photographs, USGS topographic maps, National Wetlands Inventory (NWI) maps, the USGS National Hydrography Dataset (NHD), preliminary engineering reports, and soils data within the area of the proposed project.

B. Conduct Site Visit – For the EDA Environmental Narrative or TWDB EID, FNI will conduct one site visit to make observations within the proposed project area to document existing environmental conditions and assess potential project impacts for EID preparation purposes.

C. Cultural Resource Desktop Review and Texas Historical Commission (THC) Coordination – For the EDA Environmental Narrative or TWDB EID, desktop file review and submission of a

coordination letter to THC to determine if no survey is necessary or if further investigation would be needed.

D. Tribal Consultations – For the EDA Environmental Narrative, FNI would submit tribal coordination letter to interested tribes for the area to obtain their feedback within 30 days.

E. Phase I Environmental Site Assessment (ESA) – For the EDA Environmental Narrative or TWDB EID, FNI will prepare a Phase I ESA based on standards published by the Environmental Protection Agency All Appropriate Inquiries (AAI) Final Rule and ASTM International (ASTM) under Standard Guideline E1527-21, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." The Phase I ESA will include a Historical Land Use Review, Regulatory Agency Records Review, and Site Reconnaissance Visit. The report will contain a narrative of our findings, recommendations for additional environmental investigations, as needed, and copies of all data obtained relevant to each subject property. FNI shall incorporate a summary of the Phase I ESA into the final EID.

F. Agency Coordination – For the TWDB EID, FNI shall submit coordination/notification letters to appropriate agencies, as required, potentially including U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Texas Commission on Environmental Quality, Texas Parks and Wildlife Department, Bureau of Land Management, Bureau of Reclamation, local managers of the Federal Flood Insurance Program, the local council of government, and other regional agencies or local governments that may have jurisdiction. Comments received from the agencies shall be incorporated into the final EID. If necessary, FNI shall work with the City of San Marcos to prepare and submit written responses to address state and/or federal resource agency comments. We assume that this project shall be non-controversial and that agency comments shall be minimal. If an unusual level of agency comments may cause FNI's budget to be exceeded, FNI will notify the City of San Marcos for written authorization before proceeding.

G. Preparation of Draft and Final EID or Preparation of the EDA Environmental Narrative – FNI shall prepare a draft EID following appropriate TWDB guidelines (form TWDB-0801), or would prepare an EDA Environmental Narrative based on the June 2021 Environmental Narrative Template and Application Certification Clause. The draft EID or Environmental Narrative shall be submitted to the City of San Marcos for review and comment. For the EID, the draft will be made available for public review prior to the TWDB required public meeting. After the public meeting and agency coordination, the EID shall be finalized by incorporating required changes or comments received into the final document. The Final EID shall be submitted to the TWDB for approval.

H. Public Meeting – For the EID, FNI shall assist City of San Marcos with holding one (1) Public Meeting, held at a physical location determined by City of San Marcos, by preparing a public notice for City of San Marcos to submit to local newspaper(s), participating in the public meeting, and summarizing the results of the meeting into the EID. The City of San Marcos shall be responsible for having the public notice published and all costs associated with the publication and for providing verbatim transcript services, if required.

I. Public Notice – For an EDA Environmental Narrative, FNI shall assist City of San Marcos with developing a public notice to demonstrate that City of San Marcos has considered the public's interest and concern early in the process. This task would include preparation of a public notice to be published in the local newspaper by the City of San Marcos or their grant administrator. The public notice would describe the proposed project, potential impacts, intent to apply for funding from EDA, and solicit public comment.

ARTICLE III

SUPPLEMENTAL SERVICES: Supplemental services are any services performed by FNI that are not included in basic services, but may be completed upon written authorization from the City, and described as follows:

1. Create Two Bid Packages - Upon written direction by the City, FNI will provide two separate bid packages including the following work:

   A. Bid Package No. 1 - Water Line and Force Main – Approximately 6,000 LF of water line from CRWA plant to Old Bastrop Road, including parallel force main along that alignment.

   B. Bid Package No. 2 - Lift Station and Force Main – Lift station and appurtenant work, and force main from the corner of SH-100 and Old Bastrop Road to the City's wastewater treatment plant.

   Supplemental services include effort to create two separate plan sets and contract documents and provide Bid Package No. 1 bid, construction and record drawing phase services. Bid and construction phase services for Bid Package No. 2 are included in Basic Services.

ARTICLE IV

ADDITIONAL SERVICES: Any services performed by FNI that are not included in the Basic Services or Special Services described above are Additional Services. Additional Services to be performed by FNI, if authorized by City, are described as follows:

1. Scope of services is based on the recommended lift station site, and force main and water line alignments as indicated in the Preliminary Engineering Report indicated herein. Any modifications to the site location and/or utility alignments may result in additional services as determined by FNI.
2. Geotechnical Engineering and Subsurface Utility Engineering (SUE).
3. Evaluation of different types of odor control systems, operating costs, etc.
4. An analysis for a portable generator or analysis of different options to provide back-up power for the site (diesel vs. natural gas, or permanent vs portable generator).
5. Radio path study or analysis of different communication options (ex: radio vs fiber optic cable).
6. Procurement by other means such as Competitive Sealed Proposal or CMAR.
7. Preparation of construction traffic control plan(s).
8. Furnishing full time on-site construction Resident Representation services.
9. Submitting and coordinating project through City's development review process.
10. Furnishing Special Inspections required under chapter 17 of the International Building Code. These Special Inspections are often continuous, requiring an inspector dedicated to inspection of the individual work item, and they are in additional to General Representation and Resident Representation services noted elsewhere in the contract.
11. Investigations involving consideration of operation, maintenance and overhead expenses, and the preparation of rate schedules, earnings and expense statements, feasibility studies, appraisals, evaluations, assessment schedules, and material audits or inventories required for certification of force account construction performed by the City.
12. Providing shop, mill, field or laboratory inspection of materials and equipment.

13. Preparing Operation and Maintenance Manuals or conducting operator training.
14. Preparing data and reports for assistance to the City in preparation for hearings before regulatory agencies, courts, arbitration panels or any mediator, giving testimony, personally or by deposition, and preparations therefore before any regulatory agency, court, arbitration panel or mediator.
15. Assisting City in official claims or disputes with Contractor(s).
16. Performing investigations, studies and analyses of substitutions of equipment and/or materials or deviations from the plans and specifications.
17. Assisting City in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this proposal. Such services, if any, shall be furnished by FNI on a fee basis negotiated by the respective parties outside of and in addition to this proposal.
18. Construction Staking.
19. Environmental and Archeological
    A. Preparation of a Pre-Construction Notification or Individual Section 404 permit application for submittal to the USACE;
    B. Preparation of a Jurisdictional Determination (JD) Evaluation Report;
    C. Presence/absence surveys or a Biological Assessment (BA) for federally listed threatened/endangered species;
    D. Applications for State or Federal permits or easements;
    E. Phase II Environmental Site Assessment;
    F. Cultural Resource field surveys or monitoring, as requested by Texas Historical Commission;
    G. Texas Parks and Wildlife Department (TPWD) Aquatic Resource Recovery Plan;
    H. Identification of tree species and/or preparation of a tree mitigation plan required due to tree ordinance compliance;
    I. SWP3 monitoring and inspections;
    J. Other environmental services not specifically defined in this scope of services.
20. It is assumed that no detention will be required due to the location of the site within the watershed and given that the site is located within the floodplain. If required, developing flood mitigation needs will be an additional service.

City of San Marcos

Engineering Scope of Services Checklist

Project: # Highway 80 Utility Project - Amendment No. 1

Subcontractors to the Engineer:
1) Urban Civil
2) Grubb Engineering, Inc.

Scope	Add'l Services	NIC	I. General
			A. Federal Funding? If yes, add additional task to meet federal funding requirements.
x			1) Task I: Environmental Services for Federal Grant and TWDB SRF Loan
x			2) Task II: General services during design, bid and construction phases to support TWDB SRF Loan requirements, i.e. Engineering Feasibility Report, AIS requirements, bidding and advertising requirements, etc.
		x	3) Task III:
			B. Data Collection/Review
x			1) Review Reports/Studies/Drawings
x			2) Site Visit(s)
x			3) Staff Meeting(s)
			C. Survey - **See General Requirements in the GIS Checklist for Survey Requirements**
x			1) Acquire Temporary Right of Entry –How Many? (16) Typically handled in-house
x			2) Establish Project Control ~ set 3 monuments minimum (typically every project)
x			3) ROW Survey ~ How detailed the ROW research needs to be? {Specify One}
		x	a) Route Survey per TSPS Manual of Practice Requirements for Category 2 – Route Survey ~ typically used for most project
x			b) Boundary Survey ~ typically for full depth reconstruction with drainage. Signed and sealed boundary survey shall be submitted per TSPS Manual of Practice Requirements for Category 1A – Land Title Survey Boundary survey will be provided in areas where easements are required.
x			4) Existing Conditions Survey~ Survey all utilities & surface features within the project limits. Elevations for all inverts and top of lids. Width of Survey of ROW and Proposed Easements Varies.
x			5) Topographic Survey {Specify One}
		x	a) Use COSM Lidar + Limited Topo Survey
x			b) Full topographic survey with enough detail to prepare 1' contours
x			6) Tree Survey - Specify which level of details is needed. Project limits exhibit agreed on in advance. {Specify One}
x			a) All trees 9" and above should be surveyed and tagged ~ Typical Option
		x	b) All trees & shrubs should be tagged within project limits ~ Rarely used
	x		c) Condition Assessment by Consultants/City Arborist after trees are tagged and surveyed by surveyor. Occurs after 6.a. and tree mitigation table and after 60% submittal. May be added by CIS if needed. It is our understanding that tree mitigation will not be required since we are outside of the City limits. A tree mitigation plan has been indicated as an additional service.
			D. Field Investigations
	x		1) Subsurface Utility Locate – **How Many? (TBD)** SUE will be provided through City IDIQ contract and recommended by Engineer and approved by City.
	x		2) Geotechnical **How Many? (TBD)** Engineer will provide scope for geotechnical work, and City will procure services of geotechnical engineer through IDIQ contract.
x			3) Geological Assessment - Typically Recharge Zone Only Geological/geomorphology assessments have been included at river crossing.
			E. Determine Easement/Land Acquisition Requirements
x			1) Prepare Aerial Exhibits showing Temporary Workspace Limits as well as proposed easement/ROW takings – 16 easements aerial exhibits have been included in the scope.
x			2) Field Notes – 16 easements have been included in the scope.
		x	3) Appraisal ~ Typically completed with on-calls
		x	4) Title Work ~ Typically completed with on-calls
		x	5) Negotiations of Easements ~ Typically completed in-house

Scope	Add'l Services	NIC	II. Preliminary Phase (PER)
			A. Meetings
		x	1) Project Meetings ~ Enter Weekly, Monthly, or Specify: Assume 4?
		x	2) Public Meeting(s)
		x	3) Prepare Exhibits For Public Meetings
		x	4) Utility Coordination Meeting(s) ~ Enter Weekly, Monthly, or Specify:_____
			B. Pipelines – Wastewater (gravity main)
		x	1) Determine Alignment(s)– How Many? (2 for CIP 568)
		x	2) Preliminary Hydraulics/Modeling ~ Typically not required; refer to Master Plans
		x	3) **Other(CIP #575 & 564 Tasks)**
			C. Pipelines – Wastewater (force main)
		x	1) Determine Alignment(s)– How Many? (3)
		x	2) Preliminary Hydraulics/Modeling ~ Typically not required; refer to Master Plans
		x	3) **Other(_____)**
			D. Pipelines – Water
		x	1) Determine Alignment(s)– How Many? (3)
		x	2) Preliminary Hydraulics/Modeling ~ Typically not required; refer to Master Plans
		x	3) **Other(_____)**
			E. Plants/Facilities
		x	1) Develop Design Parameters

		x	2) **Other(Lift Station Design Manual)**
			F. Streets
		x	1) Traffic Counts
		x	2) Cross-Section Alternatives
		x	3) Complete Street Assessment
		x	4) Traffic Signals
		x	5) Sidewalks
		x	6) **Other(_____)**
			G. San Marcos Electric (SMEU)
		x	1) Underground Conduit
		x	2) Photometric for Street Lighting (check with SMEU, they have in-house as well)
		x	3) If effected by project, coordination required
			H. Drainage
		x	1) Watershed Analysis
		x	2) Determine Alignments
		x	3) Preliminary Hydraulics/Modeling
		x	4) LID/Water Quality
		x	5) **Other(_____)**
			I. Project Sustainability
		x	1) Alternative Methods For Construction- Alternatives City should consider to improve the project, include associated tradeoffs
		x	2) Alternative Green Solutions
		x	3) Review Engineering Sustainability Checklist
			J. Texas Historic Commission
x			1) Letter Only to THC - typically projects that occurs within limits of an existing road
x			2) Archeological - Desktop Review and short report to THC (Typically undisturbed areas)
		x	3) Archeological - Full Review with Shovel Test and detailed report to THC
			K. Determine Project Permitting/Design Requirements
		X	Review Project to determine if any additional permits are needed (Typical Permits listed below)
			1) TxDOT ROW 2) County ROW 3) Floodplain Zone 4) TCEQ a. Edwards Contributing b. Recharge Zone c. WPAP d. SCS 5) TPWD - Parks 6) UPRR - Railroad 7) FAA Jurisdiction 8) Army Corps 9) US Fish and Wildlife 10) **Other(_____)**
			L. Utility Coordination
		x	1) Review Project to determine which utilities are within the project limits
x			2) Identify Utility Conflicts - Prepare an overall exhibit and utility conflict matrix
		x	3) Coordinate with Utility Companies to resolve conflicts ~ Typically handled by City Staff
			811 Pedernales Electric Bluebonnet Electric Century Link CenterPoint Gas Enterprise Gas American Tower LCRA Maxwell Time Warner Zayo AT&T Grande Texas State University Crystal Clear GBRA
			M. Cost Estimate
		x	1) Develop Construction Cost Estimates
			N. Deliverables
		x	1) Monthly Status Report (PDF)
		x	2) Preliminary Engineering Report Draft (1 PDF)
		x	3) Preliminary Engineering Report Final (1 PDF, 1 DWG)
		x	4) GIS Submittal Checklist & Additional Required Submittals.
		x	5) Plan Sheets - Specify Size
		x	a) Roll Plot - size & scale as determined by Consultant
		x	b) 11" x 17" after PER is approved of final scope
			6) Notes:_____ _____ _____

Scope	Add'l Services	NIC	III. Design Phase (30/60/90/100%) ~ See Engineering/CIP Plan Review Checklist For Additional Details
			A. Meetings
x			1) Project Meetings
x			**Enter Weekly, Monthly, or Specify:** 12
x			2) Public Meeting(s) Maximum of Two
x			3) Prepare Exhibits For Public Meetings Maximum of Two
x			4) Utility Coordination Meeting(s)
			B. Design Sheet Categories
x			1) Cover Page
x			2) Index
x			3) General Notes
x			4) Quantity Table – By Sheet (Required by 90% submittal)
x			5) Project Layout & Survey
x			6) Typical Sections
x			7) Tree Mitigation - Table Of All Trees & Plan of Replacement Trees. If number of trees are small, show on Erosion Control Sheets
x			8) Erosion Control - {Specify}
x			a. SWPPP - TXDOT Template (Required on all projects)
x			b. EPIC - TXDOT Template (Required on all projects)
x			c. Permanent & Temporary - combined as one plan set
		x	d. Permanent & Temporary - prepared as 2 separate plan sets
x			9) Sequence of Construction/Phase (can be combined with Traffic Control Narrative if needed)
x			10) Traffic Control Plan {Specify One}
x			a. Minimum Requirements - simple write up and standard details
		x	b. Detailed Phasing - Typical Section & Plan Sheet for every phase
		x	11) Removal
		x	12) Roadway - Plan & Profile
		x	13) Grading Plan For Intersections - show limits of accessible path
		x	14) Driveways {Specify One}
		x	a. Plan & Profile for Each Driveway
		x	b. Driveway Table
x			15) Drainage - **For Lift Station Site Only**
x			a. Hydrologic Calculations
x			b. Drainage Area Map
		x	c. Detention Basin, if Required
		x	d. Plan and Profile
		x	e. Laterals Profiles
		x	f. Water Quality
		x	16) Structural
		x	17) Retaining Walls {Specify One}
		x	a. Plan only - Typically 24" and smaller
		x	b. Plan & Profile - Typically 24" and larger
x			18) Water Line {Specify One}
		x	a. Plan only - Typically 8" Utility Project Only
x			b. Plan & Profile - Required for 12" and Larger. May want it for Full Depth Reconstruction or Drainage Projects
x			19) Wastewater Plan & Profile
x			20) Force Main Plan & Profile
		x	21) Reclaimed Water {Specify One}
		x	a. Plan only - Typically 8" Utility Project Only
x			b. Plan & Profile - Required for 12" and Larger. May want it for Full Depth Reconstruction or Drainage Projects
x			22) Lift Station
x			a. Site Plan
x			b. Mechanical Plan
x			c. Structural Plan
x			e. Electrical Plan
x			f. Control Panel Schematic Diagram
x			g. RTU Schematic Diagram
		x	23) Electrical – Underground {Specify One}
x			a. Plan only
		x	b. Plan & Profile
x			24) Electrical – Lighting
		x	25) Traffic Signals
		x	a. Existing Layout
		x	b. Temporary Signal Design
		x	c. Proposed Signal Design
		x	d. Phasing & Timing Plan
		x	e. Signal Wiring
		x	f. Elevations
		x	g. Quantities & Notes
		x	26) Signing & Pavement Markings
		x	27) Utility Layout – (Color Coded)

		x	28) Landscaping
		x	29) Irrigation
		x	30) Cross-Sections (Every 50')
			C. Permits
		x	1) TDLR Review
x			2) COSM Floodplain Permit
x			3) TXDOT Permit ~ Typically submitted by COSM Staff
x			4) Hays County Permit
		x	5) Others:
		x	6) Others:
			D. Utility Coordination
		x	1) Update Utility Conflicts - Prepare an overall exhibit and utility conflict matrix
		x	2) Coordinate with Utility Companies to resolve conflicts ~ Typically handled by City Staff
			E. Deliverables – (Must follow COSM CADD standards)
x			1) Monthly Status Report
x			2) 30% Submittal (1 PDF, DWG) (1"=40'H & 1"=10'V) a. Plan Set i. Plan Sheets (see items under III. b. Design Phase) i. Submittals **may be delayed as indicated** on the Engineering/CIP Plan Review Checklist b. Opinion of Probable Construction Cost c. Construction Schedule - Duration by Tasks e. GIS Submittal Checklist f. Engineering/CIP Plan Review Checklist
x			3) 60% Submittal (1 PDF) (1"=40'H & 1"=10'V) a. Plan Set i. Plan Sheets (see items under III. b. Design Phase) ii. Submittals **may be delayed as indicated** on the Engineering/CIP Plan Review Checklist iii. Profile of all utilities specified except Water & Force Main iv. List of Standard Details – COSM and COA v. List of Standard Specifications – COSM Div 1 and CO vi. Project Specific/Special Details b. Opinion of Probable Construction Cost c. Construction Schedule - Duration by Tasks e. Response Comments to 30% Design f. Engineering/CIP Plan Review Checklist
x			4) 90% Submittal (1 PDF) a. Plan Set i. Plan Sheets (Include items from 60% submittal) ii. Quantities – Broken down by page iii. Profile of All Utilities Specified Above iv. Project Specific/Special Details b. Opinion of Probable Construction Cost c. Construction Schedule d. Specifications - Submitted as a single PDF i. Index of Specs ii. Modifications to Austin Specs iii. COSM Adopted Specs - Project Specific iv. Special Provisions v. Special Specifications e. Bid Form (Excel File) f. Response Comments to 60% Design h. Engineering/CIP Plan Review Checklist
x			5) 100% Submittal (1 PDF, 1 DWG) a. Sealed Plan Set (include all items from 30% 60%, & 90% submittal) b. Opinion of Probable Construction Cost c. Construction Schedule d. Specifications - Submitted as a single PDF i. Index of Specs ii. Modifications to Austin Specs iii. COSM Adopted Specs - Project Specific iv. Special Provisions v. Special Specifications e. Bid Form (Excel File) f. Response Comments to 90% Design g. Engineering/CIP Plan Review Checklist h. GIS Submittal Checklist i. Construction Checklist
Scope	**Add'l Services**	**NIC**	IV. Bid Phase
			A. Meetings
x			1) Attend Pre Bid Meeting ~ Agenda prepared by COSM Staff
x			2) Answer Questions
x			3) Issues Addenda to Purchasing
			B. Bid Review

