EXHIBIT 1

City of San Marcos Highway 80 Utility Project – Preliminary Engineering
ENGINEERING SCOPE OF SERVICES

PROJECT DESCRIPTION: As indicated herein, Freese and Nichols, Inc. (FNI) will provide engineering services for the City of San Marcos (City) related to the planning, feasibility evaluation and preliminary engineering of wastewater collection and conveyance facilities to meet short- and long-term wastewater demands for the Hemphill Basin in East San Marcos.

The Scope of Work pertains to the following facilities:

1. A new lift station with an initial firm pumping capacity of 1.25 million gallons per day (MGD) with a wet well capacity to handle the 2035 peak flow of 5.0 MGD located along Highway 80 in east San Marcos (Highway 80 Lift Station CIP #555).
2. A new 12-inch force main from the new Highway 80 Lift Station to the existing City wastewater treatment facility (CIP #555 / WWMP#1).
3. Approximately 17,000 linear feet (L.F.) of new 12-inch water line extending from the existing 30-inch water line along Highway 80 to the edge of the City Certificate of Convenience and Necessity (CCN) boundary, then north along property boundaries to connect to a dead end at the San Marcos Regional Airport (Airport) (CIP #661) (feasibility only for portion of water line from Highway 80 to Gary Job Corps facility).
4. Relocation of approximately 5,600 L.F. of wastewater main on Gary Job Corps facility to convey Airport flows into the existing City wastewater main on Railroad Avenue (CIP #568) (feasibility only).
5. Decommissioning of the existing Gary Job Corps lift station and new 18-inch, 21-inch and 24-inch wastewater mains to reroute flows to the new Highway 80 Lift Station (CIP # 575) (feasibility only).
6. Expansion of Lift Station #14 (feasibility only).

The current scope of work includes the following major tasks:

A. Project Management

B. Hemphill Basin Master Plan Update

C. Permitting and Environmental Coordination

D. Preliminary Engineering Report (PER) Development

E. Schematic Design (20% Design) of the Highway 80 lift station, wastewater force main and water line (CIP #555 and CIP #661). Water line schematic design is for portion along and south of Highway 80.

F. Manhole Survey (By Ford Engineering)

G. Lift Station Design Manual Development

Future tasks anticipated to be added through contract amendment after completion of above include:

H. Final Design

I. Bid Phase Services

J. Construction Phase Services

SUBCONSULTANTS:

1. Surveyor – Ford Engineering

1. GENERAL ASSUMPTIONS:

A. Highway 80 Lift Station (CIP #555)

1. Lift Station will have an initial firm pumping capacity of 1.25 MGD with a wet well capacity to handle the 2035 peak flow of 5.0 MGD.
2. Lift Station will be located near the location as shown in the 2014 Wastewater Master Plan at Highway 80 and County Road 102.
3. Lift station can be located in 100-year floodplain, but electrical equipment will need to be designed to be elevated and out of the floodplain. The PER will identify the mounting height of the electrical equipment.
4. FNI to analyze inverts at the wet well required for City Projects CIP #575 and CIP #568 to gravity feed to the lift station. FNI to determine if these projects are feasible based on review of elevations.
5. Lift Station will be located on City property, if feasible.
6. Start-up and Commissioning - Currently, new Highway 80 lift station will not experience flows at startup per existing facilities. FNI to analyze new lift station startup and sequencing and make recommendations about how lift station will be phased into service. FNI to determine what additional CIP projects may need to be built with this lift station project.

B. Highway 80 Lift Station Force Main (CIP #555)

1. Force main will discharge directly to the existing City wastewater treatment facility (WWMP#1).
2. FNI will perform a Master Plan Update to evaluate the Hemphill Basin (referred to as “study area”) to update the system improvements recommended as part of the 2014 Wastewater Master Plan. This Master Plan will determine the force main size(s) (anticipated to be 10-inch and/or 12-inch).
3. FNI will evaluate up to three (3) alignments for the new force main, all which will be installed in an easement when outside of City Limits. The 3 alignments to be evaluated include:
    a. Alignment #1 – force main alignment along Martindale Road
    b. Alignment #2 – force main alignment along Highway 80 to State Highway 21
    c. FNI will determine feasibility of additional third alignment
4. The force main will be aligned adjacent and parallel to the new water main to utilize one easement, where feasible.

C. San Marcos Regional Airport 10-inch/12-inch Wastewater Main (CIP #568 / WWMP #19)

1. This portion of scope will be included in PER but will not be part of future Final Design Task associated with this Project.
2. FNI will perform field survey of last manhole on City owned property.
3. Gary Job Corps facility property is larger than needed and they are giving the City land on the east side of the city including:

a. Phase 1 – 130 acres

b. Phase 2 – 28 acres in the future

4. FNI to determine two routes for new wastewater main including:

a. Alignment #1 – determine if it is feasible to route all the wastewater line around the Gary Job Corps.

b. Alignment #2 – route wastewater through Gary Job Corp property. FNI/City will request water and wastewater maps from Gary Job Corp to see if it is feasible to route wastewater lines without impacting their utilities.