x			1) Bid Tabulation of Submitted Bids
x			2) Reference check for bid qualification & Recommendation of Award
		x	a. Check for Debarment and perform a background check (only required for Federal Funded Jobs)
x			b. Verify References of top 3 bidders
			C. Deliverables
x			1) Letter of recommendation (add statement that debarment has been checked)
x			2) After Bid Opening - Conformed Plans (1 PDF, 1 DWG, 2-22"x34" Sets, 4-11"x17" Sets)
Scope	**Add'l Services**	**NIC**	**V. Construction Phase**
			A. Assist with Construction Tasks
x			1) Project Meetings (Bi-weekly)
x			2) Attend Pre-Construction Meeting ~ Agenda prepared by COSM Staff
x			3) Submittal Review
x			4) Respond to Requests for Information/Modifications
x			5) Construction Observation (Assume 15 **Site Visits)**
x			6) Construction Inspection ~ Assume 13 Inspections Electrical Subcontractor has included two site visits, as required. FNI has 10 misc. project review and coordination meetings + 3 special inspections during wet well coating operations. FNI included two site visits to identify any warranty items and prepare a list of deficiencies.
		x	7) Construction Monitoring As Required By THC or Others ~ Typically Not Required **Notes:**
x			8) Pay Estimate Review
x			9) Review Change Orders
		x	10) TDLR Inspection & Approval
x			11) Project Startup - Typically Lift Station Projects Only **Notes:** FNI has included two substantial completion visits and electrical sub. has included one site visit.
x			12) Attend Final Walk Through FNI and electrical sub. have final inspection site visit.
			B. Survey
	x		1) Reset Monuments ~ Typically not required unless the design duration is long
		x	2) Construction Layout For SMEU - Typically only enough detail for SMEU to move overhead in advance of CIP project. {Specify One}
		x	a) Stake proposed poles and proposed features within 5' of poles
		x	b) Stake proposed & existing ROW within project limits
			C. Deliverables
x			1) Site Visit Reports
x			2) Submittal Response & Log
x			3) RFI Response & Log
Scope	**Add'l Services**	**NIC**	**VI. Record Drawing Phase**
			A. Survey ~ See GIS Submittal Checklist For Items To Be Surveyed
x			1) Record Drawing Survey - After construction is completed, survey installed appurtenances and invert elevations
			B. Plan Revisions
x			1) Update alignment on plans to reflects GPS data.
x			2) Update text on Profiles Inverts to reflect Record Drawing Survey.
			C. Deliverables
x			1) Draft Drawings (1-22"x34" Set, 1-11"x17" Set)
x			2) Final Drawings Per GIS Checklist
x			3) GIS Submittal Checklist & Additional Required Submittals
			FEES, PAYMENTS, AND INVOICING
			Fill out Exhibit 3 or Provide Own Template (If using own template, copy text on bottom of spreadsheet) Hourly rates must be included as an attachment with statement about rates applying through contract duration
			PROJECT SCHEDULE
			Include Each Phase as Scoped with Associated Schedule. Attach PDF of Microsoft Project Schedule and submit the electronic version. Note that the time between Design and Construction is set by the City. XX Days to completed Draft PER submittal XX Days to completed Final PER submittal XX Days to completed 20% submittal
			90 Days to completed 30% submittal
			60 Days to completed 60% submittal
			60 Days to completed 90% submittal
			10 Days to completed 100% submittal
			540 Days anticipated for construction

Engineering/CIP Plan Review Checklist

PROJECT NAME : _____

DATE REVIEWED : 30% - 60%- 90%- 99%- 100%-

INSTRUCTIONS : **X** = TASK COMPLETE **?** = NEED MORE DETAILS **N/A** = NOT APPLICABLE **F** = TO BE COMPLETED WITH FUTURE PHASE

30%	60%	90%	99%	100%	***DESCRIPTIONS***	***Comments***
30%	60%	90%	99%	100%	***INTERNAL COORDINATION - TO BE COMPLETED BY CITY PM***	
					Check City's 5-Yr Transit Plan for bus stops and include improvements, if within project limits	
					Check with IT for fiber conduit needs	
					Check the 5 Year Sidewalk Plan for conflict	
					Check Wastewater Master Plan for conflict	
					Check Transportation Master Plan for conflict	
					Check Water Master Plan for conflict	
					Check Drainage Master Plan for conflict	
					Check 5 Year Mill & Overlay Plan for conflict	
					Check CIP Plan for conflict	
					Check Electric Master Plan for conflicts	
					Check with SMEU for conflicts on maintenance projects	
30%	60%	90%	99%	100%	***EXTERNAL COORDINATION - TO BE COMPLETED BY DESIGN ENGINEER***	
					Map Request Submitted to Charter	
					Map Request Submitted to Bluebonnet	
					Map Request Submitted to Grande	
					Map Request Submitted to CenturyLink	
					Map Request Submitted to American Tower	
					Map Request Submitted to Texas State	
					Map Request Submitted to ATT	
					Map Request Submitted to PEC	
					Map Request Submitted to Crystal Clear	
					Map Request Submitted to CenterPoint Energy	
					Map Request Submitted to other utilities in the project limits	
30%	60%	90%	99%	100%	***GIS QUALITY CONTROL CHECK***	
					Submit Plans to COSM GIS Technician to perform QA/QC - ***See GIS Submittal Checklist***	
30%	60%	90%	99%	100%	***COSM DESIGN MANUAL - MUST BE USED WHILE PREPARING DESIGNS***	
					Water Distrubition System Design Criteria Manual - 1/13/2020	
					Wastewater Collection System Design Criteria Technical Manual - Most Current Version	
					Lift Station - Preferred Products Manual	
					Stormwater Technical Manual - 6/1/2020	
					Transportation Design Criteria Manual - 12/18/2018	
30%	60%	90%	99%	100%	***GENERAL - CONSTRUCTION PLANS***	
					Sheet shall be designed on 11"x 17"	
					Scale shall be 1"=40' (Horizontal) and 1"=10' (Vertical) on 11"x17"	
					North Arrow	
					Scale (graphic scale with descriptive text of scale)	
					Street names, if any part of a street is shown	
					Property Address, Owner Name & R-value shown for all parcels	
					Legend shown and includes all symbols	
					Design follows COSM design criteria	
					Engineer's opinion of probable construction cost	
					Proposed easements shown (temporary and permanent)	
					100-Year Floodplain Boundary	
					For aerial installations the plans clearly show and differentiate between existing poles and new poles	
					Location of the highway crossing clearly shown (if applicable)	
					Label all Abandoned Water, Wastewater, and Stormwater Utilities (Show Limits)	
					Match Marks - All Match Marks need to be match Roadway Match Mark location. On Utility Plans, show both Roadway Match Mark and Utility Match Mark	
					Right of Way Line	
					Limits of Construction	
					Construction specifications signed and sealed by a PE licensed in Texas	
					Construction plans signed and sealed by a PE licensed in Texas	
					Existing utilities shown:	
					Water	
					Wastewater	
					Stormwater	
					Gas	
					Electric (overhead and buried)	
					Communications (overhead and buried)	
					Location and information of all SUE work (Show marker on plans)	
					Easements - Show and label all existing, proposed, and temporary easements shown and labeled:	
					Minimum easement width is 20'. Needs to be wider for deeper mains.	
					Verify if you need any Temporary Workspace License Agreement (TWLA)	
					All construction within LOC or in the ROW or within an easement - verify easements with Acquisition Specialist	
					TCEQ (If in recharge zone)	
					Edwards Aquifer Recharge, Transition, and/or Contributing Zone Boundaries (if applicable)	
					Edwards Aquifer Recharge features (if applicable)	
					Sensitive feature Protection Zone Boundaries (if applicable)	
					Water Quality and Buffer Zones per Ch.5 (will be Ch. 6 of Codes SMTX) {if applicable}	
					TCEQ Construction Notes (if applicable)	
					WPAP Permit	
					SCS Permit	
30%	60%	90%	99%	100%	***COVER PAGE***	

30%	60%	90%	99%	100%	DESCRIPTIONS	Comments
					City of San Marcos Logo	
					Project Name, limits, length and description	
					Location map with the limits of the project clearly defined with major street or highway names/designations	
					Signature blocks for all relevant personnel	
					Names/Logos of each design firm responsible for plans	
					Design Engineers Seal	
					TDLR number (if required)	
					Index of all sheets ***(or separate index sheet)***	
30%	60%	90%	99%	100%	***GENERAL NOTES***	
					CIP general Construction Notes. Most current from webpage.	
					Provide a sequence of Construction List (if there is no separate Phase Plan)	
30%	60%	90%	99%	100%	***QUANTITY TABLE***	
					Overall quantity sheet with breakdown by sheet (or bid quantities shown on each sheet)	
					Spec reference shown?	
30%	60%	90%	99%	100%	***PROJECT LAYOUT & SURVEY***	
					Survey control points shown in plan view?	
					COSM monuments shown?	
					Geotechnical Bores shown, if any where obtained?	
					Table of Northing, Easting and Elevation listed for each control point	
30%	60%	90%	99%	100%	***TYPICAL SECTION***	
					Dimensions shown from face of curb to face of curb to match transportation design manual	
					Existing and Proposed ROW/Easements shown?	
					Paving thickness $\geq$ geotechnical recommendation.	
					Paving base shown extending 3' from back of curb to match detail?	
					Paving thickness at lip of gutter should match curb thickness. 6" typical.	
30%	60%	90%	99%	100%	***TREE MITIGATION (IF REQUIRED OR SHOW ON E&S PLANS)***	
					Existing Tree List. Indicate if saved or removed list. Show size and species.	
					Tree Table shall list: Tag Number, Species, Diameter, Removal/Protection/ within limits of contruction.	
					Tree Mitigation List (trees proposed in landscape plans or E&S plans)	
30%	60%	90%	99%	100%	***EROSION & SEDIMENTATION CONTROLS***	
					Show tree protection/removal with details	
					Tree Removal List. Show size and species. ***(if no tree mitigation section)***	
					Temporary fencing necessary to turn cattle if applicable called out along entire LOC	
					Temporary Sedimentation Ponds (per TCEQ permit) for disturbed drainage areas greater than 5 acres. See permit for exceptions.	
					Show existing and proposed storm structures	
					Existing contours and proposed flow arrows (1' Typical, 2' max)	
					TPDES Stormwater Pollution Prevention & EPIC Sheet - Use TXDOT template	
					Seeding with soil retention blankets or sod. Match existing where required (verify seeding with any easement agreement).	
					Sod is preferred for repairs in front of existing residential neighborhoods	
					Irrigation requirements specified for establishing grass	
30%	60%	90%	99%	100%	***CONSTRUCTION PHASING (TRAFFIC CONTROL NARRATIVE)***	
					Simple Plan - no section needed; shown with General Notes	
					Detailed Phasing needed - must coordinate with TCP	
30%	60%	90%	99%	100%	***TRAFFIC CONTROL PLAN - DETAILED VERSION***	
					Show typical section for each phase	
					Verify 10.5' minimum (11' preferred) width for all lanes	
					4' Pedestrian route accounted for?	
					If low profile concrete barriers (LPC) are used, need to include 1' contingency from LPC to edge of travel lane	
					Did you drive all detours to confirm they are acceptable? No one ways or road too narrow?	
					Overall key map required for each phase?	
					Detailed layout required for each phase?	
					Include COA or TxDOT details; as referred to in the TCP.	
30%	60%	90%	99%	100%	***REMOVAL***	
					Removal plan required?	
30%	60%	90%	99%	100%	***ROADWAY***	
					Call out non-standard curb limits on plans (Catch is standard)	
					If Mill and Overlay, must construct ADA compliant ramps	
					Location and Identification number clearly identified for all TxDOT highways	
					Horizontal layout points, bearings and distances, curve data	
					Roadway base shall be 3' behind back of curb. Verify quantities are correct.	
					Sidewalk and/or hike and bike trail locations and dimensions for proposed and existing curb, etc.	
					Verify intersections sight distance (horizontal and vertical) are compliant. Reference section 1.4 of TDM.	
					Bus stop shelters, if any, designed per Table 7-3 of TDM	
					Street design is compliant with Tables 1-1 to 1-5 of the TDM	
					Cross-slope shown as minimum of 1.5% or maximum of 3%. (2% Preferred)	
					Minimum curb return radius per Table 1-12 of TDM	
					PROFILE:	
					Existing & proposed centerline elevations	
					Existing right-of-way elevations and 10' - 30' past right-of-way, as required	
					All crosswalks cross slopes should be designed at 1.5%	
					Check placement of crown in road also catch or spill curbs and drainage area	
					Vertical curve data with appropriate K value per speed limit. Reference section 1.5.3 of TDM	
30%	60%	90%	99%	100%	***GRADING PLANS FOR INTERSECTIONS***	
					Intermediate top of curb elevations along street	
					Directional flow arrows - interior of lots	
					For valley gutters, identify the ADA path on the typical section if if the path crosses the valley gutters	
					Show 1.5% ADA path along the cross-walk	
					Corner of lot elevations	
30%	60%	90%	99%	100%	***DRIVEWAYS***	
					Driveway table or P&P for all driveways on reconstruction projects. (P&P prefered for full depth reconstruction)	
					Minimum curb return radius per Table 5-1 & 5-2 of TDM	
					Spacing per Table 5-1 & 5-2 of TDM	

30%	60%	90%	99%	100%	***DESCRIPTIONS***	***Comments***
					Show retaining walls that intersect driveways. Does retaining wall need to extend up driveway?	
					Verify slope in profile meets requirements shown in standard details (433S-A-SM)	
					A copy of a TxDOT permit is provided for each proposed driveway on TxDOT roadway(s)	
30%	60%	90%	99%	100%	***DRAINAGE***	
					Hydrologic Calculations	
					Detailed calculations such as routing program computations should be documented in a drainage report ~ Show both 25 & 100-year storm events using Atlas 14 rainfall data Per Storm Water Technical Manual (STM) 3.2.1.6.3 ~Both "on-site" and "overall"/"downstream" calculations provided	
					Rational Method calcs shown on plan sheets ~Drainage Area, Runoff Coefficients, Impervious Cover, Time of Concentration, Rainfall Intensity, and Peak Runoff (flow) for each subbasin	
					SCS Method supporting calcs shown on plan sheets ~Drainage area, Weighted Curve Number computation, Impervious Cover, Time of Concentration, Flow Path, and Peak Runoff (flow) for each subbasin	
					Drainage Area Map	
					"Existing" Overall Drainage Area Map with existing drainage areas and topography shown with minimum 1' contours	
					"Proposed" Overall Drainage Area Map with proposed drainage areas and topography shown with minimum 1' contours	
					On-site Proposed Drainage Area Map for smaller drainage areas captured such as sub-areas to each inlet	
					Flow direction arrows, Time of Concentration lines and type segments, & flowplaths shown	
					Indicate points of analysis on Drainage Plans where flow leaves the site that include flow comparison tables, existing versus proposed	
					Show FEMA Floodway and Floodplain Boundaries (ref. FIRM panel No. and date and pending CLOMR or LOMR case numbers)	
					Show Water Quality and Buffer Zones per CoSM Land Development Code (LDC) Section 6.2.2	
					Show Ordinary High Water Mark in Waters of the US	
					Detention Basin, if required	
					Detention Basin Outlet Structure showing stage outflow elevations for 2, 10, 25, and 100-year storm events. Required internal rock baffle per section STM 3.3.5.6.	
					Detention Basin Inlet Structure (headwall/energy dissipaters)	
					Stage-storage-discharge relationships for detention facilities shown on table	
					Design Sheets	
					All structures and pipes labeled	
					For open channels ~ Show cross-section and label 100-year HGL & Freeboard	
					Curb/Grate Inlet sizing calculations per STM 3.3.3	
					Max. 500' between Junction boxes per STM 3.3.4.3	
					Area inlet preferred - do not use grate; need to specify raised 4-sided inlet. PS approval required for using grate inlet	
					Plan sheets showing proposed topography with 1' contour intervals tying to existing	
					Profile shown for all Storm Pipe:	
					Show Pipe size, Length and Slope	
					Show Material and specify including Class III or Class IV RCP	
					Manhole stations & top of rim elevation called out	
					Invert elevation called out; include direction and in/out at each callout.	
					Top of existing and proposed ground shown	
					Elevations shown on all grade breaks	
					Show 25 and 100-year HGL, flows, and velocities on storm sewer profile and tail water if applicable.	
					Open Channel ~ Show 100 year flows, velocity & hydraulic grade line	
					Are you trapping water on private property? Refer to cross-sections. Need open back inlets?	
					Headwall and energy dissipaters showing outflow velocity	
30%	60%	90%	99%	100%	***STRUCTURAL***	
					Structural plan required?	
30%	60%	90%	99%	100%	***RETAINING WALLS***	
					Retaining walls with top of wall and bottom of wall elevations	
					Verify footing does on conflict with utility crossing	
					Any special finishes on the wall; if so, special provision included?	
					Details for each retaining wall design included?	
					Control point for off-set indicated on the detail?	
					Pay limits indicated on detail?	
					If footing is used as sidewalk; did you clarify how payment will measured?	
30%	60%	90%	99%	100%	***WATER MAIN***	
					Existing utilities, all connections to, and crossings of existing utilities shown	
					Meter size, type, and location listed on the plans	
					If you are "relocating" meters & meter box, verify you have proper pay items. See Mods 504S.	
					Verify no existing meters are installed in the sidewalk; if so, add note requiring meter to relocated outside sidewalk.	
					Existing meter sizes labeled with irrigation or residential use (Irrigation meters require Backflow Preventer)	
					Lines shall be looped or an Automatic Flush Valve will be installed	
					Stations called out for Hydrants, Tee's, Valves, Crosses, Bends, etc. (angle of bends included)	
					Bold and label all proposed lines	
					Label all that are to be abandoned	
					Station equation given from street centerline with offset at Match Marks	
					If bores included, show stationing at each end and size of encasement	
					Air Release Valve on 16" or larger lines at all high points	
					Are drain valves needed on 12" or larger lines at all low points?	
					Field verify service size and type.	
					Water department to verify all valves are working. City PM to coordinate	
					Restrained Lengths - Call out all pipe mechanical restraints and provide calculations - required on water lines at all bends and intersections points in accordance with manufacturer recommendation (Ford Uniflange and EBBA Iron Megalugs). May show in profile or plan view.	
					Valves located in an open field need Valve Location Markers (detail included?)	
					All legs of the main at a tee or cross shall have a valve (excludes FH)	
					MUST use cut-in tee if connecting to line of equal size	
					Transmission lines needs a temporary sample port at least every 1000 ft.	
					Fire hydrants located on property line (between properties)	
					Fire Hydrant Spacing Verified: See Table 3 of Water Design Manual	
					300 feet for commercial	
					500 feet for residential	

30%	60%	90%	99%	100%	***DESCRIPTIONS***	***Comments***
					Profile shown for all lines 12" and larger:	
■	■				Top of existing and proposed ground shown	
■	■				Crossing shown of existing and proposed utilities	
■	■				Size, slope, and class of pipe labeled and shown on profile	
■	■				Elevations shown on all grade breaks	
30%	60%	90%	99%	100%	***WASTEWATER MAIN***	
					Wastewater Main **(8"-12")** to be SDR 26, minimum 8" diameter, 150 PSI Pressure Rating **(Do Not Specify ASTM 3034; only ASTM 2241)** See SPL WW-227E	
					Wastewater Main **15"** to be SDR 26, 115 PSI Pressure Rating (ASTM 3034) See SPL WW-227	
					Wastewater Main **18" & Larger** to be 115 PSI Pressure Rating (ASTM F 679) See SPL WW-227A	
					Wastewater Lateral (Service) to be replaced to property line with new cleanout per detail	
					Check location of cleanout boxes (Not in sidewalk or driveway)	
					Service laterals are not permitted on lines 15" or larger. MH required for laterals on 15" and larger.	
					Show existing utilities, all connections, and crossings	
					Station equation given from street centerline with offset at Match Marks	
					Manhole Ring and Cover; do you need to specify bolt down if needed - Detail included	
					Any existing wastewater sample ports within project limits? Check with PM if needed.	
					Stub-out past paving from last manhole if future project planned	
					If tying into existing manhole, include pay item	
					Flow arrows in plan view	
					Bold and label all proposed lines	
					Label all lines that are to be abandoned	
					Manholes located in an open field need location markers (detail included?)	
					Maximum Manhole spacing of 500'	
					Manhole Vent Detail - only for manholes outside of pavement and when several watertight MH are installed; if vent needed for manhole in pavement, need to revise detail with bollards, possible easement area for vent, etc. Max unvented length of main is 1500 feet.	
					By-pass pumping required? If yes, include pay item.	
					Profile shown for all lines:	
■					Profile - Show Pipe size, material, Length and slope	
■					Manhole stations & top of rim elevation called out	
■					Invert elevation called out; include Direction and In/Out at each callout.	
■					Top of existing and proposed ground shown	
■					Elevations shown on all grade breaks	
■					If bores, show stationing and size of encasement at each end	
■					Capacity and velocity shown for peak wet weather flow shown in profile per section ***1.5 Determination of Pipe Size and Slope*** of the wastewater design manual.	
■					Flow rate and velocity for peak dry weather flow in pipes less than 18" shown in profile	
■					Line sizing calculations submitted and approved. Use Flows from Master Plan.	
■					Drop manhole required where incoming pipe invert is more than 24" higher than outgoing pipe invert (Verify large diameter drops will fit). External drop manhole is standard	
■					If requesting internal drop MH; have you received COSM approval?	
30%	60%	90%	99%	100%	***FORCE MAIN***	
					Existing utilities, all connections to, and crossings of existing utilities shown	
					Bold and label all proposed lines	
					Label all that are to be abandoned	
					Station equation given from street centerline with offset	
					If bores included, show stationing at each end and size of encasement	
					Air Release/Vacuum Valve locations required per AWWA M51, most current edition	
■	■				Restrained Lengths - Call out all pipe mechanical restraints and provide calculations - required on water lines at all bends and intersections points in accordance with manufacturer recommendation (Ford Uniflange and EBBA Iron Megalugs). May show in profile or plan view	
■	■				Valves located in an open field need Valve Location Markers (detail included?)	
■	■				Force Main Valve required by TCEQ?	
					Profile shown for all lines:	
■	■				Top of existing and proposed ground shown	
■	■				Crossing shown of existing and proposed utilities	
■	■				Size, slope, and class of pipe labeled and shown on profile	
■	■				Elevations shown on all grade breaks	
30%	60%	90%	99%	100%	***RECLAIMED WATER***	
					Existing utilities, all connections to, and crossings of existing utilities shown	
					Bold and label all proposed lines	
					Label all that are to be abandoned	
					Station equation given from street centerline with offset	
					If bores included, show stationing at each end and size of encasement	
					Air Release/Vacuum Valve required?	
■	■				Restrained Lengths - Call out all pipe mechanical restraints and provide calculations - required on water lines at all bends and intersections points in accordance with manufacturer recommendation (Ford Uniflange and EBBA Iron Megalugs). May show in profile or plan view	
■	■				Valves located in an open field need Valve Location Markers (detail included?)	
■	■				Valves spaced per Water Design Manual?	
					Profile shown for all lines 12" and larger:	
■	■				Top of existing and proposed ground shown	
■	■				Crossing shown of existing and proposed utilities	
■	■				Size, slope, and class of pipe labeled and shown on profile	
■	■				Elevations shown on all grade breaks	
30%	60%	90%	99%	100%	***LIFT STATIONS***	
					Follows COSM Design Criteria Manual on COSM website	
					Pump specification	
					Pump & Guiderail Installation Details	
					Site Plan	
					Erosion Control Plan account for work in Lift Station?	
					Odor Control Analysis	
					Power Supply Analysis	
					Wet & Dry Flow Analysis	
					Bid item for SCADA equipment from COSM supplier (coordinate with Bruce Noel)	
					Comments received from PS Lift Station Maintenance Team (coordinate with Bruce Noel)	

30%	60%	90%	99%	100%	***DESCRIPTIONS***	***Comments***
					Electrical line drawings	
					Instrumentation & Control drawings	
30%	60%	90%	99%	100%	***ELECTRIC - UNDERGROUND***	
					Show existing and proposed pole placement	
					Show primary and secondary pull boxes, transformers	
					Plan and profile of duct bank	
					Duct Bank Detail with backfill shown	
30%	60%	90%	99%	100%	***ELECTRIC - MECHANICAL***	
					Mechanical Plan required?	
30%	60%	90%	99%	100%	***ELECTRIC - LIGHTING***	
					Photometric Plan	
					Show existing and proposed pole placement	
					Show pull boxes - no more than 360 degree for bends allowed between pull boxes	
					Typical section showing trench	
					Light fixture approved by SMEU	
30%	60%	90%	99%	100%	***TRAFFIC SIGNALS***	
					Ped crossing? If yes, APS required	
					Opticom required	
					Contractor must program signal	
					Provided timing and phasing plan	
					Need temporary signals?	
					If yes, provided timing and phasing plan	
					Use TXDOT Specs; not COSM. See Modifications TXDOT 680.	
30%	60%	90%	99%	100%	***SIGNING & PAVEMENT MARKINGS***	
					Make sure you include both Type 1 & Type 2 Striping; see the Modifications (871S)	
					Crosswalk striping matches detail?	
					Sign standard and signs per MUTCD	
					Do we need a detailed striping plan?	
30%	60%	90%	99%	100%	***UTILITY LAYOUT***	
					Utility layout required?	
					Color coded?	
					Label all utilities; proposed and existing.	
30%	60%	90%	99%	100%	***LANDSCAPING***	
					Irrigation system reviewed against irrigation checklist?	
					Irrigation system approved by Jan Klein and Devin Hussey?	
					Irrigation system approved by Parks?	
					Tree/Plans approved by Parks?	
					Do you a have a service drop or will SMEU need to install one?	
					Plans clear on how power and water will be connected?	
					Are you including a 2 year maintenance requirement and pay items?	
30%	60%	90%	99%	100%	***CROSS-SECTIONS***	
					Every 50'?	
					At driveways? Unless you have details profiles	
					Utilities shown in cross-section	
					ROW/Easement Shown	
30%	60%	90%	99%	100%	***DETAILS***	
					All details included in plans; ***fill out checklist on COSM website under "Standard Details"***	
					Edge Protection Required per detail 432S-1-SM?	
30%	60%	90%	99%	100%	***BID ITEMS - COMMON MISSED ITEMS***	***Comments***
					Curb & gutter vs. driveways - don't include C&G area in driveway; curb & gutter paid thru the dwy by LF as laydown. Review Detail 433S-A-SM	
					Included pay item for TV inspection of sanitary sewer? Pay Item TBD	
					Included pay item for TV inspection of storm drain? Pay Item No. 510-VIDEO ~ Video Inspection of Newly Installed Box Culverts and Storm Drain Pipe	
					Wet Connection pay item for all water tie ins? (510S)	
					Service paid by LF and connection by EA OR by Relay Long & Short? Check the Modifications (510S)	
					Which FH pay item was used? Check the Modifications (511S)	
					Asphalt/Concrete/Base quantities follow dimensions of appropriate trench repair detail	
					Bid items list proper thickness corresponding to trench repair detail.	
					If different thickness used; need to modify trench repair detail.	
30%	60%	90%	99%	100%	***External Funded Project***	***Comments***
					CAMPO PROJECTS	
					TXDOT Cover page	
					TXDOT Title Block	
					TXDOT Details (Use COSM details if there is no TXDOT Detail)	
					Pay Items - Use TXDOT Pay items ((Use COSM pay items if there is no TXDOT pay item)	
30%	60%	90%	99%	100%	***MISCELLANEOUS***	
					Construction schedule estimate to justify the number of working days we award for construction. Specify Calendar Day or Working Days.	
					Mailboxes - placement updated to match COSM standard detail 432S-10-SM	
					Mailboxes (Alternative Detail if City Detail Wont Work) - See TXDOT details MB-14 and MB-15 on Maintenance webpage	

GIS Submittal Checklist

Project Details

PROJECT NAME :		
SUBMITTAL DATE:	First Plan Submittal:	XX/XX/20XX
	Construction/ Approved Plan Set:	XX/XX/20XX
	Record Drawing:	XX/XX/20XX
COMPANY SUBMITTING CONTACT INFORMATION:	Company Name:	
	Contact Person:	
	Email:	
	Address:	
	Phone:	

General Requirements For All Submittals

State Plane Coordinates:	NAD 1983 State Plane Texas South Central FIPS 4204 Feet
Coordinate Geometry	Grid (No Surface Files)
CAD Software	DWG (No DGN)
CAD Version	2013 or Newer
CAD Base Files	2-D only (No Civil 3-D files & No "xrefs")
GPS Survey Data	The survey points file (P, N, E, Z, D) in a CSV format. P=Point, N=Northing, E=Easting, Z=Elevation, D=Description

Deliverables

Submittal Type ● = Required N/A = NOT APPLICABLE			**Item To Submit**	**COMMENTS**
First Plan Submittal:	Construction/ Approved Plan set:	Record Drawing:		
●	N/A	N/A	Surveyor Certification For Design Data - See Template	This is for the design survey. A letter from the surveyor stating what coordinate system the survey was referenced to; both vertically and horizontally.
N/A	N/A	●	Surveyor Certification For Record Drawing - See Template	This is for the separate post construction survey. A letter from the surveyor stating what coordinate system the survey was referenced to; both vertically and horizontally
●	●	●	CAD Drawing	CAD Files must be updated to reflect revised location of attributes as determined by the record drawing survey.
●	●	●	PDF of Drawing	Record Drawings must be updated to reflect revised location of attributes as determined by the record drawing survey.
N/A	N/A	●	One 22X34 Hard Copy (Inspector Approved)	
N/A	N/A	●	One 11X17 Hard Copy (Inspector Approved)	
N/A	N/A	●	GPS Survey Data in a csv format. Include Index of descriptions	locations of assets as built

Record Drawing Survey Requirements

Instructions: All Installed Items Listed Must Be Re-surveyed After Construction is Completed.
~ Please indicate if the attribute was installed with your scope or if these attributes are not part your scope.
~ Existing attributes that where not installed under this scope of work do not need to be re-surveyed

N/A = Not Applicable X = Included	***Items To Survey*** ***GPS Survey Points at the Centroid of Structure***	***COMMENTS***
	Water - Hydrant	
	Water - Meter	
	Water - Sample Site	
	Water - Valve - Air, Altitude, Automatic Flush, Ball, Blow Off, Butterfly, Check, Combination Air Release, Cone, Fire Hydrant, Gate, Manual Flush, Plug, Pressure Reducing, Vacuum Breaker	
	Wastewater - Access Points - WAD, Clean Out	
	Wastewater - Manholes Lid	
	Wastewater - Manholes Rim and Inverts (In & Out)	
	Wastewater - Sample Port	
	Wastewater - Valve	
	Storm Sewer - Inlet Lid (Slot Drain, Trench Drain, Area, Curb, Double Sided, Four Sided)	
	Storm Sewer - Culverts (Upstream and downstream elevations)	
	Storm Sewer - Inlet Rim and Inverts (In & Out)	
	Storm Sewer - Junction Box/Manhole Rim and Inverts (In & Out)	

Layer Name Information

Instructions: All items Listed Must Be Shown In the CAD Files. **Combine all CAD files into a single DWG file showing the attributes listed below.**
~ Please indicate if the attribute is included in your files or if these attributes is not part your scope.
~ If included, please indicate how the layer is identified in your CAD file

N/A = Not Applicable X = Included	*ATTRIBUTE- as named in COSM GIS System*	*ATTRIBUTE - As named in your CAD file. Which Layer is it on?*
	Base File Attributes	
	Site Boundary	
	Parcels	
	Right of Way	
	Existing Easements	
	Proposed Easements	
	Street Centerline	
	Pavement Back of Curb	
	Edge of Pavement	
	Sidewalks	
	Building Footprints	
	Floodplain Delineation	
	Water Attributes	
	Fitting - Cap, Cross, Reducer, Tap, Tee	
	Hydrant	
	Meter	
	Sample Site	
	Service Line	
	Storage Tank	
	Valve - Air, Altitude, Automatic Flush, Ball, Blow Off, Butterfly, Check, Combination Air Release, Cone, Fire Hydrant, Gate, Manual Flush, Plug, Pressure Reducing, Vacuum Breaker	
	Water main	
	Well	
	Wastewater Attributes	
	Access Points - WAD, Clean Out	
	Cap	
	Lift Station	
	Mains	
	Manhole	
	Sample Port	
	Service Line	
	Treatment Plant	
	Valve	
	Storm Sewer Attributes	
	Channel	
	Culvert	
	Inlet - Slot Drain, Trench Drain, Area, Curb, Double Sided, Four Sided	
	Junction Box/Manhole	
	Outfall	
	Rip Rap	
	Storm Sewer Pipes	
	Lateral Lines	
	Water Quality and Storage - (Example: Bioswale, Detention, Greenroof, Modular Wetland, Permeable Pavers, Rain Garden, Retention, Wetland)	

EXHIBIT 2

City of San Marcos Highway 80 Utility Project – Amendment No. 1
DETAILED FEE SCHEDULE

Compensation to FNI for the Basic Services shall be for an amount up to but not to exceed $2,758,705.00.

Task	Contract Amount
Preliminary Engineering	$346,053.00
Amendment No. 1 – Design, Bid, Construction and Record Phase Services	$2,412,652.00
Total Contract Amount	**$2,758,705.00**

If FNI sees the Scope of Services changing so that additional services are needed, including but not limited to those services described as Additional Services, FNI will notify City for City's written approval before proceeding.

The hours listed above are an estimate. The hours assigned to the Phase are not exclusive to the Phase which they are assigned. The total fee will not exceed the total contract amount as discussed in Article 2. The hourly rates of this contract shall apply throughout the remainder of this contract and to all change in services.

Payment to the ENGINEER will be made as follows:

1. Basic Services - The amounts of these invoices will be based upon the extent of work completed by the Engineer on an hourly basis.
2. Reimbursable Expense - Reimbursable expenses including such things as expenses for plotting, reproduction of documents, auto travel mileage (current IRS approved mileage rate), delivery charges, long distance communications, freight, and state accessibility will be invoiced with appropriate backup documentation.

Invoice and Time of Payment

Invoices will be prepared in a format approved by the City prior to submission of the first monthly invoice. Invoices shall be submitted monthly and paid within 30 days.

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Project Fee Summary		
Basic Services	$	2,412,652
Special Services	$	-
Total Project	$	2,412,652

Tasks																
Phase	**Task**	**Basic or Special**	**Task Description**	Charles Kucherka	Ryan Ramsey	Collin Brewer	Blake Stelzer	Cassie Grady	Eric Love	Marissa Mendoza	Mike Hagen	Richard Provolt	Wade Zemlock	Mike Shiflett	John Rinacke	Kimberly Patak	Sarah West
				Senior Advisor	Engineer V	Engineer IV	Engineer I	BIM/CAD Designer II	BIM/CAD Technician II	Operations Analyst	LS QC	Construct. QC	Electrical QC	Geotech. QC	Estimator	Drainage QC	Engineer VI
				$209	$178	$156	$137	$153	$96	$148	$240	$209	$240	$240	$117	$209	$209
			Project Management														
			Internal kickoff meeting	1	1	2	3	1	1		1						
			External kickoff meeting	1	1	2	3										
			Periodic internal meetings (12 months design - video)	6	6	12	12	6	6							2	12
			Periodic client meetings (Bi-weekly x 12 months - video)	13	13	26	26										
			External stakeholder meetings	4	4	8	8										
			Maintain and monitor scope / schedule / budget (28 months)		28	28											
			One Page Reports / Periodic client communications (28 months)			16	16										
			Corporate Support (Scheduler)				12										
			Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)							28							
			Project Scoping, Preparation and Setup	40	8	4	4			8						4	
			Project Closeout		8	8				4							
			Contract Preparation for Subconsultants		2	8				6							
			Maintain Project Decision/Issues Log - Design Only			6	16										
			Prepare and maintain Entity/Utility Coord. Log - Design Only			6	16										
			Public Meetings x 2 + PowerPoint + Gatorboards x 2	8	8	16	24										
			Quality Management														
			Develop quality management plan			2											
			Senior Advisor	40													
			Quality Control reviews (3 reviews x 8 hours)	24	24						24		24	4		24	
			Quality Assurance reviews	3	3												
			Constructability reviews									8					
			30% Design														
			Conduct Project Site Visit, including WWTP, and CRWA	4	4	4	4										
			Field Survey + Coordination Between CAD + Stake Holder Meetings	8	8	8	8	8									
			Develop Exhibits and Tracking for Easements and Metes and Bounds		1	4	12	8	32								
			Proposed Easements (16 total) + Coordination and CAD Verification			8	16	32									
			Funding Coordination & Modifications of Preliminary Reports	6	16	40	80										
			Provide 30% Design Plans	16	40	154	257	250	250								12
			Cost Estimating	1	1	4	6								8		2
			Lift Station Drainage Design	2	2	8	8	4	4								24
			Evaluate Rectangular vs. Round Wet Well	4	4	16	24	8	16						4		
			Blanco River Bore	4	8	16	24	40									
			Hydraulic Impact Assessment			4	4										12
			Erosion Hazard Zone Development			4	4										14
			Environmental and Cultural Coordination			1	2										
			30% Submittal														
			Pre-Submittal Coordination Set and Review		2	8	8										
			Submittal Preparation for QC			2	8										
			Quality Control Review by FNI	6		2	2										
			Address Comments and Submit Draft to City	2	2	16	32										
			Submit 30% Plans - PDF		2	4	8										
			30% Design Workshops, Resp. to Comments, Mtg. Minutes	2	2	24	40										4
			60% Design														
			Develop Scope for Geotechnical Engineering & QC	1		4								4			
			Utility Coordination/Meetings with Stake Holders	8	8	8	8										
			Update Exhibits and Tracking for Easements and Metes and Bounds			4	8	8	8								
			Transient Analysis			8	16	4	4								
			Provide 60% Design Plans	8	40	171	222	454	454								8
			60% Project Specifications	4	8	16	40										2
			Prepare SWPPP			4	16	4	40								
			Prepare Floodplain Development Permit & Watershed Protectin Plan Applications														3
			Cost Estimating	1	1	8	8								8		1
			60% Submittal														
			Pre-Submittal Coordination Set and Review		4	16	16										
			Submittal Preparation for QC			8	8										
			Quality Control Review by FNI		4	4	4										
			Address Comments and Submit Draft to City	1	2	16	32										
			60% Submittal - PDF			4	8		8								
			60% Design Workshops, Resp. to Comments, Mtg. Minutes	2	4	16	40										4
			90%/100% Design														
			Utility Coordination/Meetings with Stake Holders														

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary		
	Basic Services	$	2,412,652
	Special Services	$	-
	Total Project	$	2,412,652

Tasks																
Phase	Task	Basic or Special	Task Description	Charles Kucherka	Ryan Ramsey	Collin Brewer	Blake Stelzer	Cassie Grady	Eric Love	Marissa Mendoza	Mike Hagen	Richard Provolt	Wade Zemlock	Mike Shiflett	John Rinacke	Kimberly Patak	Sarah West
				Senior Advisor	Engineer V	Engineer IV	Engineer I	BIM/CAD Designer II	BIM/CAD Technician II	Operations Analyst	LS QC	Construct. QC	Electrical QC	Geotech. QC	Estimator	Drainage QC	Engineer VI
				$209	$178	$156	$137	$153	$96	$148	$240	$209	$240	$240	$117	$209	$209
			Provide 90% Design Plans	4	16	171	222	344	344								4
			90% Project Specifications	4	8	40	80										1
			Cost Estimating	1	1	8	8								8		1
			90% Submittal														
			Pre-Submittal Coordination Set and Review		2	16	16										
			Submittal Preparation for QC			8	8										
			Quality Control Review by FNI		4	4	4										
			Address Comments and Submit Draft to City	4	4	16	32										
			90% Submittal - PDF				8										
			90% Design Workshops, Resp. to Comments, Mtg. Minutes	2	2	16	24										
			TCEQ and City Review Permitting		2	4	8										
			100% Draft Coordination and Comment Responses	2	4	24	40										
			Provide 100% Design Plans	2	16	51	86	115	115								4
			100% Project Specifications	2	2	16	40										
			Project Checklists			4	12										
			Cost Estimating			2	2								4		1
			100% Signed and Sealed Submittal (5 - 11x17 plans (100 sheets), 5 specifications (900 sheets)	1	1	8	16										
			TWDB Coordination	2	4	32	40										
			Bid Phase														
			Prepare Pre-Bid Presentation	1	1	4	6										
			Prepare Agenda and Attend Pre-bid Meeting	1	1	2	4										
			Attend Bid Opening		1	1											
			Prepare Addenda	4	8	24	40	8	24								8
			Review and Evaluate Contractor's Qualifications		1	6	16										
			Prepare Cost Evaluation Letter and RoA Letter		1	4	8										
			TWDB Coordination			8	8										
			Construction Phase														
			General Coordination w/ City & Contractor	8	8	40	40										
			TWDB Coordination		8	16	40										
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)			2	8	2	8								
			Review Submittals (200 assumed)	4	4	40	250										
			Review Lab, Shop & Mill Test Rpts			10	20										
			Review O&M Manual & Revise Specs as Necessary			8	16										
			Respond to Contr. RFIs (Assume 12)	4	4	16	24										
			Review Alterations. Prepare RFPs, COs - 3 total	4	4	16	24										
			Coordination of Construction Related Challenges	4	4	16	16										
			Meeting and Site Visits														
			Pre-Construction Conference	2	2	2	4										
			Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (30 total)	4	15	30	60										
			Monthly Site Visits x 15 month Construction Time, 15 total site visits) Including documentation, agendas, meeting minutes and follow up time. 3 hours per visit.	15	15	45	45										
			Misc. Project Review Meetings x 4	8	8	12	12										
			Misc. Coordination Meetings x 6	8	8	24	24										
			Wet Well Pre-Coating Meetings x 1	12		12											
			Wet Well Coating Inspection			16											
			Testing and Start-Up Meeting	6		6											
			Substantial Completion Meeting x 2	2	6	6	6										
			Final Completion Meeting x 2	2	2	6	8										
			1-Year Warranty Inspection and Follow Up Visit		2	6	6										
			Certification of Project Construction & TCEQ Coordination			1	2										
			Prepare Draft/Final Record Drawings (Electronic)			16	32	24	60								
			Supplemental Items														
			Provide Two Bid Packages:														
			Design Phase														
			Funding Coordination & Modifications of Preliminary Reports		2	16	16										
			Prepare 16 aerial exhibits to support parcel acquisition with easements shown.			16	16	16	84								