5. FNI to show future parallel 12-inch water main tying into the end of the existing City 12-inch water main on the Airport.

6. FNI to show limits of proposed easements.

D. Gary Job Corps Lift Station Decommissioning (CIP # 575 / WWMP #30)

1. This portion of scope will be included in PER but will not be part of future Final Design Task associated with this Project.

2. FNI will perform field survey of elevation of the wastewater line entering the wet well to confirm if the existing lift station can be decommissioned with a new wastewater gravity line to the proposed new Highway 80 lift station.

3. FNI to identify alignment of new wastewater main and show the proposed future parallel 12-inch water main and limits of proposed easements.

E. Hemphill Creek 12-inch, 24-inch, 27-inch Wastewater Main (CIP #564)

1. The 2014 Wastewater Master Plan Master plan shows the Hemphill Creek project as a 2020 project. FNI to evaluate upstream flows to determine how soon it is needed. The City has concerns that Lift Station #14 will see overflows with the potential Whisper South Development. FNI to analyze when capacity will be exceeded and make recommendations for improvements in the CIP.

F. Blanco Riverine Project (CIP #633)

1. FNI to show proposed right-of-way (ROW) of Blanco Riverine Project in preliminary design and determine if the alignment already purchased can be utilized as part of Project.

G. Lift Station Startup

H. Coordination with Other Projects

1. FM 110 – FNI to show proposed/existing ROW and consider alignment in Design.

2. Alliance Regional Water Authority (ARWA) Transmission Main – FNI to show proposed/existing ROW and consider alignment in Design.

3. Canyon Regional Water Authority (CRWA) Transmission Main – FNI to extend 12-inch water line to the site on Old Martindale Road near Highway 80. FNI to analyze discharge pressure from CRWA with the City 30-inch main and verify operations.

4. Blanco River By-Pass Creek Improvements – FNI to show improvements and consider in design.

5. Smart Terminal Development – FNI to consider in design.

I. Format for Deliverables

1. All drawings will be produced in AutoCAD® format. All drawing sets will be submitted on standard 11" x 17" plan sheets, unless otherwise indicated.
2. All technical memoranda will be submitted in portable document format (PDF). No paper copies will be provided.

J. Cost Estimates

1. Opinions of probable construction cost, and any resulting conclusions on project financial or economic feasibility or funding requirements, will be prepared for guidance in project evaluation and implementation from the information available at the time the opinion was prepared. Consultant makes no warranty that City costs will not vary from Consultant's estimate as these costs depend on actual labor and material costs, competitive market conditions, actual site conditions, final project scope, implementation schedule, continuity of personnel and engineering, and other variable factors. Because of these factors, project feasibility, benefit/cost ratios, risks, and funding needs must be carefully reviewed prior to making specific financial decisions or establishing project budgets to help ensure proper project evaluation and adequate funding.

2. BASIC SERVICES: FNI shall provide the following professional services in connection with the development of the Project:

A. Project Management:

1. Prepare subconsultant agreements:
    a. Ford Engineering
2. Project Setup and Accounting: FNI will setup the project in FNI's accounting software and monitor it on a monthly basis.
3. Quality Assurance (QA)/Quality Control (QC): FNI will develop and implement a QA/QC plan for the project.
4. Baseline Schedule – Engineer will provide a detailed schedule prepared in Microsoft Project™ 2016 or more recent version.
5. 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.
6. 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.
7. 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.
8. Meetings:
    a. 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.
        i. FNI will prepare and distribute a kickoff meeting agenda prior to the meeting and prepare and distribute meeting minutes following meeting.
    b. Project Status Meeting: Up to four (4) project status meetings with City in addition to

meetings listed below.

c. Public Meeting: Up to one (1) public meeting; FNI to prepare agenda, exhibits and meeting notes for public meetings.

d. Site Visits: Up to one (1) visit for data collection and product coordination.

9. Deliverables:

a. Monthly 1-Page Reports

b. Project schedule

B. Master Plan Update

FNI will evaluate the Hemphill Basin (referred to as "study area") to update the system improvements recommended as part of the 2014 Wastewater Master Plan. The purpose of this focused wastewater master plan update is to revise the land use assumptions and flow projections in the study area, utilize the hydraulic model to assist with the identification of phased collection system improvements to serve projected flows, and to develop a recommendation for the capacity of proposed Highway 80 Lift Station. The assumptions, methodology, and recommendations will be summarized in a technical memorandum. The following tasks outline the work to be performed:

1. Data Collection and Review: A data request will be prepared and submitted to the City. FNI will review and analyze available data that is pertinent to the study area. Data requested may include historical lift station flow data, wastewater GIS data, development plans, population information, and growth projections.

2. Update Land Use Assumptions: Based on development information provided by the City, FNI will update the land use assumptions for the Hemphill Wastewater Basin. Residential units and commercial acreages for existing, 10-year, and 25-year conditions will be identified.

3. Update Wastewater Flow Projections: FNI will update the wastewater flow projections for existing, 10-year, and 25-year conditions in the Hemphill Wastewater Basin based on updated land use assumptions and selected planning criteria (gpcd, peaking factor, etc.) from the 2014 Wastewater Master Plan.