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary		
	Basic Services	$	2,412,652
	Special Services	$	-
	Total Project	$	2,412,652

Tasks																
Phase	Task	Basic or Special	Task Description	Charles Kucherka	Ryan Ramsey	Collin Brewer	Blake Stelzer	Cassie Grady	Eric Love	Marissa Mendoza	Mike Hagen	Richard Provolt	Wade Zemlock	Mike Shiflett	John Rinacke	Kimberly Patak	Sarah West
				Senior Advisor	Engineer V	Engineer IV	Engineer I	BIM/CAD Designer II	BIM/CAD Technician II	Operations Analyst	LS QC	Construct. QC	Electrical QC	Geotech. QC	Estimator	Drainage QC	Engineer VI
				$209	$178	$156	$137	$153	$96	$148	$240	$209	$240	$240	$117	$209	$209
			30% Plans Submittal		4	24	40	40	80								
			Cost Estimating			2	4										
			Pre-Submittal Coordination Set and Review		2	4	4										
			Submittal Preparation for QC			2	8										
			Quality Control Review by FNI	6		2	2										
			Address Comments and Submit Draft to City		2	16	16										
			Submit 30% Plans - PDF		2	4	8										
			30% Design Workshops, Resp. to Comments, Mtg. Minutes	1	2	8	16										
			Provide 60% Design Plans		4	24	40	40	80								
			60% Project Specifications		1	8	40										
			Prepare SWPPP			4	16	4	40								
			Cost Estimating	1	1	4	4										
			60% Submittal														
			Pre-Submittal Coordination Set and Review		4	4	4										
			Submittal Preparation for QC			8	8										
			Quality Control Review by FNI	6	2	2	2										
			Address Comments and Submit Draft to City	1	2	8	16										
			60% Submittal - PDF			4	8		8								
			60% Design Workshops, Resp. to Comments, Mtg. Minutes	1	2	8	16										
			Provide 90% Design Plans		4	24	40	40	80								
			90% Project Specifications		1	8	40										
			Cost Estimating		1	4	4										
			90% Submittal														
			Pre-Submittal Coordination Set and Review		2	4	4										
			Submittal Preparation for QC			8	8										
			Quality Control Review by FNI	6	2	2	2										
			Address Comments and Submit Draft to City	1	2	8	16										
			90% Submittal - PDF				8										
			90% Design Workshops, Resp. to Comments, Mtg. Minutes	1	2	8	16										
			TCEQ			1	2										
			100% Draft Coordination and Comment Responses		1	4	16										
			Provide 100% Design Plans		2	8	16	8	8								
			100% Project Specifications		1	4	8										
			Cost Estimating			2	2										
			100% Signed and Sealed Submittal (5 - 11x17 plans (30 sheets), 5 specifications (500 sheets)			8	8										
			TWDB Coordination	2	4	32	40										
			Bid Phase														
			Prepare Pre-Bid Presentation	1	1	4	6										
			Prepare Agenda and Attend Pre-bid Meeting	1	1	2	4										
			Attend Bid Opening		1	1											
			Prepare Addenda	2	2	8	16	8	8								
			Review and Evaluate Contractor's Qualifications		1	6	10										
			Prepare Cost Evaluation Letter and RoA Letter		1	4	8										
			TWDB Coordination			8	8										
			Construction Phase (Assuming 5 month Construction Duration)														
			General Coordination w/ City & Contractor	8	4	16	16										
			TWDB Coordination		8	16	40										
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)			2	8	2	8								
			Review Submittals (50 assumed)			24	63										
			Review Lab, Shop & Mill Test Rpts			4	8										
			Review O&M Manual & Revise Specs as Necessary			2	4										
			Respond to Contr. RFIs (Assume 12)	1	1	8	16										
			Review Alterations. Prepare RFPs, COs - 3 total	1	1	8	16										
			Coordination of Construction Related Challenges	2	2	8	16										
			Meeting and Site Visits														
			Pre-Construction Conference	2	2	2	4										
			Bi-weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (11 total)			22	33										
			Construction Site Visit - 1 per month x 5 months = 5 total, including documentation and follow up time. 2 hours per visit. (monthly site visits for engineer)	2	2	10	10										

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary		
	Basic Services	$	2,412,652
	Special Services	$	-
	Total Project	$	2,412,652

Tasks																
Phase	Task	Basic or Special	Task Description	Charles Kucherka	Ryan Ramsey	Collin Brewer	Blake Stelzer	Cassie Grady	Eric Love	Marissa Mendoza	Mike Hagen	Richard Provolt	Wade Zemlock	Mike Shiflett	John Rinacke	Kimberly Patak	Sarah West
				Senior Advisor	Engineer V	Engineer IV	Engineer I	BIM/CAD Designer II	BIM/CAD Technician II	Operations Analyst	LS QC	Construct. QC	Electrical QC	Geotech. QC	Estimator	Drainage QC	Engineer VI
				$209	$178	$156	$137	$153	$96	$148	$240	$209	$240	$240	$117	$209	$209
			Misc. Coordination Meetings x 4	2	2	8	8										
			Substantial Completion Meeting x 1	1	1	4	4										
			Final Completion Meeting x 1	1	1	2	4										
			1-Year Warranty Inspection and Follow Up Visit			2	3										
			Certification of Project Construction & TCEQ Coordination			1	2										
			Prepare Draft/Final Record Drawings (Electronic)			2	8	2	8								
			Total Hours / Quantity	**383**	**521**	**2,040**	**3,306**	**1,480**	**1,778**	**46**	**25**	**8**	**24**	**8**	**32**	**30**	**117**
			Total Effort	**$ 82,171**	**$ 95,163**	**$ 328,360**	**$ 468,459**	**$ 229,936**	**$ 173,569**	**$ 6,808**	**$ 6,000**	**$ 1,672**	**$ 5,760**	**$ 1,920**	**$ 3,800**	**$ 6,270**	**$ 24,612**

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks				Labor													
Phase	Task	Basic or Special	Task Description	Kaylyn Hudson	Andrew Swynenberg	Garrett Johnston	Noe Ortiz	Brad Watson	Michael Robertson	Bailey Watson	Josh Moore	Julia Whitcraft	Tom Dixon	Tam Tran	CJ Sellers	Alyxes Martinez	Brian King
				Engineer IV	Engineer IV	Engineer VI	BIM/CAD Designer II	Structural QC	Engineer V	Engineer II	BIM/CAD Technician III	BIM/CAD Designer II	Environmental Scientist VII	Environmental Scientist III	Environmental Scientist III	Environmental Scientist II	GIS Analyst V
				$156	$156	$209	$153	$240	$178	$137	$96	$153	$209	$113	$113	$113	$156
			Project Management														
			Internal kickoff meeting					1	1	1	1						
			External kickoff meeting						1	1							
			Periodic internal meetings (12 months design - video)	6	6	2			12	12	12						
			Periodic client meetings (Bi-weekly x 12 months - video)						4	4							
			External stakeholder meetings														
			Maintain and monitor scope / schedule / budget (28 months)														
			One Page Reports / Periodic client communications (28 months)														
			Corporate Support (Scheduler)														
			Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)														
			Project Scoping, Preparation and Setup					4					4				
			Project Closeout														
			Contract Preparation for Subconsultants					1									
			Maintain Project Decision/Issues Log - Design Only														
			Prepare and maintain Entity/Utility Coord. Log - Design Only														
			Public Meetings x 2 + PowerPoint + Gatorboards x 2														
			Quality Management														
			Develop quality management plan														
			Senior Advisor														
			Quality Control reviews (3 reviews x 8 hours)					24				10	16				
			Quality Assurance reviews														
			Constructability reviews														
			30% Design														
			Conduct Project Site Visit, including WWTP, and CRWA														
			Field Survey + Coordination Between CAD + Stake Holder Meetings														
			Develop Exhibits and Tracking for Easements and Metes and Bounds														
			Proposed Easements (16 total) + Coordination and CAD Verification														
			Funding Coordination & Modifications of Preliminary Reports														
			Provide 30% Design Plans	40			40		14	26	39						
			Cost Estimating	4													
			Lift Station Drainage Design	60	8	2											
			Evaluate Rectangular vs. Round Wet Well						4	8							
			Blanco River Bore														
			Hydraulic Impact Assessment		80	12											
			Erosion Hazard Zone Development	40													
			Environmental and Cultural Coordination											228	84	96	24
			30% Submittal														
			Pre-Submittal Coordination Set and Review														
			Submittal Preparation for QC														
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City														
			Submit 30% Plans - PDF														
			30% Design Workshops, Resp. to Comments, Mtg. Minutes	4													
			60% Design														
			Develop Scope for Geotechnical Engineering & QC						2								
			Utility Coordination/Meetings with Stake Holders														
			Update Exhibits and Tracking for Easements and Metes and Bounds														
			Transient Analysis														
			Provide 60% Design Plans	24			24		34	68	102						
			60% Project Specifications	4					3								
			Prepare SWPPP											40			
			Prepare Floodplain Development Permit & Watershed Protectin Plan Applic		10								3	16			
			Cost Estimating	2													
			60% Submittal														
			Pre-Submittal Coordination Set and Review														
			Submittal Preparation for QC														
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City														
			60% Submittal - PDF														
			60% Design Workshops, Resp. to Comments, Mtg. Minutes	4													
			90%/100% Design														
			Utility Coordination/Meetings with Stake Holders														

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks				Labor													
Phase	Task	Basic or Special	Task Description	Kaylyn Hudson	Andrew Swynenberg	Garrett Johnston	Noe Ortiz	Brad Watson	Michael Robertson	Bailey Watson	Josh Moore	Julia Whitcraft	Tom Dixon	Tam Tran	CJ Sellers	Alyxes Martinez	Brian King
				Engineer IV	Engineer IV	Engineer VI	BIM/CAD Designer II	Structural QC	Engineer V	Engineer II	BIM/CAD Technician III	BIM/CAD Designer II	Environmental Scientist VII	Environmental Scientist III	Environmental Scientist III	Environmental Scientist II	GIS Analyst V
				$156	$156	$209	$153	$240	$178	$137	$96	$153	$209	$113	$113	$113	$156
			Provide 90% Design Plans	12			12		47	90	135						
			90% Project Specifications	2					4								
			Cost Estimating	2													
			90% Submittal														
			Pre-Submittal Coordination Set and Review														
			Submittal Preparation for QC														
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City														
			90% Submittal - PDF														
			90% Design Workshops, Resp. to Comments, Mtg. Minutes														
			TCEQ and City Review Permitting														
			100% Draft Coordination and Comment Responses														
			Provide 100% Design Plans	8			8										
			100% Project Specifications														
			Project Checklists														
			Cost Estimating	2													
			100% Signed and Sealed Submittal (5 - 11x17 plans (100 sheets), 5 specifications (900 sheets)														
			TWDB Coordination														
			Bid Phase														
			Prepare Pre-Bid Presentation														
			Prepare Agenda and Attend Pre-bid Meeting														
			Attend Bid Opening														
			Prepare Addenda	8			8		8	4	12	4					
			Review and Evaluate Contractor's Qualifications														
			Prepare Cost Evaluation Letter and RoA Letter														
			TWDB Coordination														
			Construction Phase														
			General Coordination w/ City & Contractor														
			TWDB Coordination														
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)						2	2	4						
			Review Submittals (200 assumed)						20	20							
			Review Lab, Shop & Mill Test Rpts														
			Review O&M Manual & Revise Specs as Necessary														
			Respond to Contr. RFIs (Assume 12)						10	10	5						
			Review Alterations. Prepare RFPs, COs - 3 total						6	6	6						
			Coordination of Construction Related Challenges														
			Meeting and Site Visits														
			Pre-Construction Conference														
			Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (30 total)														
			Monthly Site Visits x 15 month Construction Time, 15 total site visits) Including documentation, agendas, meeting minutes and follow up time. 3 hours per visit.														
			Misc. Project Review Meetings x 4														
			Misc. Coordination Meetings x 6														
			Wet Well Pre-Coating Meetings x 1														
			Wet Well Coating Inspection														
			Testing and Start-Up Meeting														
			Substantial Completion Meeting x 2														
			Final Completion Meeting x 2														
			1-Year Warranty Inspection and Follow Up Visit														
			Certification of Project Construction & TCEQ Coordination														
			Prepare Draft/Final Record Drawings (Electronic)						2		4						
			Supplemental Items														
			Provide Two Bid Packages:														
			Design Phase														
			Funding Coordination & Modifications of Preliminary Reports														
			Prepare 16 aerial exhibits to support parcel acquisition with easements shown.														

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks				Labor													
Phase	Task	Basic or Special	Task Description	Kaylyn Hudson	Andrew Swynenberg	Garrett Johnston	Noe Ortiz	Brad Watson	Michael Robertson	Bailey Watson	Josh Moore	Julia Whitcraft	Tom Dixon	Tam Tran	CJ Sellers	Alyxes Martinez	Brian King
				Engineer IV	Engineer IV	Engineer VI	BIM/CAD Designer II	Structural QC	Engineer V	Engineer II	BIM/CAD Technician III	BIM/CAD Designer II	Environmental Scientist VII	Environmental Scientist III	Environmental Scientist III	Environmental Scientist II	GIS Analyst V
				$156	$156	$209	$153	$240	$178	$137	$96	$153	$209	$113	$113	$113	$156
			30% Plans Submittal														
			Cost Estimating														
			Pre-Submittal Coordination Set and Review														
			Submittal Preparation for QC														
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City														
			Submit 30% Plans - PDF														
			30% Design Workshops, Resp. to Comments, Mtg. Minutes														
			Provide 60% Design Plans														
			60% Project Specifications														
			Prepare SWPPP											24			
			Cost Estimating														
			60% Submittal														
			Pre-Submittal Coordination Set and Review														
			Submittal Preparation for QC														
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City														
			60% Submittal - PDF														
			60% Design Workshops, Resp. to Comments, Mtg. Minutes														
			Provide 90% Design Plans														
			90% Project Specifications														
			Cost Estimating														
			90% Submittal														
			Pre-Submittal Coordination Set and Review														
			Submittal Preparation for QC														
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City														
			90% Submittal - PDF														
			90% Design Workshops, Resp. to Comments, Mtg. Minutes														
			TCEQ														
			100% Draft Coordination and Comment Responses														
			Provide 100% Design Plans														
			100% Project Specifications														
			Cost Estimating														
			100% Signed and Sealed Submittal (5 - 11x17 plans (30 sheets), 5 specifications (500 sheets)														
			TWDB Coordination														
			Bid Phase														
			Prepare Pre-Bid Presentation														
			Prepare Agenda and Attend Pre-bid Meeting														
			Attend Bid Opening														
			Prepare Addenda														
			Review and Evaluate Contractor's Qualifications														
			Prepare Cost Evaluation Letter and RoA Letter														
			TWDB Coordination														
			Construction Phase (Assuming 5 month Construction Duration)														
			General Coordination w/ City & Contractor														
			TWDB Coordination														
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)														
			Review Submittals (50 assumed)														
			Review Lab, Shop & Mill Test Rpts														
			Review O&M Manual & Revise Specs as Necessary														
			Respond to Contr. RFIs (Assume 12)														
			Review Alterations. Prepare RFPs, COs - 3 total														
			Coordination of Construction Related Challenges														
			Meeting and Site Visits														
			Pre-Construction Conference														
			Bi-weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (11 total)														
			Construction Site Visit - 1 per month x 5 months = 5 total, including documentation and follow up time. 2 hours per visit. (monthly site visits for engineer)														

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks				Labor													
Phase	Task	Basic or Special	Task Description	Kaylyn Hudson	Andrew Swynenberg	Garrett Johnston	Noe Ortiz	Brad Watson	Michael Robertson	Bailey Watson	Josh Moore	Julia Whitcraft	Tom Dixon	Tam Tran	CJ Sellers	Alyxes Martinez	Brian King
				Engineer IV	Engineer IV	Engineer VI	BIM/CAD Designer II	Structural QC	Engineer V	Engineer II	BIM/CAD Technician III	BIM/CAD Designer II	Environmental Scientist VII	Environmental Scientist III	Environmental Scientist III	Environmental Scientist II	GIS Analyst V
				$156	$156	$209	$153	$240	$178	$137	$96	$153	$209	$113	$113	$113	$156
			Misc. Coordination Meetings x 4														
			Substantial Completion Meeting x 1														
			Final Completion Meeting x 1														
			1-Year Warranty Inspection and Follow Up Visit														
			Certification of Project Construction & TCEQ Coordination														
			Prepare Draft/Final Record Drawings (Electronic)														
			Total Hours / Quantity	**222**	**104**	**16**	**92**	**30**	**174**	**252**	**320**	**14**	**23**	**308**	**84**	**96**	**24**
			Total Effort	**$ 34,844**	**$ 16,224**	**$ 3,344**	**$ 14,247**	**$ 7,200**	**$ 31,973**	**$ 35,464**	**$ 31,433**	**$ 2,166**	**$ 4,807**	**$ 34,804**	**$ 9,492**	**$ 10,848**	**$ 3,744**

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks																	
Phase	Task	Basic or Special	Task Description	Kimberly Buckley	Ben Hagood	Heath Myers	Jake Heimann	Junior Henson	Brian Glynn	Jonathan Faughtenberry	Tom Roessler	Chelsea Thorn	Luis Lopez	Kirk Millican	Scott Vaughan	Adam Young	Nick Prisco
				Group Manager	Environmental Scientist V	GIS Analyst IV	Construction Manager III	Construction Representative IV	Engineer VI	Bore QC	Arch VI	Arch IV	Arch Specs/Code	Arch QC	Mech. QC	Mech.	Mech.
				$240	$178	$137	$138	$138	$209	$209	$209	$156	$113	$240	$178	$240	$178
			Project Management														
			Internal kickoff meeting						1		1	1					1
			External kickoff meeting								1						
			Periodic internal meetings (12 months design - video)						6		3	6					2
			Periodic client meetings (Bi-weekly x 12 months - video)						1								
			External stakeholder meetings														
			Maintain and monitor scope / schedule / budget (28 months)									6		6			
			One Page Reports / Periodic client communications (28 months)														
			Corporate Support (Scheduler)														
			Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)														
			Project Scoping, Preparation and Setup				4		4		4						4
			Project Closeout														
			Contract Preparation for Subconsultants														
			Maintain Project Decision/Issues Log - Design Only														
			Prepare and maintain Entity/Utility Coord. Log - Design Only														
			Public Meetings x 2 + PowerPoint + Gatorboards x 2														
			Quality Management														
			Develop quality management plan														
			Senior Advisor														
			Quality Control reviews (3 reviews x 8 hours)							12				24	12	4	
			Quality Assurance reviews														
			Constructability reviews														
			30% Design														
			Conduct Project Site Visit, including WWTP, and CRWA														
			Field Survey + Coordination Between CAD + Stake Holder Meetings														
			Develop Exhibits and Tracking for Easements and Metes and Bounds														
			Proposed Easements (16 total) + Coordination and CAD Verification														
			Funding Coordination & Modifications of Preliminary Reports														
			Provide 30% Design Plans								16	40	8				8
			Cost Estimating								2						1
			Lift Station Drainage Design														
			Evaluate Rectangular vs. Round Wet Well														
			Blanco River Bore						12								
			Hydraulic Impact Assessment														
			Erosion Hazard Zone Development														
			Environmental and Cultural Coordination	8	120	60											
			30% Submittal														
			Pre-Submittal Coordination Set and Review														4
			Submittal Preparation for QC									2					2
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City						1		1	2					2
			Submit 30% Plans - PDF														2
			30% Design Workshops, Resp. to Comments, Mtg. Minutes						1								
			60% Design														
			Develop Scope for Geotechnical Engineering & QC						6								
			Utility Coordination/Meetings with Stake Holders														
			Update Exhibits and Tracking for Easements and Metes and Bounds														
			Transient Analysis														
			Provide 60% Design Plans						20		20	160					16
			60% Project Specifications						8				16				2
			Prepare SWPPP														
			Prepare Floodplain Development Permit & Watershed Protectin Plan Applic														
			Cost Estimating						1		2						1
			60% Submittal														
			Pre-Submittal Coordination Set and Review														2
			Submittal Preparation for QC									2					2
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City						1		4	8					2
			60% Submittal - PDF														2
			60% Design Workshops, Resp. to Comments, Mtg. Minutes						1								
			90%/100% Design														
			Utility Coordination/Meetings with Stake Holders														