4. Progress Meeting #1: FNI will attend a meeting with City staff to review updated land use assumptions and flow projections. FNI will solicit comments on the flow projections and make revisions as needed based on feedback from the City.

5. Hydraulic Analysis: FNI will utilize the City's existing Infoworks ICM model to perform hydraulic analysis of the wastewater collection system and its ability to convey projected peak flows. FNI will evaluate the impacts of the updated flow projections on local and downstream conveyance infrastructure. FNI will perform hydraulic modeling for existing, 10-year, and 25-year peak wet weather flow conditions.

6. Development of Improvement Alternatives: FNI will utilize the hydraulic modeling analysis results to evaluate improvement alternatives to convey projected peak flows. The improvement alternatives will be evaluated with considerations for maximizing existing infrastructure and accommodating expected growth within the study area.

7. Progress Meeting #2: FNI will attend a meeting with City staff to discuss the hydraulic analysis and improvement alternatives. FNI will solicit comments on the proposed improvements and make revisions as needed based on direction from the City.

8. Improvement Alignment and Site Analysis: FNI will utilize the hydraulic model to review the potential pipeline alignments and Highway 80 Lift Station sites identified as part of the preliminary design. Considerations for connectivity of future developments and proposed upstream improvements will be evaluated.
9. Capital Improvement Plan: FNI will update the capital improvements plan (CIP) for the study area to provide planning level cost estimates in 2021 dollars and recommended timing for the proposed improvements. FNI will create project cost sheets of the proposed improvements in the same format as the 2014 Wastewater Master Plan.
10. Draft Technical Memorandum: FNI will develop a draft technical memorandum (TM) summarizing the assumptions, methodology and findings of the study. FNI will deliver one (1) electronic PDF copy of the Draft TM.
11. Progress Meeting #3: FNI will attend a meeting with City staff to review the Draft TM and solicit comments from the City. A comment response form will be prepared and tracked for revisions.
12. Final Technical Memorandum: FNI will address the City's comments and provide one (1) electronic copy and five (5) hard copies of the Final TM.
13. Deliverables:
    a. Draft Technical Memorandum in Adobe PDF format.
    b. Final Technical Memorandum in Adobe PDF format.
    c. GIS Shapefiles of the Proposed Improvements.
    d. Prepare meeting notes and agendas for all meetings.

C. <u>Permitting and Environmental Preliminary Evaluation</u>

1. Environmental Site Visits: Up to one (1) visit for environmental data collection.
2. Identify anticipated permits and points of contact for the lift station, force main and water line (CIP #555 and CIP #661). Summarize all permits, requirements, points of contact and status in permitting log.
3. Perform limited coordination and communication with potential permitting entities to determine permitting requirements. Majority of coordination will be via phone/email but will conduct up to four (4) meetings with potential entities below. Agendas and meeting notes will be prepared for each meeting.
    a. City of San Marcos
    b. Floodplain Zone
    c. Gary Job Corps
    d. TxDOT ROW
    e. County ROW
    f. TCEQ
    g. TPWD
    h. UPRR
    i. USACE
    j. US Fish and Wildlife

4. Environmental Coordination - Conduct environmental and archeological desktop study for the lift station, force main and water line (CIP #555 and CIP #661).
5. Perform Army Corps of Engineers (USACE) Section 404 permit evaluation.

D. Preliminary Engineering Report (PER)

1. Prepare and submit PER. The PER should address/include the following:
    a. Hydraulics – summarize the assumptions, methodology, and recommendations of the Master Plan Update Task.
    b. Environmental - summarize the assumptions, methodology, and recommendations of the Permitting and Environmental Preliminary Evaluation.
    c. Highway 80 Lift Station Force Main
        i. Identify force main size.
        ii. Evaluate up to three (3) alignments for the new force main.
        iii. Schematic exhibits in the form of a roll plot or large-scale sheets identifying pipe alignments and lift station location. This will include a profile of alignment options.
        iv. Make recommendation for final alignment.
    d. Highway 80 Lift Station
        i. Site Location
        ii. Site Civil (grading, drainage, yard piping, fencing)
        iii. Structural
        iv. Electrical distribution system (back-up diesel generator, motor controllers)
        v. Mounting elevation for electrical equipment (so it is out of the floodplain)
        vi. From the local electric utility for electrical service for the site
        vii. Instrumentation and SCADA cabinet
        viii. Site Lighting
        ix. Security
        x. Corrosion
        xi. Permitting
        xii. Start-up and Commissioning
        xiii. Operations and Maintenance
    e. Highway 80 Water Line
        i. Evaluate up to three (3) alignments for the new water line.
        ii. Schematic exhibits in the form of a roll plot or large-scale sheets identifying pipe alignments.
    f. San Marcos Regional Airport 10-inch/12-inch Wastewater Main
        i. Evaluate two (2) routes for new wastewater main in Gary Job Corps property.

ii. Schematic exhibits in the form of a roll plot or large-scale sheets identifying pipe alignments. This will include a profile of alignment options to show feasibility.

iii. Include plan and profile of wastewater lines.

g. Gary Job Corps Lift Station Decommissioning - Analyze wastewater gravity line, identify alignment of new wastewater main and show the proposed future parallel 12-inch water main and limits of proposed easements.

i. Schematic exhibits in the form of a roll plot or large-scale sheets identifying pipe alignments. This will include a profile of alignment options to show feasibility.

h. Hemphill Creek 12-inch, 24-inch, 27-inch Wastewater Main - Analyze when overflows can be expected and make recommendations to intercept these flows sooner in the CIP.

i. Blanco Riverine Project - Show proposed right-of-way of Blanco Riverine Project and determine if alignment already purchased can be utilized as part of Project.

j. Lift Station Startup - Determine what additional CIP projects may need to be built with this lift station project.

k. Coordination with Other Projects – coordinate and evaluate location of other projects including:

i. FM 110 Project

ii. ARWA Transmission Main

iii. CRWA Transmission Main

iv. Blanco River By-Pass Creek Improvements

v. Smart Terminal Development

l. Overall schedule and phasing of recommended improvements.

2. Draft PER: FNI will develop a draft PER addressing items described in D.1 above. FNI will deliver one (1) electronic PDF copy of the Draft PER.

3. AACE Class 3 Engineer's Opinion of Probable Construction Cost with expected accuracy range from -15% to +20%.

4. PER review workshop (1 workshop): FNI will attend a meeting with City staff to discuss the Draft PER.

a. FNI will review and issue responses to City review comment response log.

5. FNI will incorporate City comments and prepare Final PER. FNI will deliver one (1) electronic PDF copy of the Final PER.

6. Deliverables:

a. Draft PER in Adobe PDF format.

b. Comment response log.

c. Final PER in Adobe PDF format.

d. Meeting notes and agendas for all meetings and workshops.

E. <u>Schematic Design (20% Design)</u>

Upon completion of the PER and approval by the City, FNI will proceed with the following 20% design phase services:

1. Develop 20% Pipeline Drawings. The 20% Drawings will include: Plan and profile in drawings of the pipelines (1"= 40' H and 1"= 10'V) with aerial background on 11"x17" sheets. Plan view to show construction corridor for pipelines, proposed permanent and temporary easements, known utilities and right-of-way limits. LiDAR data will be used for topography. The 20% Pipeline Drawings should address/include the following:
    a. Highway 80 Lift Station Force Main
    b. Highway 80 Water Line (CIP #555 and CIP #661).
2. Develop Highway 80 Lift Station Schematic Layout with proposed property boundaries. The 20% Drawings will include:
    a. Lift station location and overall site layout
    b. Proposed easements and ROW
    c. Potential utility conflicts
    d. Electrical site layout and overall one-line diagram
    e. Include equipment elevations to ensure clearance from floodplain
    f. Recommended pothole locations for potential utility conflicts.
    g. Recommended locations of geotechnical bores.
3. Deliverables:
    a. Draft 20% Design in Adobe PDF format.
    b. Comment response table.
    c. Final 20% Design in Adobe PDF format.
    d. Meeting notes and agendas for all meetings and workshops.

F. <u>Survey (By Ford Engineering)</u>

1. Provide survey data for up to seven (7) existing manholes to get invert elevations at manholes identified in assumptions; for the most part FNI will rely on LiDAR data. LiDAR data will be tied into survey data via survey control points corresponding to existing LiDAR data and transferring LiDAR data to CAD software.
2. Provide survey elevation data for the wastewater line entering the wet well of the existing Gary Job Corps Lift Station to confirm lift station can be decommissioned and a wastewater gravity line can be installed to the new Highway 80 Lift Station.
3. Provide survey elevation data for the creek crossing Highway 80 near the proposed new lift station.
4. Where necessary along route, the surveyor shall contact private property owner and attempt to ascertain permission to enter and survey within private properties. If surveyor encounters a hostile property owner, surveyor will consult with FNI and/or the City for directions for resolution.

G. <u>Lift Station Design Manual</u>

1. Site visits: maximum of one (1) visit to existing City Lift Stations for data collection and product coordination with City staff.
2. FNI to provide updates to the City lift station design guidelines. FNI will coordinate with the City to develop standard details and standard products including:

a. Standard lift station details:
    i. Pump station items.
    ii. Fencing.
    iii. Potable water connection with backflow and pressure transmitter connected to SCADA.
    iv. Awning.
    v. Develop details that apply to all lift station projects, as feasible.
b. Standard lift station specifications.
c. Standard Products List or Preferred Products / Manufacturers List.

3. Design Manual review workshop (1 workshop): FNI will attend a meeting with City staff to discuss the Draft PER.
    a. FNI will review and issue responses to City review comment response log.
4. FNI will incorporate City comments and prepare Final Design Manual. FNI will deliver one (1) electronic PDF copy of the Final PER.
5. Deliverables:
    a. Draft plans, specifications, and standard product list in Adobe PDF format.
    b. Comment response table.
    c. Final plans, specifications, and standard product list in Adobe PDF format.
    d. Prepare meeting notes and agendas for all meetings and workshops.