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks																
Phase	Task	Basic or Special	Task Description	Kimberly Buckley	Ben Hagood	Heath Myers	Jake Heimann	Junior Henson	Brian Glynn	Jonathan Faughtenberry	Tom Roessler	Chelsea Thorn	Luis Lopez	Kirk Millican	Scott Vaughan	Adam Young	Nick Prisco
				Group Manager	Environmental Scientist V	GIS Analyst IV	Construction Manager III	Construction Representative IV	Engineer VI	Bore QC	Arch VI	Arch IV	Arch Specs/Code	Arch QC	Mech. QC	Mech.	Mech.
				$240	$178	$137	$138	$138	$209	$209	$209	$156	$113	$240	$178	$240	$178
			Provide 90% Design Plans						8		16	88					8
			90% Project Specifications						4				8				2
			Cost Estimating						1		2						1
			90% Submittal														
			Pre-Submittal Coordination Set and Review														1
			Submittal Preparation for QC									2					2
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City								4	2					2
			90% Submittal - PDF														2
			90% Design Workshops, Resp. to Comments, Mtg. Minutes														
			TCEQ and City Review Permitting														
			100% Draft Coordination and Comment Responses														
			Provide 100% Design Plans								12	64					2
			100% Project Specifications										8				2
			Project Checklists														
			Cost Estimating														1
			100% Signed and Sealed Submittal (5 - 11x17 plans (100 sheets), 5 specifications (900 sheets)								6						
			TWDB Coordination														
			Bid Phase														
			Prepare Pre-Bid Presentation														
			Prepare Agenda and Attend Pre-bid Meeting														
			Attend Bid Opening														
			Prepare Addenda						4		8	18					4
			Review and Evaluate Contractor's Qualifications														
			Prepare Cost Evaluation Letter and RoA Letter														
			TWDB Coordination														
			Construction Phase														
			General Coordination w/ City & Contractor				100										
			TWDB Coordination														
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)								4	16					
			Review Submittals (200 assumed)						8		4	24					4
			Review Lab, Shop & Mill Test Rpts														
			Review O&M Manual & Revise Specs as Necessary														
			Respond to Contr. RFIs (Assume 12)						4		4	8					2
			Review Alterations. Prepare RFPs, COs - 3 total														
			Coordination of Construction Related Challenges				40		4								
			Meeting and Site Visits														
			Pre-Construction Conference				4										
			Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (30 total)				15										
			Monthly Site Visits x 15 month Construction Time, 15 total site visits) Including documentation, agendas, meeting minutes and follow up time. 3 hours per visit.					128									
			Misc. Project Review Meetings x 4														
			Misc. Coordination Meetings x 6				24	24									
			Wet Well Pre-Coating Meetings x 1				24	24									
			Wet Well Coating Inspection					4									
			Testing and Start-Up Meeting					4									
			Substantial Completion Meeting x 2					8									
			Final Completion Meeting x 2					4									
			1-Year Warranty Inspection and Follow Up Visit														
			Certification of Project Construction & TCEQ Coordination														
			Prepare Draft/Final Record Drawings (Electronic)								2	12					2
			Supplemental Items														
			Provide Two Bid Packages:														
			Design Phase														
			Funding Coordination & Modifications of Preliminary Reports														
			Prepare 16 aerial exhibits to support parcel acquisition with easements shown.														

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks																	
Phase	Task	Basic or Special	Task Description	Kimberly Buckley	Ben Hagood	Heath Myers	Jake Heimann	Junior Henson	Brian Glynn	Jonathan Faughtenberry	Tom Roessler	Chelsea Thorn	Luis Lopez	Kirk Millican	Scott Vaughan	Adam Young	Nick Prisco
				Group Manager	Environmental Scientist V	GIS Analyst IV	Construction Manager III	Construction Representative IV	Engineer VI	Bore QC	Arch VI	Arch IV	Arch Specs/Code	Arch QC	Mech. QC	Mech.	Mech.
				$240	$178	$137	$138	$138	$209	$209	$209	$156	$113	$240	$178	$240	$178
			30% Plans Submittal														
			Cost Estimating														
			Pre-Submittal Coordination Set and Review														
			Submittal Preparation for QC														
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City														
			Submit 30% Plans - PDF														
			30% Design Workshops, Resp. to Comments, Mtg. Minutes														
			Provide 60% Design Plans														
			60% Project Specifications														
			Prepare SWPPP														
			Cost Estimating														
			60% Submittal														
			Pre-Submittal Coordination Set and Review														
			Submittal Preparation for QC														
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City														
			60% Submittal - PDF														
			60% Design Workshops, Resp. to Comments, Mtg. Minutes														
			Provide 90% Design Plans														
			90% Project Specifications														
			Cost Estimating														
			90% Submittal														
			Pre-Submittal Coordination Set and Review														
			Submittal Preparation for QC														
			Quality Control Review by FNI														
			Address Comments and Submit Draft to City														
			90% Submittal - PDF														
			90% Design Workshops, Resp. to Comments, Mtg. Minutes														
			TCEQ														
			100% Draft Coordination and Comment Responses														
			Provide 100% Design Plans														
			100% Project Specifications														
			Cost Estimating														
			100% Signed and Sealed Submittal (5 - 11x17 plans (30 sheets), 5 specifications (500 sheets)														
			TWDB Coordination														
			Bid Phase														
			Prepare Pre-Bid Presentation														
			Prepare Agenda and Attend Pre-bid Meeting														
			Attend Bid Opening														
			Prepare Addenda														
			Review and Evaluate Contractor's Qualifications														
			Prepare Cost Evaluation Letter and RoA Letter														
			TWDB Coordination														
			Construction Phase (Assuming 5 month Construction Duration)														
			General Coordination w/ City & Contractor														
			TWDB Coordination														
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)														
			Review Submittals (50 assumed)														
			Review Lab, Shop & Mill Test Rpts														
			Review O&M Manual & Revise Specs as Necessary														
			Respond to Contr. RFIs (Assume 12)														
			Review Alterations. Prepare RFPs, COs - 3 total														
			Coordination of Construction Related Challenges														
			Meeting and Site Visits														
			Pre-Construction Conference														
			Bi-weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (11 total)														
			Construction Site Visit - 1 per month x 5 months = 5 total, including documentation and follow up time. 2 hours per visit. (monthly site visits for engineer)														

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks																		
Phase	**Task**	**Basic or Special**	**Task Description**	Kimberly Buckley	Ben Hagood	Heath Myers	Jake Heimann	Junior Henson	Brian Glynn	Jonathan Faughtenberry	Tom Roessler	Chelsea Thorn	Luis Lopez	Kirk Millican	Scott Vaughan	Adam Young	Nick Prisco
				Group Manager	Environmental Scientist V	GIS Analyst IV	Construction Manager III	Construction Representative IV	Engineer VI	Bore QC	Arch VI	Arch IV	Arch Specs/Code	Arch QC	Mech. QC	Mech.	Mech.
				$240	$178	$137	$138	$138	$209	$209	$209	$156	$113	$240	$178	$240	$178
			Misc. Coordination Meetings x 4														
			Substantial Completion Meeting x 1														
			Final Completion Meeting x 1														
			1-Year Warranty Inspection and Follow Up Visit														
			Certification of Project Construction & TCEQ Coordination														
			Prepare Draft/Final Record Drawings (Electronic)														
			Total Hours / Quantity	**8**	**120**	**60**	**211**	**196**	**96**	**12**	**116**	**461**	**40**	**30**	**12**	**4**	**88**
			Total Effort	**$ 1,920**	**$ 21,360**	**$ 8,220**	**$ 31,449**	**$ 29,255**	**$ 20,479**	**$ 2,508**	**$ 24,884**	**$ 73,766**	**$ 4,592**	**$ 7,200**	**$ 2,136**	**$ 960**	**$ 15,972**

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks										
Phase	Task	Basic or Special	Task Description	Erin Hollingsworth	Jesse Ellis	Rebecca Peters	Tom Hill	Total Hours	Total Labor Effort	
				Mech.	Trans. Analysis	Trans. Analysis	Tran. Analysis			
				$137	$137	$178	$240			
			Project Management						$	-
			Internal kickoff meeting	1				19	$	3,139
			External kickoff meeting					10	$	1,634
			Periodic internal meetings (12 months design - video)	6	1	1	1	138	$	22,030
			Periodic client meetings (Bi-weekly x 12 months - video)					87	$	14,118
			External stakeholder meetings					24	$	3,892
			Maintain and monitor scope / schedule / budget (28 months)					68	$	11,728
			One Page Reports / Periodic client communications (28 months)					32	$	4,688
			Corporate Support (Scheduler)					12	$	1,644
			Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)					28	$	4,144
			Project Scoping, Preparation and Setup					92	$	17,708
			Project Closeout					20	$	3,264
			Contract Preparation for Subconsultants					17	$	2,732
			Maintain Project Decision/Issues Log - Design Only					22	$	3,128
			Prepare and maintain Entity/Utility Coord. Log - Design Only					22	$	3,128
			Public Meetings x 2 + PowerPoint + Gatorboards x 2					56	$	8,880
									$	-
			Quality Management						$	-
			Develop quality management plan					2	$	312
			Senior Advisor					40	$	8,360
			Quality Control reviews (3 reviews x 8 hours)					226	$	48,782
			Quality Assurance reviews					6	$	1,161
			Constructability reviews					8	$	1,672
									$	-
			30% Design						$	-
			Conduct Project Site Visit, including WWTP, and CRWA					16	$	2,720
			Field Survey + Coordination Between CAD + Stake Holder Meetings					40	$	6,664
			Develop Exhibits and Tracking for Easements and Metes and Bounds					57	$	6,742
			Proposed Easements (16 total) + Coordination and CAD Verification					56	$	8,336
			Funding Coordination & Modifications of Preliminary Reports					142	$	21,302
			Provide 30% Design Plans	16				1,225	$	170,633
			Cost Estimating	1				30	$	4,544
			Lift Station Drainage Design					122	$	20,156
			Evaluate Rectangular vs. Round Wet Well					88	$	12,368
			Blanco River Bore					104	$	16,672
			Hydraulic Impact Assessment					112	$	18,668
			Erosion Hazard Zone Development					62	$	10,338
			Environmental and Cultural Coordination					623	$	81,778
			30% Submittal						$	-
			Pre-Submittal Coordination Set and Review	4				26	$	3,960
			Submittal Preparation for QC	4				18	$	2,624
			Quality Control Review by FNI					10	$	1,840
			Address Comments and Submit Draft to City	4				62	$	9,288
			Submit 30% Plans - PDF	4				20	$	2,980
			30% Design Workshops, Resp. to Comments, Mtg. Minutes					77	$	11,667
									$	-
			60% Design						$	-
			Develop Scope for Geotechnical Engineering & QC					17	$	3,403
			Utility Coordination/Meetings with Stake Holders					32	$	5,440
			Update Exhibits and Tracking for Easements and Metes and Bounds					28	$	3,712
			Transient Analysis		120	40	60	252	$	42,396
			Provide 60% Design Plans	32				1,857	$	253,769
			60% Project Specifications	8				111	$	16,744
			Prepare SWPPP					104	$	11,788
			Prepare Floodplain Development Permit & Watershed Protectin Plan Applic					32	$	4,622
			Cost Estimating	1				34	$	5,130
			60% Submittal						$	-
			Pre-Submittal Coordination Set and Review	2				40	$	6,030
			Submittal Preparation for QC	2				22	$	3,286
			Quality Control Review by FNI					12	$	1,884
			Address Comments and Submit Draft to City	4				70	$	10,642
			60% Submittal - PDF	2				24	$	3,118
			60% Design Workshops, Resp. to Comments, Mtg. Minutes					71	$	10,775
									$	-
			90%/100% Design						$	-
			Utility Coordination/Meetings with Stake Holders						$	-

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks										
Phase	Task	Basic or Special	Task Description	Erin Hollingsworth	Jesse Ellis	Rebecca Peters	Tom Hill	Total Hours	Total Labor Effort	
				Mech.	Trans. Analysis	Trans. Analysis	Tran. Analysis			
				$137	$137	$178	$240			
			Provide 90% Design Plans	16	24	16	8	1,585	$	223,691
			90% Project Specifications	4				157	$	24,270
			Cost Estimating	1				34	$	5,335
			90% Submittal						$	-
			Pre-Submittal Coordination Set and Review	1				36	$	5,573
			Submittal Preparation for QC	2				22	$	3,417
			Quality Control Review by FNI					12	$	1,959
			Address Comments and Submit Draft to City	2				66	$	10,614
			90% Submittal - PDF	2				12	$	1,795
			90% Design Workshops, Resp. to Comments, Mtg. Minutes					44	$	6,820
			TCEQ and City Review Permitting					14	$	2,159
			100% Draft Coordination and Comment Responses					70	$	10,768
			Provide 100% Design Plans	4				486	$	70,975
			100% Project Specifications	2				72	$	10,695
			Project Checklists					16	$	2,268
			Cost Estimating	1				13	$	1,966
			100% Signed and Sealed Submittal (5 - 11x17 plans (100 sheets), 5 specifications (900 sheets)					32	$	5,284
			TWDB Coordination					78	$	12,066
									$	-
			Bid Phase						$	-
			Prepare Pre-Bid Presentation					12	$	1,906
			Prepare Agenda and Attend Pre-bid Meeting					8	$	1,297
			Attend Bid Opening					2	$	347
			Prepare Addenda	4				198	$	30,647
			Review and Evaluate Contractor's Qualifications					23	$	3,438
			Prepare Cost Evaluation Letter and RoA Letter					13	$	1,974
			TWDB Coordination					16	$	2,438
									$	-
			Construction Phase						$	-
			General Coordination w/ City & Contractor					196	$	30,951
			TWDB Coordination					64	$	10,167
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)					48	$	7,385
			Review Submittals (200 assumed)	16				394	$	62,186
			Review Lab, Shop & Mill Test Rpts					30	$	4,651
			Review O&M Manual & Revise Specs as Necessary					24	$	3,721
			Respond to Contr. RFIs (Assume 12)	4				95	$	15,993
			Review Alterations. Prepare RFPs, COs - 3 total					66	$	10,598
			Coordination of Construction Related Challenges					84	$	13,620
			Meeting and Site Visits						$	-
			Pre-Construction Conference					14	$	2,364
			Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (30 total)					124	$	19,984
			Monthly Site Visits x 15 month Construction Time, 15 total site visits) Including documentation, agendas, meeting minutes and follow up time. 3 hours per visit.					248	$	39,645
			Misc. Project Review Meetings x 4					40	$	7,152
			Misc. Coordination Meetings x 6					112	$	18,119
			Wet Well Pre-Coating Meetings x 1					72	$	11,902
			Wet Well Coating Inspection					20	$	3,297
			Testing and Start-Up Meeting					16	$	2,966
			Substantial Completion Meeting x 2					28	$	4,703
			Final Completion Meeting x 2					22	$	3,632
			1-Year Warranty Inspection and Follow Up Visit					14	$	2,287
			Certification of Project Construction & TCEQ Coordination					3	$	465
			Prepare Draft/Final Record Drawings (Electronic)	4				158	$	21,898
									$	-
			Supplemental Items						$	-
			Provide Two Bid Packages:						$	-
			Design Phase						$	-
			Funding Coordination & Modifications of Preliminary Reports					34	$	5,044
			Prepare 16 aerial exhibits to support parcel acquisition with easements shown.					132	$	15,200

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks										
Phase	Task	Basic or Special	Task Description	Erin Hollingsworth	Jesse Ellis	Rebecca Peters	Tom Hill	Total Hours	Total Labor Effort	
				Mech.	Trans. Analysis	Trans. Analysis	Tran. Analysis			
				$137	$137	$178	$240			
			30% Plans Submittal					188	$	23,736
			Cost Estimating					6	$	860
			Pre-Submittal Coordination Set and Review					10	$	1,528
			Submittal Preparation for QC					10	$	1,408
			Quality Control Review by FNI					10	$	1,840
			Address Comments and Submit Draft to City					34	$	5,044
			Submit 30% Plans - PDF					14	$	2,076
			30% Design Workshops, Resp. to Comments, Mtg. Minutes					27	$	4,005
			Provide 60% Design Plans					188	$	23,736
			60% Project Specifications					49	$	6,906
			Prepare SWPPP					88	$	9,980
			Cost Estimating					10	$	1,559
			60% Submittal						$	-
			Pre-Submittal Coordination Set and Review					12	$	1,884
			Submittal Preparation for QC					16	$	2,344
			Quality Control Review by FNI					12	$	2,196
			Address Comments and Submit Draft to City					27	$	4,005
			60% Submittal - PDF					20	$	2,488
			60% Design Workshops, Resp. to Comments, Mtg. Minutes					27	$	4,005
			Provide 90% Design Plans					188	$	24,685
			90% Project Specifications					49	$	7,182
			Cost Estimating					9	$	1,404
			90% Submittal						$	-
			Pre-Submittal Coordination Set and Review					10	$	1,589
			Submittal Preparation for QC					16	$	2,438
			Quality Control Review by FNI					12	$	2,284
			Address Comments and Submit Draft to City					27	$	4,165
			90% Submittal - PDF					8	$	1,140
			90% Design Workshops, Resp. to Comments, Mtg. Minutes					27	$	4,165
			TCEQ					3	$	447
			100% Draft Coordination and Comment Responses					21	$	3,114
			Provide 100% Design Plans					42	$	6,020
			100% Project Specifications					13	$	1,974
			Cost Estimating					4	$	609
			100% Signed and Sealed Submittal (5 - 11x17 plans (30 sheets), 5 specifications (500 sheets)					16	$	2,438
			TWDB Coordination					78	$	12,066
			Bid Phase						$	-
			Prepare Pre-Bid Presentation					12	$	1,906
			Prepare Agenda and Attend Pre-bid Meeting					8	$	1,297
			Attend Bid Opening					2	$	347
			Prepare Addenda					44	$	6,454
			Review and Evaluate Contractor's Qualifications					17	$	2,583
			Prepare Cost Evaluation Letter and RoA Letter					13	$	1,974
			TWDB Coordination					16	$	2,438
			Construction Phase (Assuming 5 month Construction Duration)						$	-
			General Coordination w/ City & Contractor					44	$	7,649
			TWDB Coordination					64	$	10,167
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)					20	$	2,685
			Review Submittals (50 assumed)					87	$	13,311
			Review Lab, Shop & Mill Test Rpts					12	$	1,860
			Review O&M Manual & Revise Specs as Necessary					6	$	930
			Respond to Contr. RFIs (Assume 12)					26	$	4,139
			Review Alterations. Prepare RFPs, COs - 3 total					26	$	4,139
			Coordination of Construction Related Challenges					28	$	4,558
			Meeting and Site Visits						$	-
			Pre-Construction Conference					10	$	1,767
			Bi-weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (11 total)					55	$	8,602
			Construction Site Visit - 1 per month x 5 months = 5 total, including documentation and follow up time. 2 hours per visit. (monthly site visits for engineer)					24	$	4,006