3. ADDITIONAL SERVICES: Additional Services to be performed by FNI, if authorized by the City, which are not included in the above-described basic services, are described as follows:

A. Archeological study services required by the Texas Historical Commission.
B. Archaeological testing requiring excavations by a backhoe or excavator and any other efforts required by the state beyond those specifically indicated in the Basic Services.
C. Topographic survey, final design, bidding and/or construction phase services.
D. Environmental and/or jurisdictional permit development or approvals.
E. Subsurface Utility Engineering (SUE).
F. Easement and/or land acquisition.
G. Flow monitoring and/or model calibration associated with master planning.
H. 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).
I. Radio path study or analysis of different communication options (ex: radio vs fiber optic cable).

EXHIBIT 2

City of San Marcos Highway 80 Utility Project – Preliminary Engineering
DETAILED FEE SCHEDULE

Compensation to FNI for the Basic Services shall be for an amount up to but not to exceed $346,053.

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.

EXHIBIT 2
Detailed Fee Schedule

Project Fee Summary		
Basic Services	$	346,053
Special Services	$	-
Total Project	$	346,053

		Labor														
Task	**Task Description**	Drew Hardin	Charles Kucherka	Ryan Ramsey	David Guerrero	Brent Millar	Davin Hatley	Eric Love	Stephanie Neises	Matthew Schorsch	Tyler May	Madeline Colety	Patrick Garnett	Tam Tran	Heath Myers	Kimberly Buckley
		SA	QA/QC	PM/PE	Project Eng	constructability	CAD Designer	CAD Tech	Master Plan QC	Master Plan Task Lead	Master Plan Engineer	GIS Analyst	Env. Lead	Env. Tech	Env. GIS	Env QC
		$240	$209	$178	$137	$240	$153	$96	$209	$178	$137	$113	$178	$113	$137	$240
A	**Task A. Project Management**															
A.1	Subconsultant agreements			2												
A.2	Project Setup and Accounting			4												
A.3	QA/QC Plan and Implement	4	4	4												
A.4	Baseline Schedule			2												
A.5	Project Planning and Monitoring (scope / schedule / budget) (11 mo*2 hrs/mo PM; 1 hr/mo for accounting; 0.5 hr/mo for admin)			22												
A.6	Status Reporting/Invoicing (12)			12												
A.7	Project Team Coordination (w/Owner, Subconsultants & Internal Team (1 hr/wk))			48												
A.8	Meetings															
A.8.a	Kickoff meeting with COSM & Internal KO Mtg	3	3	6	6				1	1			1			
A.8.b	Progress Mtgs w/Owner (4 total)	4	4	12	12											
A.8.c	Public Meeting (1 total)		2	4	4											
A.8.d	Site Visit (1 total)			8	8											
B	**Task B. Master Plan Update**															
B.1	Data Collection and Review								2	4	12	4				
B.2	Update Land Use Assumptions								2	12	24	4				
B.3	Update Wastewater Flow Projections								2	8	24	2				
B.4	Progress Meeting #1			2					4	4						
B.5	Hydraulic Analysis								8	20	40					
B.6	Development of Improvement Alternatives								8	24	40	8				
B.7	Progress Meeting #2			2					4	4						
B.8	Improvement Alignment and Site Analysis:								2	12	24	4				
B.9	Cost Estimates								2	8	40					
B.10	Draft Technical Memorandum								2	12	24	8				
B.11	Progress Meeting #3			2					4	4						
B.12	Final Technical Memorandum								2	4	16	4				
	Task C. Permitting and Environmental Preliminary Evaluation															
C.1	Site Visit /mapping WOTUS												8	8	4	
C.2	Identify anticipated permits and points of contact			2	10								2			
C.3	Permitting Entities Coordination												8			
C.4	Environmental and archeological desktop study			2	8								10	12	1	
C.5	Section 404 Permitting and Evaluation												1	4	1	

Task	Task Description	Labor														
		Drew Hardin	Charles Kucherka	Ryan Ramsey	David Guerrero	Brent Millar	Davin Hatley	Eric Love	Stephanie Neises	Matthew Schorsch	Tyler May	Madeline Colety	Patrick Garnett	Tam Tran	Heath Myers	Kimberly Buckley
		SA	QA/QC	PM/PE	Project Eng	constructability	CAD Designer	CAD Tech	Master Plan QC	Master Plan Task Lead	Master Plan Engineer	GIS Analyst	Env. Lead	Env. Tech	Env. GIS	Env QC
		$240	$209	$178	$137	$240	$153	$96	$209	$178	$137	$113	$178	$113	$137	$240
D	**Task D. Preliminary Engineering Report (PER)**															
D.1.a	Hydraulics – summarize the assumptions, methodology, and recommendations of the Master Plan Update Task				4						4					
D.1.b	Environmental - summarize the assumptions, methodology, and recommendations of the Permitting and Environmental Preliminary Evaluation.												4			4
D.1.c	Highway 80 Lift Station Force Main			12	20		4	16								
D.1.d	Highway 80 Lift Station			12	20		4	16								
D.1.e	Highway 80 Water Line			8	12		4	16								
D.1.f	Airport 10-inch/12-inch Wastewater Main						4	16								
D.1.g	Gary Job Corps LS Decommissioning			4	8		4	16								
D.1.h	Hemphill Creek 12-inch, 24-inch, 27-inch Wastewater Main			2	6		4									
D.1.i	Blanco Riverine Project			2	4											
D.1.j	Lift Station Startup			4	8											
D.1.k	Coordination with Other Projects			4	8											
D.1.l	Overall schedule and phasing			4	8											
D.2	Prepare Draft EFR	4	8	12	32	6			4							
D.3	OPCC			4	6											
D.4	DRAFT PER Workshop (1)	2	2	2	4											
D.4.a	Review Comments and Issue Responses			2	4											
D.5	FINAL PER	4	8	6	16				4							
E	**Task E. Schematic Design (20% Design)**															
E.1.a	Highway 80 Force Main			20	40		20	80								
E.1.b	Highway 80 Water Line	2	4	14	30	4	20	80								
E.2	Highway 80 Lift Station			22	44		10	40								
F	**Task F. Survey (Ford Engineering)**															
F	Manhole and LS Invert Survey / Creek Elev Survey				2		2									
G	**Task G. Lift Station Design Manual**															
G.1	Site Visits (1 total; 8 hours per site visit)		8	8	8											
G.2.a	Standard Lift Station Details		4	8	40											
G.2.b	Standard Lift Station Specifications		4	8	40											
G.2.c	Standard / Preferred Products List		4	8	40											
G.3	DRAFT Design Manual Workshop (1)	2	2	2	4											
G.4	Final Design Manual		4	8	12											
	Total Hours / Quantity	**25**	**61**	**310**	**468**	**10**	**76**	**280**	**51**	**117**	**248**	**34**	**34**	**24**	**6**	**4**
	Total Effort	**$ 6,127**	**$ 13,077**	**$ 56,355**	**$ 65,699**	**$ 2,458**	**$ 11,900**	**$ 27,525**	**$ 10,701**	**$ 20,829**	**$ 33,998**	**$ 3,844**	**$ 6,052**	**$ 2,712**	**$ 822**	**$ 960**

Task	Task Description	Rebecca Sandoval	David Phillips	Adam Burke	Janet Frantz	Erin Rider	Marissa Mendoza	Derek Gianan	Total Hours	Total Labor Effort	Total Expense Effort	Subconsultants		Total
		Elec QC	Elec PE	Elec EIT	Elec CAD	Admin	Accounting	Scheduler				Ford Eng	Total Sub Effort	Total Effort
		$178	$156	$137	$153		$148	$148						
A	**Task A. Project Management**									$ -	$ -		$ -	$ -
A.1	Subconsultant agreements						2		4	$ 652	$ 34		$ -	$ 686
A.2	Project Setup and Accounting						4		8	$ 1,304	$ 68		$ -	$ 1,372
A.3	QA/QC Plan and Implement								12	$ 2,558	$ 102		$ -	$ 2,660
A.4	Baseline Schedule							4	6	$ 948	$ 51		$ -	$ 999
A.5	Project Planning and Monitoring (scope / schedule / budget) (11 mo*2 hrs/mo PM; 1 hr/mo for accounting; 0.5 hr/mo for admin)					6	11		39	$ 5,655	$ 332		$ -	$ 5,986
A.6	Status Reporting/Invoicing (12)								12	$ 2,179	$ 102		$ -	$ 2,281
A.7	Project Team Coordination (w/Owner, Subconsultants & Internal Team (1 hr/wk))								48	$ 8,715	$ 408		$ -	$ 9,123
A.8	Meetings									$ -	$ -		$ -	$ -
A.8.a	Kickoff meeting with COSM & Internal KO Mtg		1	1					23	$ 4,095	$ 207		$ -	$ 4,302
A.8.b	Progress Mtgs w/Owner (4 total)								32	$ 5,688	$ 272		$ -	$ 5,960
A.8.c	Public Meeting (1 total)								10	$ 1,678	$ 85		$ -	$ 1,763
A.8.d	Site Visit (1 total)								16	$ 2,520	$ 147		$ -	$ 2,667
B	**Task B. Master Plan Update**									$ -	$ -		$ -	$ -
B.1	Data Collection and Review								22	$ 3,226	$ 187		$ -	$ 3,413
B.2	Update Land Use Assumptions								42	$ 6,294	$ 357		$ -	$ 6,651
B.3	Update Wastewater Flow Projections								36	$ 5,356	$ 306		$ -	$ 5,662
B.4	Progress Meeting #1								10	$ 1,904	$ 175		$ -	$ 2,079
B.5	Hydraulic Analysis								68	$ 10,712	$ 578		$ -	$ 11,290
B.6	Development of Improvement Alternatives								80	$ 12,328	$ 680		$ -	$ 13,008
B.7	Progress Meeting #2								10	$ 1,904	$ 175		$ -	$ 2,079
B.8	Improvement Alignment and Site Analysis:								42	$ 6,294	$ 357		$ -	$ 6,651
B.9	Cost Estimates								50	$ 7,322	$ 425		$ -	$ 7,747
B.10	Draft Technical Memorandum								46	$ 6,746	$ 391		$ -	$ 7,137
B.11	Progress Meeting #3								10	$ 1,904	$ 175		$ -	$ 2,079
B.12	Final Technical Memorandum								26	$ 3,789	$ 355		$ -	$ 4,144
	Task C. Permitting and Environmental Preliminary Evaluation									$ -	$ -		$ -	$ -
C.1	Site Visit /mapping WOTUS								20	$ 2,876	$ 181		$ -	$ 3,057
C.2	Identify anticipated permits and points of contact								14	$ 2,082	$ 119		$ -	$ 2,201
C.3	Permitting Entities Coordination								8	$ 1,424	$ 68		$ -	$ 1,492
C.4	Environmental and archeological desktop study								33	$ 4,725	$ 281		$ -	$ 5,006
C.5	Section 404 Permitting and Evaluation								6	$ 767	$ 51		$ -	$ 818