City of San Marcos
Highway 80 Utility Project
4/22/2022
Detailed Cost Breakdown

Tasks									
Phase	**Task**	**Basic or Special**	**Task Description**	Erin Hollingsworth	Jesse Ellis	Rebecca Peters	Tom Hill	**Total Hours**	**Total Labor Effort**
				Mech.	Trans. Analysis	Trans. Analysis	Tran. Analysis		
				$137	$137	$178	$240		
			Misc. Coordination Meetings x 4					20	$ 3,372
			Substantial Completion Meeting x 1					10	$ 1,686
			Final Completion Meeting x 1					8	$ 1,349
			1-Year Warranty Inspection and Follow Up Visit					5	$ 782
			Certification of Project Construction & TCEQ Coordination					3	$ 465
			Prepare Draft/Final Record Drawings (Electronic)					20	$ 2,685
									$ -
			Total Hours / Quantity	**154**	**145**	**57**	**69**	**13,436**	
			Total Effort	**$ 21,580**	**$ 19,997**	**$ 10,260**	**$ 16,637**		**$ 1,988,267**

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	2,412,652
	Special Services	-
	Total Project	2,412,652

Tasks				Expenses										
Phase	Task	Basic or Special	Task Description	Tech Charge	Miles	Meals	Hotel	B&W (sheet)	Color (sheet)	Binding (each)	Lg Format - Bond - B&W (sq. ft.)	Lg Format - Glossy/Mylar - B&W (sq. ft.)	Other	Total Expense Effort
			Project Management											$ -
			Internal kickoff meeting	19										$ 162
			External kickoff meeting	10	16									$ 94
			Periodic internal meetings (12 months design - video)	138										$ 1,173
			Periodic client meetings (Bi-weekly x 12 months - video)	87										$ 740
			External stakeholder meetings	24	60									$ 239
			Maintain and monitor scope / schedule / budget (28 months)	68										$ 578
			One Page Reports / Periodic client communications (28 months)	32										$ 272
			Corporate Support (Scheduler)	12										$ 102
			Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)	28										$ 238
			Project Scoping, Preparation and Setup	92										$ 782
			Project Closeout	20										$ 170
			Contract Preparation for Subconsultants	17										$ 145
			Maintain Project Decision/Issues Log - Design Only	22										$ 187
			Prepare and maintain Entity/Utility Coord. Log - Design Only	22										$ 187
			Public Meetings x 2 + PowerPoint + Gatorboards x 2	56	40								300	$ 844
														$ -
			Quality Management											$ -
			Develop quality management plan	2										$ 17
			Senior Advisor	40										$ 340
			Quality Control reviews (3 reviews x 8 hours)	226										$ 1,921
			Quality Assurance reviews	6										$ 51
			Constructability reviews	8										$ 68
														$ -
			30% Design											$ -
			Conduct Project Site Visit, including WWTP, and CRWA	16	40									$ 159
			Field Survey + Coordination Between CAD + Stake Holder Meetings	40	500								500	$ 1,208
			Develop Exhibits and Tracking for Easements and Metes and Bounds	57										$ 485
			Proposed Easements (16 total) + Coordination and CAD Verification	56										$ 476
			Funding Coordination & Modifications of Preliminary Reports	142										$ 1,207
			Provide 30% Design Plans	1,225										$ 10,416
			Cost Estimating	30										$ 255
			Lift Station Drainage Design	122										$ 1,037
			Evaluate Rectangular vs. Round Wet Well	88										$ 748
			Blanco River Bore	104										$ 884
			Hydraulic Impact Assessment	112										$ 952
			Erosion Hazard Zone Development	62										$ 527
			Environmental and Cultural Coordination	623	2,100	400	500							$ 7,559
			30% Submittal											$ -
			Pre-Submittal Coordination Set and Review	26										$ 221
			Submittal Preparation for QC	18										$ 153
			Quality Control Review by FNI	10										$ 85
			Address Comments and Submit Draft to City	62										$ 527
			Submit 30% Plans - PDF	20										$ 170
			30% Design Workshops, Resp. to Comments, Mtg. Minutes	77	40									$ 678
														$ -
			60% Design											$ -
			Develop Scope for Geotechnical Engineering & QC	17										$ 145
			Utility Coordination/Meetings with Stake Holders	32										$ 272
			Update Exhibits and Tracking for Easements and Metes and Bounds	28										$ 238
			Transient Analysis	252										$ 2,142
			Provide 60% Design Plans	1,857									300	$ 16,132
			60% Project Specifications	111										$ 944
			Prepare SWPPP	104										$ 884
			Prepare Floodplain Development Permit & Watershed Protectin Plan Applic	32										$ 272
			Cost Estimating	34										$ 289
			60% Submittal											$ -
			Pre-Submittal Coordination Set and Review	40										$ 340
			Submittal Preparation for QC	22										$ 187
			Quality Control Review by FNI	12										$ 102
			Address Comments and Submit Draft to City	70										$ 595
			60% Submittal - PDF	24										$ 204
			60% Design Workshops, Resp. to Comments, Mtg. Minutes	71	40									$ 627
														$ -
			90%/100% Design											$ -
			Utility Coordination/Meetings with Stake Holders											$ -

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	2,412,652
	Special Services	-
	Total Project	2,412,652

Tasks				Expenses										
Phase	Task	Basic or Special	Task Description	Tech Charge	Miles	Meals	Hotel	B&W (sheet)	Color (sheet)	Binding (each)	Lg Format - Bond - B&W (sq. ft.)	Lg Format - Glossy/Mylar - B&W (sq. ft.)	Other	Total Expense Effort
			Provide 90% Design Plans	1,585									300	$ 13,820
			90% Project Specifications	157										$ 1,335
			Cost Estimating	34										$ 289
			90% Submittal											$ -
			Pre-Submittal Coordination Set and Review	36										$ 306
			Submittal Preparation for QC	22										$ 187
			Quality Control Review by FNI	12										$ 102
			Address Comments and Submit Draft to City	66										$ 561
			90% Submittal - PDF	12										$ 102
			90% Design Workshops, Resp. to Comments, Mtg. Minutes	44	40									$ 397
			TCEQ and City Review Permitting	14										$ 119
			100% Draft Coordination and Comment Responses	70										$ 595
			Provide 100% Design Plans	486										$ 4,134
			100% Project Specifications	72										$ 612
			Project Checklists	16										$ 136
			Cost Estimating	13										$ 111
			100% Signed and Sealed Submittal (5 - 11x17 plans (100 sheets), 5 specifications (900 sheets)	32				5,000		10				$ 775
			TWDB Coordination	78										$ 663
														$ -
			Bid Phase											$ -
			Prepare Pre-Bid Presentation	12										$ 102
			Prepare Agenda and Attend Pre-bid Meeting	8	16								200	$ 307
			Attend Bid Opening	2	16									$ 26
			Prepare Addenda	198										$ 1,683
			Review and Evaluate Contractor's Qualifications	23										$ 196
			Prepare Cost Evaluation Letter and RoA Letter	13										$ 111
			TWDB Coordination	16										$ 136
														$ -
			Construction Phase											$ -
			General Coordination w/ City & Contractor	196									500	$ 2,241
			TWDB Coordination	64										$ 544
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)	48				5,000		11	519			$ 1,041
			Review Submittals (200 assumed)	394										$ 3,349
			Review Lab, Shop & Mill Test Rpts	30										$ 255
			Review O&M Manual & Revise Specs as Necessary	24										$ 204
			Respond to Contr. RFIs (Assume 12)	95										$ 808
			Review Alterations. Prepare RFPs, COs - 3 total	66										$ 561
			Coordination of Construction Related Challenges	84										$ 714
			Meeting and Site Visits											$ -
			Pre-Construction Conference	14	16									$ 128
			Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (30 total)	124										$ 1,054
			Monthly Site Visits x 15 month Construction Time, 15 total site visits) Including documentation, agendas, meeting minutes and follow up time. 3 hours per visit.	248	240									$ 2,248
			Misc. Project Review Meetings x 4	40	64									$ 377
			Misc. Coordination Meetings x 6	112	96									$ 1,008
			Wet Well Pre-Coating Meetings x 1	72	16									$ 621
			Wet Well Coating Inspection	20	16									$ 179
			Testing and Start-Up Meeting	16	32									$ 155
			Substantial Completion Meeting x 2	28	32									$ 257
			Final Completion Meeting x 2	22	32									$ 206
			1-Year Warranty Inspection and Follow Up Visit	14	32									$ 138
			Certification of Project Construction & TCEQ Coordination	3										$ 26
			Prepare Draft/Final Record Drawings (Electronic)	158										$ 1,343
														$ -
			Supplemental Items											$ -
			Provide Two Bid Packages:											$ -
			Design Phase										500	$ 575
			Funding Coordination & Modifications of Preliminary Reports	34										$ 289
			Prepare 16 aerial exhibits to support parcel acquisition with easements shown.	132										$ 1,122

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	2,412,652
	Special Services	-
	Total Project	2,412,652

Tasks				Expenses										
Phase	Task	Basic or Special	Task Description	Tech Charge	Miles	Meals	Hotel	B&W (sheet)	Color (sheet)	Binding (each)	Lg Format - Bond - B&W (sq. ft.)	Lg Format - Glossy/Mylar - B&W (sq. ft.)	Other	Total Expense Effort
			30% Plans Submittal	188										$ 1,598
			Cost Estimating	6										$ 51
			Pre-Submittal Coordination Set and Review	10										$ 85
			Submittal Preparation for QC	10										$ 85
			Quality Control Review by FNI	10										$ 85
			Address Comments and Submit Draft to City	34										$ 289
			Submit 30% Plans - PDF	14										$ 119
			30% Design Workshops, Resp. to Comments, Mtg. Minutes	27										$ 230
			Provide 60% Design Plans	188										$ 1,598
			60% Project Specifications	49										$ 417
			Prepare SWPPP	88										$ 748
			Cost Estimating	10										$ 85
			60% Submittal											$ -
			Pre-Submittal Coordination Set and Review	12										$ 102
			Submittal Preparation for QC	16										$ 136
			Quality Control Review by FNI	12										$ 102
			Address Comments and Submit Draft to City	27										$ 230
			60% Submittal - PDF	20										$ 170
			60% Design Workshops, Resp. to Comments, Mtg. Minutes	27										$ 230
			Provide 90% Design Plans	188										$ 1,598
			90% Project Specifications	49										$ 417
			Cost Estimating	9										$ 77
			90% Submittal											$ -
			Pre-Submittal Coordination Set and Review	10										$ 85
			Submittal Preparation for QC	16										$ 136
			Quality Control Review by FNI	12										$ 102
			Address Comments and Submit Draft to City	27										$ 230
			90% Submittal - PDF	8										$ 68
			90% Design Workshops, Resp. to Comments, Mtg. Minutes	27										$ 230
			TCEQ	3										$ 26
			100% Draft Coordination and Comment Responses	21										$ 179
			Provide 100% Design Plans	42										$ 357
			100% Project Specifications	13										$ 111
			Cost Estimating	4										$ 34
			100% Signed and Sealed Submittal (5 - 11x17 plans (30 sheets), 5 specifications (500 sheets)	16				2,650		10				$ 404
			TWDB Coordination	78										$ 663
			Bid Phase											$ -
			Prepare Pre-Bid Presentation	12										$ 102
			Prepare Agenda and Attend Pre-bid Meeting	8										$ 68
			Attend Bid Opening	2										$ 17
			Prepare Addenda	44										$ 374
			Review and Evaluate Contractor's Qualifications	17										$ 145
			Prepare Cost Evaluation Letter and RoA Letter	13										$ 111
			TWDB Coordination	16										$ 136
			Construction Phase (Assuming 5 month Construction Duration)											$ -
			General Coordination w/ City & Contractor	44									500	$ 949
			TWDB Coordination	64										$ 544
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)	20				2,650		11	156			$ 477
			Review Submittals (50 assumed)	87										$ 735
			Review Lab, Shop & Mill Test Rpts	12										$ 102
			Review O&M Manual & Revise Specs as Necessary	6										$ 51
			Respond to Contr. RFIs (Assume 12)	26										$ 221
			Review Alterations. Prepare RFPs, COs - 3 total	26										$ 221
			Coordination of Construction Related Challenges	28										$ 238
			Meeting and Site Visits											$ -
			Pre-Construction Conference	10	16									$ 94
			Bi-weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (11 total)	55										$ 468
			Construction Site Visit - 1 per month x 5 months = 5 total, including documentation and follow up time. 2 hours per visit. (monthly site visits for engineer)	24	65									$ 242

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	2,412,652
	Special Services	-
	Total Project	2,412,652

Tasks				Expenses										
Phase	Task	Basic or Special	Task Description	Tech Charge	Miles	Meals	Hotel	B&W (sheet)	Color (sheet)	Binding (each)	Lg Format - Bond - B&W (sq. ft.)	Lg Format - Glossy/Mylar - B&W (sq. ft.)	Other	Total Expense Effort
			Misc. Coordination Meetings x 4	20	52									$ 200
			Substantial Completion Meeting x 1	10	16									$ 94
			Final Completion Meeting x 1	8	16									$ 77
			1-Year Warranty Inspection and Follow Up Visit	5	16									$ 52
			Certification of Project Construction & TCEQ Coordination	3										$ 26
			Prepare Draft/Final Record Drawings (Electronic)	20										$ 170
														$ -
			Total Hours / Quantity	**13,436**	**3,665**	**400**	**500**	**15,300**	**-**	**42**	**675**	**-**	**3,100**	
			Total Effort	**$ 114,204**	**$ 2,144**	**$ 460**	**$ 575**	**$ 1,530**	**$ -**	**$ 11**	**$ 169**	**$ -**	**$ 3,565**	**$ 122,658**

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	2,412,652
	Special Services	-
	Total Project	2,412,652

Tasks				Subconsultants				Total	
Phase	Task	Basic or Special	Task Description	Grubb	Urban Civil			Total Sub Effort	Total Effort
			Project Management					$ -	$ -
			Internal kickoff meeting					$ -	$ 3,301
			External kickoff meeting					$ -	$ 1,728
			Periodic internal meetings (12 months design - video)					$ -	$ 23,203
			Periodic client meetings (Bi-weekly x 12 months - video)					$ -	$ 14,858
			External stakeholder meetings					$ -	$ 4,131
			Maintain and monitor scope / schedule / budget (28 months)					$ -	$ 12,306
			One Page Reports / Periodic client communications (28 months)					$ -	$ 4,960
			Corporate Support (Scheduler)					$ -	$ 1,746
			Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)					$ -	$ 4,382
			Project Scoping, Preparation and Setup					$ -	$ 18,490
			Project Closeout					$ -	$ 3,434
			Contract Preparation for Subconsultants					$ -	$ 2,877
			Maintain Project Decision/Issues Log - Design Only					$ -	$ 3,315
			Prepare and maintain Entity/Utility Coord. Log - Design Only					$ -	$ 3,315
			Public Meetings x 2 + PowerPoint + Gatorboards x 2					$ -	$ 9,724
								$ -	$ -
			Quality Management					$ -	$ -
			Develop quality management plan					$ -	$ 329
			Senior Advisor					$ -	$ 8,700
			Quality Control reviews (3 reviews x 8 hours)					$ -	$ 50,703
			Quality Assurance reviews					$ -	$ 1,212
			Constructability reviews					$ -	$ 1,740
								$ -	$ -
			30% Design					$ -	$ -
			Conduct Project Site Visit, including WWTP, and CRWA					$ -	$ 2,879
			Field Survey + Coordination Between CAD + Stake Holder Meetings		98,100			$ 112,815	$ 120,687
			Develop Exhibits and Tracking for Easements and Metes and Bounds					$ -	$ 7,227
			Proposed Easements (16 total) + Coordination and CAD Verification		56,000			$ 64,400	$ 73,212
			Funding Coordination & Modifications of Preliminary Reports					$ -	$ 22,509
			Provide 30% Design Plans	12,712				$ 14,619	$ 195,668
			Cost Estimating					$ -	$ 4,799
			Lift Station Drainage Design					$ -	$ 21,193
			Evaluate Rectangular vs. Round Wet Well					$ -	$ 13,116
			Blanco River Bore					$ -	$ 17,556
			Hydraulic Impact Assessment					$ -	$ 19,620
			Erosion Hazard Zone Development					$ -	$ 10,865
			Environmental and Cultural Coordination					$ -	$ 89,337
			30% Submittal					$ -	$ -
			Pre-Submittal Coordination Set and Review					$ -	$ 4,181
			Submittal Preparation for QC					$ -	$ 2,777
			Quality Control Review by FNI					$ -	$ 1,925
			Address Comments and Submit Draft to City					$ -	$ 9,815
			Submit 30% Plans - PDF					$ -	$ 3,150
			30% Design Workshops, Resp. to Comments, Mtg. Minutes					$ -	$ 12,345
								$ -	$ -
			60% Design					$ -	$ -
			Develop Scope for Geotechnical Engineering & QC					$ -	$ 3,548
			Utility Coordination/Meetings with Stake Holders					$ -	$ 5,712
			Update Exhibits and Tracking for Easements and Metes and Bounds					$ -	$ 3,950
			Transient Analysis					$ -	$ 44,538
			Provide 60% Design Plans					$ -	$ 269,901
			60% Project Specifications					$ -	$ 17,688
			Prepare SWPPP					$ -	$ 12,672
			Prepare Floodplain Development Permit & Watershed Protectin Plan Applic					$ -	$ 4,894
			Cost Estimating					$ -	$ 5,419
			60% Submittal	32,052				$ 36,860	$ 36,860
			Pre-Submittal Coordination Set and Review					$ -	$ 6,370
			Submittal Preparation for QC					$ -	$ 3,473
			Quality Control Review by FNI					$ -	$ 1,986
			Address Comments and Submit Draft to City					$ -	$ 11,237
			60% Submittal - PDF					$ -	$ 3,322
			60% Design Workshops, Resp. to Comments, Mtg. Minutes					$ -	$ 11,402
								$ -	$ -
			90%/100% Design					$ -	$ -
			Utility Coordination/Meetings with Stake Holders					$ -	$ -

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	2,412,652
	Special Services	-
	Total Project	2,412,652

Tasks				Subconsultants					Total
Phase	Task	Basic or Special	Task Description	Grubb	Urban Civil			Total Sub Effort	Total Effort
			Provide 90% Design Plans					$ -	$ 237,511
			90% Project Specifications					$ -	$ 25,605
			Cost Estimating					$ -	$ 5,624
			90% Submittal	28,696				$ 33,000	$ 33,000
			Pre-Submittal Coordination Set and Review					$ -	$ 5,879
			Submittal Preparation for QC					$ -	$ 3,604
			Quality Control Review by FNI					$ -	$ 2,061
			Address Comments and Submit Draft to City					$ -	$ 11,175
			90% Submittal - PDF					$ -	$ 1,897
			90% Design Workshops, Resp. to Comments, Mtg. Minutes					$ -	$ 7,218
			TCEQ and City Review Permitting					$ -	$ 2,278
			100% Draft Coordination and Comment Responses					$ -	$ 11,363
			Provide 100% Design Plans					$ -	$ 75,108
			100% Project Specifications					$ -	$ 11,307
			Project Checklists					$ -	$ 2,404
			Cost Estimating					$ -	$ 2,076
			100% Signed and Sealed Submittal (5 - 11x17 plans (100 sheets), 5 specifications (900 sheets)					$ -	$ 6,059
			TWDB Coordination					$ -	$ 12,729
								$ -	$ -
			Bid Phase					$ -	$ -
			Prepare Pre-Bid Presentation					$ -	$ 2,008
			Prepare Agenda and Attend Pre-bid Meeting					$ -	$ 1,604
			Attend Bid Opening					$ -	$ 374
			Prepare Addenda	1,700				$ 1,955	$ 34,285
			Review and Evaluate Contractor's Qualifications					$ -	$ 3,634
			Prepare Cost Evaluation Letter and RoA Letter					$ -	$ 2,084
			TWDB Coordination					$ -	$ 2,574
								$ -	$ -
			Construction Phase					$ -	$ -
			General Coordination w/ City & Contractor	24,112				$ 27,729	$ 60,921
			TWDB Coordination					$ -	$ 10,711
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)					$ -	$ 8,426
			Review Submittals (200 assumed)					$ -	$ 65,535
			Review Lab, Shop & Mill Test Rpts					$ -	$ 4,906
			Review O&M Manual & Revise Specs as Necessary					$ -	$ 3,925
			Respond to Contr. RFIs (Assume 12)					$ -	$ 16,800
			Review Alterations. Prepare RFPs, COs - 3 total					$ -	$ 11,159
			Coordination of Construction Related Challenges					$ -	$ 14,334
			Meeting and Site Visits					$ -	$ -
			Pre-Construction Conference					$ -	$ 2,493
			Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (30 total)					$ -	$ 21,038
			Monthly Site Visits x 15 month Construction Time, 15 total site visits) Including documentation, agendas, meeting minutes and follow up time. 3 hours per visit.					$ -	$ 41,893
			Misc. Project Review Meetings x 4					$ -	$ 7,529
			Misc. Coordination Meetings x 6					$ -	$ 19,127
			Wet Well Pre-Coating Meetings x 1					$ -	$ 12,523
			Wet Well Coating Inspection					$ -	$ 3,476
			Testing and Start-Up Meeting					$ -	$ 3,120
			Substantial Completion Meeting x 2					$ -	$ 4,960
			Final Completion Meeting x 2					$ -	$ 3,838
			1-Year Warranty Inspection and Follow Up Visit					$ -	$ 2,424
			Certification of Project Construction & TCEQ Coordination					$ -	$ 491
			Prepare Draft/Final Record Drawings (Electronic)		6,000			$ 6,900	$ 30,141
								$ -	$ -
			Supplemental Items					$ -	$ -
			Provide Two Bid Packages:					$ -	$ -
			Design Phase					$ -	$ 575
			Funding Coordination & Modifications of Preliminary Reports					$ -	$ 5,333
			Prepare 16 aerial exhibits to support parcel acquisition with easements shown.					$ -	$ 16,322