Exhibit 2 - Detailed Fee Schedule

Task	Task Description	Rebecca Sandoval	David Phillips	Adam Burke	Janet Frantz	Erin Rider	Marissa Mendoza	Derek Gianan	Total Hours	Total Labor Effort	Total Expense Effort	Subconsultants: Ford Eng	Subconsultants: Total Sub Effort	Total: Total Effort
		Elec QC	Elec PE	Elec EIT	Elec CAD	Admin	Accounting	Scheduler						
		$178	$156	$137	$153		$148	$148						
D	**Task D. Preliminary Engineering Report (PER)**									$ -	$ -		$ -	$ -
D.1.a	Hydraulics – summarize the assumptions, methodology, and recommendations of the Master Plan Update Task								8	$ 1,122	$ 68		$ -	$ 1,190
D.1.b	Environmental - summarize the assumptions, methodology, and recommendations of the Permitting and Environmental Preliminary Evaluation.								8	$ 1,672	$ 68		$ -	$ 1,740
D.1.c	Highway 80 Lift Station Force Main								52	$ 7,193	$ 442		$ -	$ 7,635
D.1.d	Highway 80 Lift Station	6	24	44					126	$ 18,293	$ 1,071		$ -	$ 19,364
D.1.e	Highway 80 Water Line								40	$ 5,341	$ 340		$ -	$ 5,681
D.1.f	Airport 10-inch/12-inch Wastewater Main								20	$ 2,200	$ 170		$ -	$ 2,370
D.1.g	Gary Job Corps LS Decommissioning								32	$ 4,051	$ 272		$ -	$ 4,323
D.1.h	Hemphill Creek 12-inch, 24-inch, 27-inch Wastewater Main								12	$ 1,833	$ 102		$ -	$ 1,935
D.1.i	Blanco Riverine Project								6	$ 926	$ 51		$ -	$ 977
D.1.j	Lift Station Startup								12	$ 1,851	$ 102		$ -	$ 1,953
D.1.k	Coordination with Other Projects								12	$ 1,851	$ 102		$ -	$ 1,953
D.1.l	Overall schedule and phasing								12	$ 1,851	$ 102		$ -	$ 1,953
D.2	Prepare Draft EFR	6	12	24					108	$ 18,080	$ 918		$ -	$ 18,998
D.3	OPCC		4	6					20	$ 3,052	$ 170		$ -	$ 3,222
D.4	DRAFT PER Workshop (1)		4						14	$ 2,484	$ 119		$ -	$ 2,603
D.4.a	Review Comments and Issue Responses		2	4					12	$ 1,806	$ 102		$ -	$ 1,908
D.5	FINAL PER	6	6	10					60	$ 10,344	$ 644		$ -	$ 10,988
E	**Task E. Schematic Design (20% Design)**									$ -	$ -		$ -	$ -
E.1.a	Highway 80 Force Main								160	$ 20,255	$ 1,360		$ -	$ 21,615
E.1.b	Highway 80 Water Line								154	$ 20,089	$ 1,309		$ -	$ 21,398
E.2	Highway 80 Lift Station								116	$ 15,682	$ 986		$ -	$ 16,668
F	**Task F. Survey (Ford Engineering)**									$ -	$ -		$ -	$ -
F	Manhole and LS Invert Survey / Creek Elev Survey								4	$ 580	$ 34	2,000	$ 2,300	$ 2,914
G	**Task G. Lift Station Design Manual**									$ -	$ -		$ -	$ -
G.1	Site Visits (1 total; 8 hours per site visit)		20						44	$ 7,546	$ 1,396		$ -	$ 8,942
G.2.a	Standard Lift Station Details	4	8	30	10				104	$ 15,831	$ 884		$ -	$ 16,715
G.2.b	Standard Lift Station Specifications	4	8	40					104	$ 15,666	$ 884		$ -	$ 16,550
G.2.c	Standard / Preferred Products List	4	8	40					104	$ 15,666	$ 884		$ -	$ 16,550
G.3	DRAFT Design Manual Workshop (1)	2		2					14	$ 2,529	$ 119		$ -	$ 2,648
G.4	Final Design Manual								24	$ 4,060	$ 204		$ -	$ 4,264
										$ -	$ -		$ -	$ -
	Total Hours / Quantity	**34**	**105**	**221**	**22**	**6**	**17**	**4**	**2,157**			**$ 2,000**		
	Total Effort	**$ 6,220**	**$ 16,824**	**$ 31,125**	**$ 3,459**	**$ -**	**$ 2,549**	**$ 592**		**$ 323,826**	**$ 19,927**	**$ 2,300**	**$ 2,300**	**$ 346,053**

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. Supplemental Services - The Engineer will receive approval in writing before performing supplemental services. The amounts of these invoices will be based upon the extent of work completed by the Engineer on a lump sum basis.
3. 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.