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	2,412,652
	Special Services	-
	Total Project	2,412,652

Tasks				Subconsultants					Total
Phase	Task	Basic or Special	Task Description	Grubb	Urban Civil			Total Sub Effort	Total Effort
			30% Plans Submittal					$ -	$ 25,334
			Cost Estimating					$ -	$ 911
			Pre-Submittal Coordination Set and Review					$ -	$ 1,613
			Submittal Preparation for QC					$ -	$ 1,493
			Quality Control Review by FNI					$ -	$ 1,925
			Address Comments and Submit Draft to City					$ -	$ 5,333
			Submit 30% Plans - PDF					$ -	$ 2,195
			30% Design Workshops, Resp. to Comments, Mtg. Minutes					$ -	$ 4,235
			Provide 60% Design Plans					$ -	$ 25,334
			60% Project Specifications					$ -	$ 7,323
			Prepare SWPPP					$ -	$ 10,728
			Cost Estimating					$ -	$ 1,644
			60% Submittal					$ -	$ -
			Pre-Submittal Coordination Set and Review					$ -	$ 1,986
			Submittal Preparation for QC					$ -	$ 2,480
			Quality Control Review by FNI					$ -	$ 2,298
			Address Comments and Submit Draft to City					$ -	$ 4,235
			60% Submittal - PDF					$ -	$ 2,658
			60% Design Workshops, Resp. to Comments, Mtg. Minutes					$ -	$ 4,235
			Provide 90% Design Plans					$ -	$ 26,283
			90% Project Specifications					$ -	$ 7,599
			Cost Estimating					$ -	$ 1,481
			90% Submittal					$ -	$ -
			Pre-Submittal Coordination Set and Review					$ -	$ 1,674
			Submittal Preparation for QC					$ -	$ 2,574
			Quality Control Review by FNI					$ -	$ 2,386
			Address Comments and Submit Draft to City					$ -	$ 4,395
			90% Submittal - PDF					$ -	$ 1,208
			90% Design Workshops, Resp. to Comments, Mtg. Minutes					$ -	$ 4,395
			TCEQ					$ -	$ 473
			100% Draft Coordination and Comment Responses					$ -	$ 3,292
			Provide 100% Design Plans					$ -	$ 6,377
			100% Project Specifications					$ -	$ 2,084
			Cost Estimating					$ -	$ 643
			100% Signed and Sealed Submittal (5 - 11x17 plans (30 sheets), 5 specifications (500 sheets)					$ -	$ 2,841
			TWDB Coordination					$ -	$ 12,729
			Bid Phase					$ -	$ -
			Prepare Pre-Bid Presentation					$ -	$ 2,008
			Prepare Agenda and Attend Pre-bid Meeting					$ -	$ 1,365
			Attend Bid Opening					$ -	$ 364
			Prepare Addenda					$ -	$ 6,828
			Review and Evaluate Contractor's Qualifications					$ -	$ 2,728
			Prepare Cost Evaluation Letter and RoA Letter					$ -	$ 2,084
			TWDB Coordination					$ -	$ 2,574
			Construction Phase (Assuming 5 month Construction Duration)					$ -	$ -
			General Coordination w/ City & Contractor					$ -	$ 8,598
			TWDB Coordination					$ -	$ 10,711
			Prepare Conformed Construction Documents - Submit (1) PDF, (5) 11"x17" (100 sheets), (1) 22"x34" Plans (100 sheets); (1) PDF and (3) Specifications (900 pages)					$ -	$ 3,161
			Review Submittals (50 assumed)					$ -	$ 14,046
			Review Lab, Shop & Mill Test Rpts					$ -	$ 1,962
			Review O&M Manual & Revise Specs as Necessary					$ -	$ 981
			Respond to Contr. RFIs (Assume 12)					$ -	$ 4,360
			Review Alterations. Prepare RFPs, COs - 3 total					$ -	$ 4,360
			Coordination of Construction Related Challenges					$ -	$ 4,796
			Meeting and Site Visits					$ -	$ -
			Pre-Construction Conference					$ -	$ 1,862
			Bi-weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (11 total)					$ -	$ 9,069
			Construction Site Visit - 1 per month x 5 months = 5 total, including documentation and follow up time. 2 hours per visit. (monthly site visits for engineer)					$ -	$ 4,248

City of San Marcos Highway 80 Utility Project 4/22/2022 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	2,412,652
	Special Services	-
	Total Project	2,412,652

Tasks				Subconsultants					Total
Phase	Task	Basic or Special	Task Description	Grubb	Urban Civil			Total Sub Effort	Total Effort
			Misc. Coordination Meetings x 4					$ -	$ 3,573
			Substantial Completion Meeting x 1					$ -	$ 1,781
			Final Completion Meeting x 1					$ -	$ 1,426
			1-Year Warranty Inspection and Follow Up Visit					$ -	$ 834
			Certification of Project Construction & TCEQ Coordination					$ -	$ 491
			Prepare Draft/Final Record Drawings (Electronic)		3,000			$ 3,450	$ 6,305
								$ -	$ -
			Total Hours / Quantity	**$ 99,272**	**$ 163,100**	**$ -**	**$ -**		
			Total Effort	**$ 114,163**	**$ 187,565**	**$ -**	**$ -**	**$ 301,728**	**$ 2,412,652**

EXHIBIT 3

City of San Marcos Highway 80 Utility Project – Amendment No. 1
PROJECT SCHEDULE

TIME OF COMPLETION: FNI is authorized to commence work on the project upon execution of this AGREEMENT and agrees to complete the services in accordance with the following schedule:

Milestone/Deliverable	Calendar Days
Anticipated Notice to Proceed	May 2022
30% Design	90 days following Notice to Proceed
60% Design	60 days following receipt of City comments on 30% submittal
90% Design	60 days following receipt of City comments on 60% submittal
100% Design/Bid Sets	30 days following receipt of City comments on 90% submittal
Bid Phase	As required per City contracting process
Construction Phase	540 days
Record Submittal	150 days following construction final completion

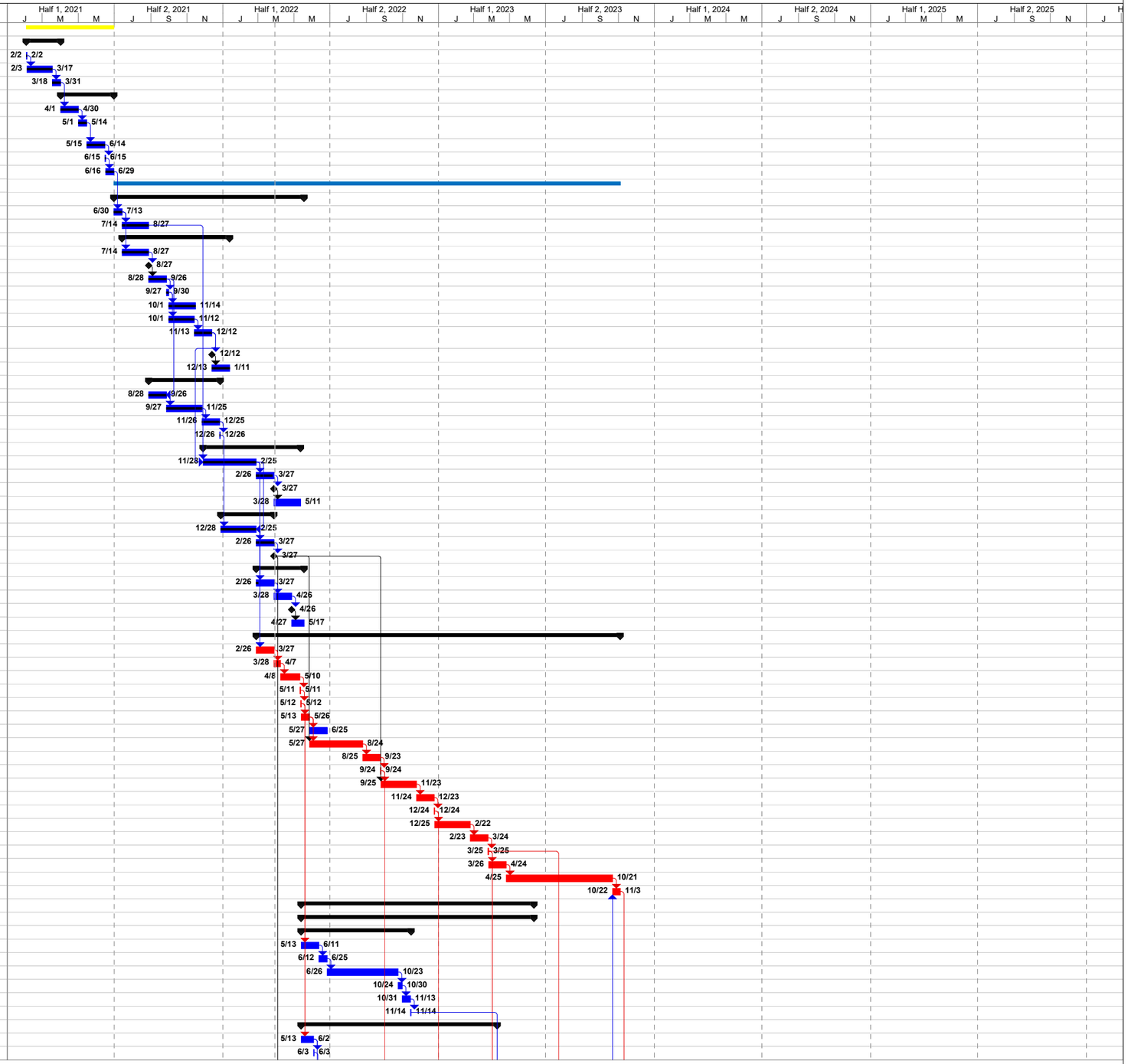
If FNI's services are delayed through no fault of FNI, FNI shall be entitled to adjust contract schedule consistent with the number of days of delay. These delays may include but are not limited to delays in City or regulatory reviews, delays on the flow of information to be provided to FNI, governmental approvals, etc.

Project schedule does not account for property acquisition. A detailed schedule provided by the City has been attached.

If the project is split between two bid packages, the schedule will be modified as agreeable between FNI and the City.

Exhibit 3 - Project Schedule

ID	Task Name	Duration	Start	Finish	Predecesso	Resource Names	Text1	Date1	Date2	% Complete
1	**Preliminary Phase**	**148 days**	**Tue 2/2/21**	**Tue 6/29/21**			**T**	**Tue 2/2/21**	**Tue 6/29/21**	**100%**
2	**Scoping**	**58 days**	**Tue 2/2/21**	**Wed 3/31/21**			**T**	**Tue 2/2/21**	**Wed 3/31/21**	**100%**
3	COSM / FNI Scoping Meeting	1 day	Tue 2/2/21	Tue 2/2/21			M	Tue 2/2/21	Tue 2/2/21	100%
4	Finalize Scope	43 days	Wed 2/3/21	Wed 3/17/21	3			Wed 2/3/21	Wed 3/17/21	100%
5	FNI PSA Submittal	14 days	Thu 3/18/21	Wed 3/31/21	4			Thu 3/18/21	Wed 3/31/21	100%
6	**Professional Service Contract**	**90 days**	**Thu 4/1/21**	**Tue 6/29/21**			**T**	**Thu 4/1/21**	**Tue 6/29/21**	**100%**
7	Negotiate Contract	30 days	Thu 4/1/21	Fri 4/30/21	5			Thu 4/1/21	Fri 4/30/21	100%
8	Prepare ARF/Verify Funds with Finance - May need reimbursement form	14 days	Sat 5/1/21	Fri 5/14/21	7			Sat 5/1/21	Fri 5/14/21	100%
9	ARF Review Process (Min 29 Days)	31 days	Sat 5/15/21	Mon 6/14/21	8			Sat 5/15/21	Mon 6/14/21	100%
10	City Council (Typically Tuesday)	1 day	Tue 6/15/21	Tue 6/15/21	9			Tue 6/15/21	Tue 6/15/21	100%
11	Execute Contract	14 days	Wed 6/16/21	Tue 6/29/21	10			Wed 6/16/21	Tue 6/29/21	100%
12	**Design Phase**	**857 days**	**Wed 6/30/21**	**Fri 11/3/23**			**T**	**Wed 6/30/21**	**Thu 11/2/23**	**28%**
13	**Preliminary Design**	**322 days**	**Wed 6/30/21**	**Tue 5/17/22**			**T**	**Wed 6/30/21**	**Sun 5/15/22**	**83%**
14	Kick Off Meeting	14 days	Wed 6/30/21	Tue 7/13/21	11		M	Wed 6/30/21	Tue 7/13/21	100%
15	Manhole Survey	45 days	Wed 7/14/21	Fri 8/27/21	14			Wed 7/14/21	Fri 8/27/21	100%
16	**Master Plan Update**	**182 days**	**Wed 7/14/21**	**Tue 1/11/22**			**T**	**Wed 7/14/21**	**Sun 1/9/22**	**100%**
17	Data Collection/Update Land Use/Flows	45 days	Wed 7/14/21	Fri 8/27/21	14			Wed 7/14/21	Fri 8/27/21	100%
18	Meeting #1 - LU Assumptions & Flows	0 days	Fri 8/27/21	Fri 8/27/21	17		M	Fri 8/27/21	Fri 8/27/21	100%
19	Hydraulics & Improvement Alternatives	30 days	Sat 8/28/21	Sun 9/26/21	18			Sat 8/28/21	Sun 9/26/21	100%
20	Meeting #2 - Hydraulics & Improvements	4 days	Mon 9/27/21	Thu 9/30/21	19		M	Sun 9/26/21	Sun 9/26/21	100%
21	CIP Update	45 days	Fri 10/1/21	Sun 11/14/21	20			Mon 9/27/21	Wed 11/10...	100%
22	Draft Master Plan Update TM Submittal	43 days	Fri 10/1/21	Fri 11/12/21	20		D	Mon 9/27/21	Wed 11/10...	100%
23	COSM Review - Draft Master Plan Update TM	30 days	Sat 11/13/21	Sun 12/12/21	22			Thu 11/11/21	Fri 12/10/21	100%
24	Meeting #3 - Draft Master Plan TM	0 days	Sun 12/12/21	Sun 12/12/21	23		M	Fri 12/10/21	Fri 12/10/21	100%
25	FNI Finalizes Master Plan Update TM	30 days	Mon 12/13/21	Tue 1/11/22	24		D	Sat 12/11/21	Sun 1/9/22	100%
26	**Alignment Analysis**	**121 days**	**Sat 8/28/21**	**Sun 12/26/21**			**T**	**Sat 8/28/21**	**Sun 12/26/...**	**100%**
27	Data Collection	30 days	Sat 8/28/21	Sun 9/26/21	19FF			Sat 8/28/21	Sun 9/26/21	100%
28	Develop Alignment Alternatives	60 days	Mon 9/27/21	Thu 11/25/21	27		D	Mon 9/27/21	Thu 11/25/...	100%
29	COSM Review - Draft Alignment Alt.	30 days	Fri 11/26/21	Sat 12/25/21	28			Fri 11/26/21	Sat 12/25/21	100%
30	Meeting - Alignment Alternatives	1 day	Sun 12/26/21	Sun 12/26/21	29		M	Sun 12/26/...	Sun 12/26/...	100%
31	**PER**	**165 days**	**Sun 11/28/21**	**Wed 5/11/22**			**T**	**Fri 11/26/21**	**Mon 5/9/22**	**71%**
32	FNI Prepare Draft PER	90 days	Sun 11/28/21	Fri 2/25/22	15,23FS-15		D	Fri 11/26/21	Wed 2/23/22	100%
33	COSM Reviews Draft PER	30 days	Sat 2/26/22	Sun 3/27/22	32			Thu 2/24/22	Fri 3/25/22	90%
34	Draft PER Review Meeting	0 days	Sun 3/27/22	Sun 3/27/22	33		M	Fri 3/25/22	Fri 3/25/22	0%
35	FNI Finalizes PER	45 days	Mon 3/28/22	Wed 5/11/22	34		D	Sat 3/26/22	Mon 5/9/22	0%
36	**20% Design**	**90 days**	**Tue 12/28/21**	**Sun 3/27/22**			**T**	**Mon 12/27...**	**Sat 3/26/22**	**100%**
37	FNI Prepare Preliminary Layout (20%)	60 days	Tue 12/28/21	Fri 2/25/22	32FF,30		D	Mon 12/27...	Thu 2/24/22	100%
38	COSM Reviews 20% Design	30 days	Sat 2/26/22	Sun 3/27/22	37			Fri 2/25/22	Sat 3/26/22	100%
39	20% Review Meeting	0 days	Sun 3/27/22	Sun 3/27/22	38		M	Sat 3/26/22	Sat 3/26/22	100%
40	**Lift Station Design Manual**	**81 days**	**Sat 2/26/22**	**Tue 5/17/22**				**Thu 2/24/22**	**Sun 5/15/22**	**4%**
41	FNI Prepare Draft Design Manual	30 days	Sat 2/26/22	Sun 3/27/22	32		D	Thu 2/24/22	Fri 3/25/22	10%
42	COSM Reviews Draft Design Manual	30 days	Mon 3/28/22	Tue 4/26/22	41			Sat 3/26/22	Sun 4/24/22	0%
43	Draft Design Manual Review Meeting	0 days	Tue 4/26/22	Tue 4/26/22	42		M	Sun 4/24/22	Sun 4/24/22	0%
44	FNI Finalizes Design Manual	21 days	Wed 4/27/22	Tue 5/17/22	43		D	Mon 4/25/22	Sun 5/15/22	0%
45	**Final Design (Future Contract)**	**616 days**	**Sat 2/26/22**	**Fri 11/3/23**			**T**	**Fri 2/25/22**	**Thu 11/2/23**	**0%**
46	Negotiate CIS #1	30 days	Sat 2/26/22	Sun 3/27/22	37			Fri 2/25/22	Sat 3/26/22	0%
47	Prepare ARF/Verify Funds with Finance - May	11 days	Mon 3/28/22	Thu 4/7/22	46			Sun 3/27/22	Wed 4/6/22	0%
48	ARF Review Process (Min 29 Days)	33 days	Fri 4/8/22	Tue 5/10/22	47			Thu 4/7/22	Mon 5/9/22	0%
49	City Council (Typically Tuesday)	1 day	Wed 5/11/22	Wed 5/11/22	48			Tue 5/10/22	Tue 5/10/22	0%
50	Execute CIS #1	1 day	Thu 5/12/22	Thu 5/12/22	49			Wed 5/11/22	Wed 5/11/22	0%
51	Kick Off Meeting	14 days	Fri 5/13/22	Thu 5/26/22	50		M	Thu 5/12/22	Wed 5/25/22	0%
52	Topographic & Boundary Survey	30 days	Fri 5/27/22	Sat 6/25/22	51			Thu 5/26/22	Fri 6/24/22	0%
53	FNI Prepare Preliminary Layout (30%)	90 days	Fri 5/27/22	Wed 8/24/22	39,51		D	Thu 5/26/22	Tue 8/23/22	0%
54	COSM Reviews 30% Design	30 days	Thu 8/25/22	Fri 9/23/22	53			Wed 8/24/22	Thu 9/22/22	0%
55	30% Review Meeting	1 day	Sat 9/24/22	Sat 9/24/22	54		M	Fri 9/23/22	Fri 9/23/22	0%
56	FNI Prepare 60%	60 days	Sun 9/25/22	Wed 11/23/22	55,39		D	Sat 9/24/22	Tue 11/22/...	0%
57	COSM Reviews 60% Design	30 days	Thu 11/24/22	Fri 12/23/22	56			Wed 11/23...	Thu 12/22/...	0%
58	60% Review Meeting	1 day	Sat 12/24/22	Sat 12/24/22	57		M	Fri 12/23/22	Fri 12/23/22	0%
59	FNI Prepare 90%	60 days	Sun 12/25/22	Wed 2/22/23	58		D	Sat 12/24/22	Tue 2/21/23	0%
60	COSM Reviews 90% Design	30 days	Thu 2/23/23	Fri 3/24/23	59			Wed 2/22/23	Thu 3/23/23	0%
61	90% Review Meeting	1 day	Sat 3/25/23	Sat 3/25/23	60		M	Fri 3/24/23	Fri 3/24/23	0%
62	FNI Seals 100% Plans	30 days	Sun 3/26/23	Mon 4/24/23	61		D	Sat 3/25/23	Sun 4/23/23	0%
63	Float	180 days	Tue 4/25/23	Sat 10/21/23	62			Mon 4/24/23	Fri 10/20/23	0%
64	Meeting with Purchasing To Advertise	13 days	Sun 10/22/23	Fri 11/3/23	92,97,63		M	Sat 10/21/23	Thu 11/2/23	0%
65	**Easements (Future Contract)**	**394 days**	**Fri 5/13/22**	**Sat 6/10/23**			**T**	**Thu 5/12/22**	**Fri 6/9/23**	**0%**
66	**Easements/ROW Acquisitions**	**394 days**	**Fri 5/13/22**	**Sat 6/10/23**			**T**	**Thu 5/12/22**	**Fri 6/9/23**	**0%**
67	**License Agreements**	**186 days**	**Fri 5/13/22**	**Mon 11/14/22**			**T**	**Thu 5/12/22**	**Sun 11/13/...**	**0%**
68	Prepare License Agreement Exhibits	30 days	Fri 5/13/22	Sat 6/11/22	50			Thu 5/12/22	Fri 6/10/22	0%
69	Prepare offer letter	14 days	Sun 6/12/22	Sat 6/25/22	68			Sat 6/11/22	Fri 6/24/22	0%
70	Negation with owners	120 days	Sun 6/26/22	Sun 10/23/22	69			Sat 6/25/22	Sat 10/22/22	0%
71	Offer accepted: Letter agreement, Exhil	7 days	Mon 10/24/22	Sun 10/30/22	70			Sun 10/23/...	Sat 10/29/22	0%
72	Request check	14 days	Mon 10/31/22	Sun 11/13/22	71			Sun 10/30/...	Sat 11/12/22	0%
73	Possession of Real Estate from Close	1 day	Mon 11/14/22	Mon 11/14/22	72			Sun 11/13/...	Sun 11/13/...	0%
74	**Easements and ROW**	**332 days**	**Fri 5/13/22**	**Sun 4/9/23**			**T**	**Thu 5/12/22**	**Sat 4/8/23**	**0%**
75	Survey/Exhibit/Field Notes Prepared	21 days	Fri 5/13/22	Thu 6/2/22	50			Thu 5/12/22	Wed 6/1/22	0%
76	Field Notes to appraiser	1 day	Fri 6/3/22	Fri 6/3/22	75			Thu 6/2/22	Thu 6/2/22	0%

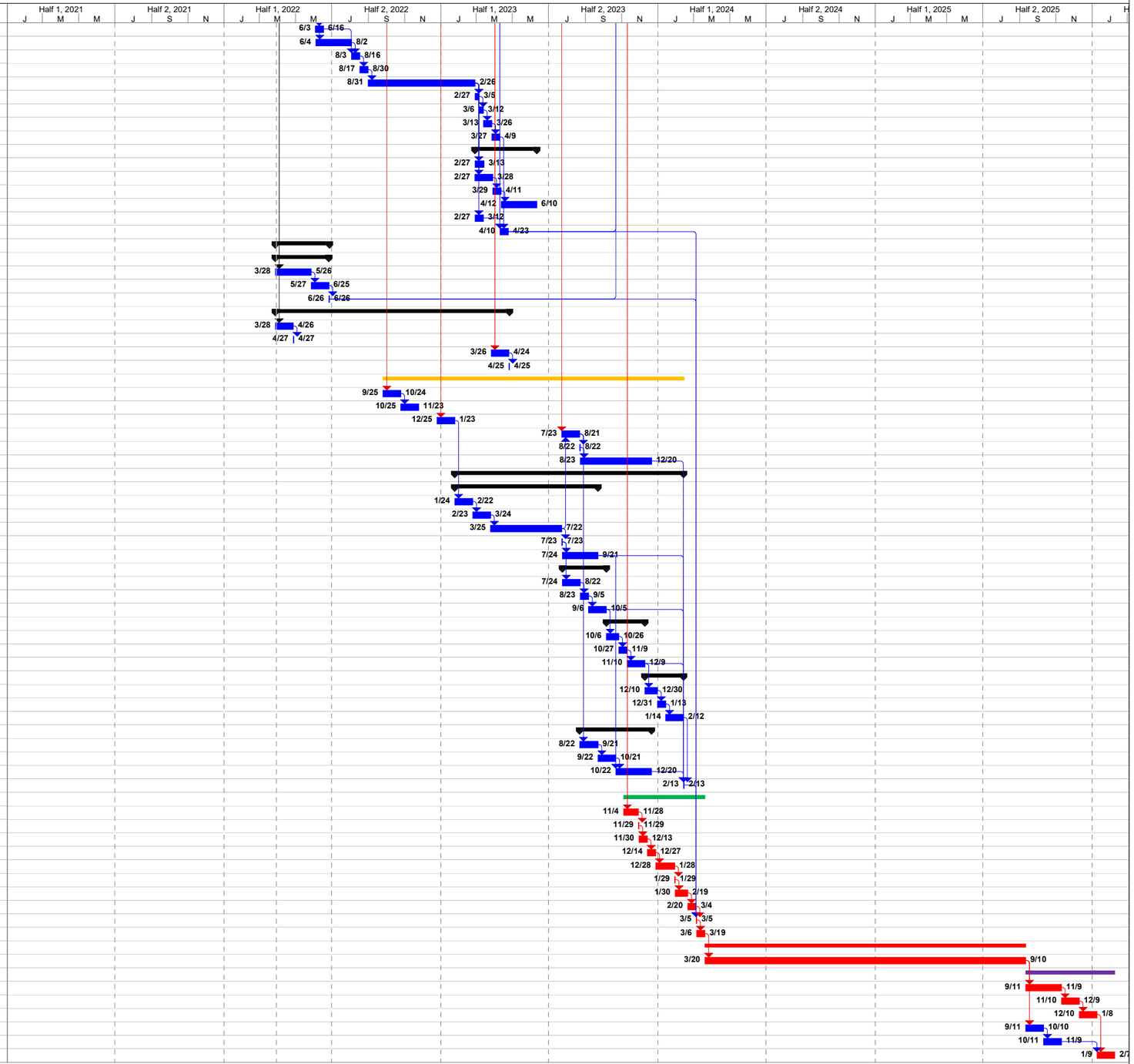


Project: Exhibit 3 - HWY 80 Utility Proj
Date: Wed 3/30/22

Task | Summary | Rolled Up Milestone | External Tasks | Inactive Task | Manual Task | Manual Summary | Progress
Critical Task | Rolled Up Task | Rolled Up Progress | Project Summary | Inactive Milestone | Duration-only | Start-only | Deadline
Milestone | Rolled Up Critical Task | Split | Group By Summary | Inactive Summary | Manual Summary Rollup | Finish-only

Exhibit 3 - Project Schedule

ID	Task Name	Duration	Start	Finish	Predecesso	Resource Names	Text1	Date1	Date2	% Complete
77	Notice of intent to acquire sent to prope	14 days	Fri 6/3/22	Thu 6/16/22	75			Thu 6/2/22	Wed 6/15/22	0%
78	Prepare Appraisal	60 days	Sat 6/4/22	Tue 8/2/22	76			Fri 6/3/22	Mon 8/1/22	0%
79	Review Appraisal/Auth to make offer	14 days	Wed 8/3/22	Tue 8/16/22	77,78			Tue 8/2/22	Mon 8/15/22	0%
80	Prepare offer letter	14 days	Wed 8/17/22	Tue 8/30/22	79			Tue 8/16/22	Mon 8/29/22	0%
81	Negation with owners, begin title clearir	180 days	Wed 8/31/22	Sun 2/26/23	80			Tue 8/30/22	Sat 2/25/23	0%
82	Offer accepted: clear title, schedule clo	7 days	Mon 2/27/23	Sun 3/5/23	81			Sun 2/26/23	Sat 3/4/23	0%
83	Title Commitment	7 days	Mon 3/6/23	Sun 3/12/23	82			Sun 3/5/23	Sat 3/11/23	0%
84	Request check	14 days	Mon 3/13/23	Sun 3/26/23	83			Sun 3/12/23	Sat 3/25/23	0%
85	Possession of Real Estate from Close	14 days	Mon 3/27/23	Sun 4/9/23	84			Sun 3/26/23	Sat 4/8/23	0%
86	**Eminent Domain**	**104 days**	**Mon 2/27/23**	**Sat 6/10/23**			**T**	**Sun 2/26/23**	**Fri 6/9/23**	**0%**
87	If rejected: Make 2nd Offer (15 Cal Day	15 days	Mon 2/27/23	Mon 3/13/23	81			Sun 2/26/23	Sun 3/12/23	0%
88	If rejected: Send to City Council	30 days	Mon 2/27/23	Tue 3/28/23	81			Sun 2/26/23	Mon 3/27/23	0%
89	Prepare Eminent Domain Process	14 days	Wed 3/29/23	Tue 4/11/23	88			Tue 3/28/23	Mon 4/10/23	0%
90	Eminent Domain	60 days	Wed 4/12/23	Sat 6/10/23	89			Tue 4/11/23	Fri 6/9/23	0%
91	Possession and Use Agreement	14 days	Mon 2/27/23	Sun 3/12/23	81			Sun 2/26/23	Sat 3/11/23	0%
92	Easements/ROW Cleared	14 days	Mon 4/10/23	Sun 4/23/23	73,85,91			Sun 4/9/23	Sat 4/22/23	0%
93	**Permits (Future Contract)**	**91 days**	**Mon 3/28/22**	**Sun 6/26/22**			**T**	**Sun 3/27/22**	**Sat 6/25/22**	**0%**
94	**Texas Historical Commission**	**90 days**	**Mon 3/28/22**	**Sat 6/25/22**			**T**	**Sun 3/27/22**	**Fri 6/24/22**	**0%**
95	Cultural Constraints Analysis	60 days	Mon 3/28/22	Thu 5/26/22	39			Sun 3/27/22	Wed 5/25/22	0%
96	THC Review	30 days	Fri 5/27/22	Sat 6/25/22	95			Thu 5/26/22	Fri 6/24/22	0%
97	Permits Approved	1 day	Sun 6/26/22	Sun 6/26/22	96			Sat 6/25/22	Sat 6/25/22	0%
98	**Public Outreach (Future Contract)**	**394 days**	**Mon 3/28/22**	**Tue 4/25/23**			**T**	**Sun 3/27/22**	**Mon 4/24/23**	**0%**
99	Set Up Meeting after PER	30 days	Mon 3/28/22	Tue 4/26/22	39			Sun 3/27/22	Mon 4/25/22	0%
100	Public Meeting For PER	1 day	Wed 4/27/22	Wed 4/27/22	99		M	Tue 4/26/22	Tue 4/26/22	0%
101	Set Up Meeting after 90% Plans	30 days	Sun 3/26/23	Mon 4/24/23	61			Sat 3/25/23	Sun 4/23/23	0%
102	Public Meeting For90% Plans	1 day	Tue 4/25/23	Tue 4/25/23	101		M	Mon 4/24/23	Mon 4/24/23	0%
103	**Utility Relocation (Future Contract)**	**507 days**	**Sun 9/25/22**	**Tue 2/13/24**			**T**	**Sat 9/24/22**	**Mon 2/12/24**	**0%**
104	Determine Conflicts & Notify Utilities	30 days	Sun 9/25/22	Mon 10/24/22	55			Sat 9/24/22	Sun 10/23/...	0%
105	Review Meeting (after 30%)	30 days	Tue 10/25/22	Wed 11/23/22	104		M	Mon 10/24...	Tue 11/22/...	0%
106	Review Meeting (After 60%)	30 days	Sun 12/25/22	Mon 1/23/23	58		M	Sat 12/24/22	Sun 1/22/23	0%
107	Review Meeting (After 90%)	30 days	Sun 7/23/23	Mon 8/21/23	61,114		M	Sat 7/22/23	Sun 8/20/23	0%
108	Issue Notification Letters	1 day	Tue 8/22/23	Tue 8/22/23	107			Mon 8/21/23	Mon 8/21/23	0%
109	Minimum Notification Requirement (120 Days)	120 days	Wed 8/23/23	Wed 12/20/23	108			Tue 8/22/23	Tue 12/19/...	0%
110	**Power Poles**	**385 days**	**Tue 1/24/23**	**Mon 2/12/24**			**T**	**Mon 1/23/23**	**Sun 2/11/24**	**0%**
111	**SMEU**	**241 days**	**Tue 1/24/23**	**Thu 9/21/23**			**T**	**Mon 1/23/23**	**Wed 9/20/23**	**0%**
112	Prepares Design (After 60% Plans)	30 days	Tue 1/24/23	Wed 2/22/23	106			Mon 1/23/23	Tue 2/21/23	0%
113	Review SMEU Plans	30 days	Thu 2/23/23	Fri 3/24/23	112			Wed 2/22/23	Thu 3/23/23	0%
114	Order Materials	120 days	Sat 3/25/23	Sat 7/22/23	113			Fri 3/24/23	Fri 7/21/23	0%
115	Walk Alignment with CIP PM (After 100% I	1 day	Sun 7/23/23	Sun 7/23/23	114			Sat 7/22/23	Sat 7/22/23	0%
116	SMEU to Relocate Power Poles/Undergrou	60 days	Mon 7/24/23	Thu 9/21/23	115			Sun 7/23/23	Wed 9/20/23	0%
117	**Century Link**	**74 days**	**Mon 7/24/23**	**Thu 10/5/23**			**T**	**Sun 7/23/23**	**Wed 10/4/23**	**0%**
118	Prepares Design	30 days	Mon 7/24/23	Tue 8/22/23	115			Sun 7/23/23	Mon 8/21/23	0%
119	Get contract in place	14 days	Wed 8/23/23	Tue 9/5/23	118			Tue 8/22/23	Mon 9/4/23	0%
120	Relocate Overhead	30 days	Wed 9/6/23	Thu 10/5/23	119			Tue 9/5/23	Wed 10/4/23	0%
121	**Grande**	**65 days**	**Fri 10/6/23**	**Sat 12/9/23**			**T**	**Thu 10/5/23**	**Fri 12/8/23**	**0%**
122	Prepares Design	21 days	Fri 10/6/23	Thu 10/26/23	120			Thu 10/5/23	Wed 10/25...	0%
123	Get contract in place	14 days	Fri 10/27/23	Thu 11/9/23	122			Thu 10/26/...	Wed 11/8/23	0%
124	Relocate Overhead	30 days	Fri 11/10/23	Sat 12/9/23	123			Thu 11/9/23	Fri 12/8/23	0%
125	**Time Warner**	**65 days**	**Sun 12/10/23**	**Mon 2/12/24**			**T**	**Sat 12/9/23**	**Sun 2/11/24**	**0%**
126	Prepares Design	21 days	Sun 12/10/23	Sat 12/30/23	124			Sat 12/9/23	Fri 12/29/23	0%
127	Get contract in place	14 days	Sun 12/31/23	Sat 1/13/24	126			Sat 12/30/23	Fri 1/12/24	0%
128	Relocate Overhead	30 days	Sun 1/14/24	Mon 2/12/24	127			Sat 1/13/24	Sun 2/11/24	0%
129	**Center Point Gas**	**121 days**	**Tue 8/22/23**	**Wed 12/20/23**			**T**	**Mon 8/21/23**	**Tue 12/19/...**	**0%**
130	Prepares Design	31 days	Tue 8/22/23	Thu 9/21/23	107			Mon 8/21/23	Wed 9/20/23	0%
131	Get contract in place	30 days	Fri 9/22/23	Sat 10/21/23	130			Thu 9/21/23	Fri 10/20/23	0%
132	Relocate Gas Mains	60 days	Sun 10/22/23	Wed 12/20/23	131,116			Sat 10/21/23	Tue 12/19/...	0%
133	Utilities Cleared	1 day	Tue 2/13/24	Tue 2/13/24	116,120,124			Mon 2/12/24	Mon 2/12/24	0%
134	**Bid Phase (Future Contract)**	**137 days**	**Sat 11/4/23**	**Tue 3/19/24**			**T**	**Fri 11/3/23**	**Mon 3/18/24**	**0%**
135	Advertise (Must Start on a Sunday)	25 days	Sat 11/4/23	Tue 11/28/23	64		B	Fri 11/3/23	Mon 11/27...	0%
136	Bid Opening (Must be Tues-Thurs)	1 day	Wed 11/29/23	Wed 11/29/23	135		B	Tue 11/28/...	Tue 11/28/...	0%
137	Review Bids	14 days	Thu 11/30/23	Wed 12/13/23	136		B	Wed 11/29...	Tue 12/12/...	0%
138	Prepare ARF/Verify Funds with Finance - May ne	14 days	Thu 12/14/23	Wed 12/27/23	137		B	Wed 12/13...	Tue 12/26/...	0%
139	ARF Review Process (Min 29 Days)	32 days	Thu 12/28/23	Sun 1/28/24	138		B	Wed 12/27...	Sat 1/27/24	0%
140	City Council Award (Must be on a Tuesday)	1 day	Mon 1/29/24	Mon 1/29/24	139		B	Sun 1/28/24	Sun 1/28/24	0%
141	Execute Contract	21 days	Tue 1/30/24	Mon 2/19/24	140		B	Mon 1/29/24	Sun 2/18/24	0%
142	Pre Construction Tasks (Materials Testing/Prepa	14 days	Tue 2/20/24	Mon 3/4/24	141		B	Mon 2/19/24	Sun 3/3/24	0%
143	Pre Construction Meeting	1 day	Tue 3/5/24	Tue 3/5/24	92,97,133,1		B	Mon 3/4/24	Mon 3/4/24	0%
144	Issue NTP	14 days	Wed 3/6/24	Tue 3/19/24	143		B	Tue 3/5/24	Mon 3/18/24	0%
145	**Construction Phase (Future Contract)**	**540 days**	**Wed 3/20/24**	**Wed 9/10/25**			**T**	**Tue 3/19/24**	**Tue 9/9/25**	**0%**
146	Construction	540 days	Wed 3/20/24	Wed 9/10/25	144		C	Tue 3/19/24	Tue 9/9/25	0%
147	**Closeout Phase (Future Contract)**	**150 days**	**Thu 9/11/25**	**Sat 2/7/26**			**T**	**Wed 9/10/25**	**Fri 2/6/26**	**0%**
148	Consultant Prepare Record Drawings	60 days	Thu 9/11/25	Sun 11/9/25	146		C	Wed 9/10/25	Sat 11/8/25	0%
149	Review Record Drawings	30 days	Mon 11/10/25	Tue 12/9/25	148		C	Sun 11/9/25	Mon 12/8/25	0%
150	Consultant Revises Record Drawings	30 days	Wed 12/10/25	Thu 1/8/26	149		C	Tue 12/9/25	Wed 1/7/26	0%
151	Prepare Final Invoice Construction	30 days	Thu 9/11/25	Fri 10/10/25	146		C	Wed 9/10/25	Thu 10/9/25	0%
152	Pay Final Invoice Construction	30 days	Sat 10/11/25	Sun 11/9/25	151		C	Fri 10/10/25	Sat 11/8/25	0%
153	Pay Final Invoice Design	30 days	Fri 1/9/26	Sat 2/7/26	150,152		C	Thu 1/8/26	Fri 2/6/26	0%



Project: Exhibit 3 - HWY 80 Utility Proj
Date: Wed 3/30/22

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