EXHIBIT 3

City of San Marcos Highway 80 Utility Project – Preliminary Engineering
PROJECT SCHEDULE

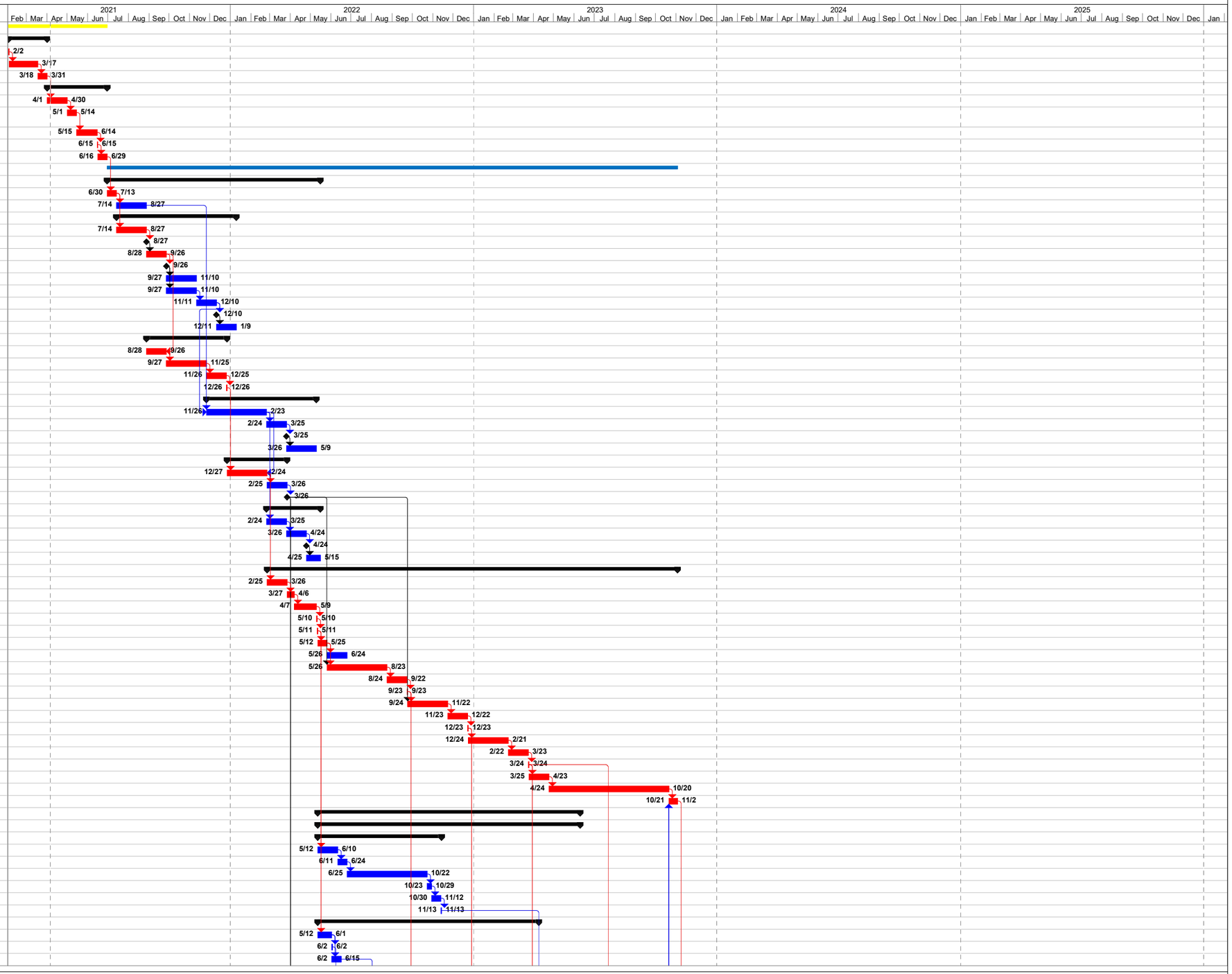
TIME OF COMPLETION: FNI is authorized to commence work on the project upon execution of this AGREEMENT and agrees to complete the services in accordance with the following schedule:

Milestone/Deliverable	Calendar Days
Anticipated Notice to Proceed	June 2021
Master Plan Update and Draft Master Plan Update	165 days following Notice to Proceed
Draft Preliminary Engineering Report	90 days following approval of City approval of alignments
Final Preliminary Engineering Report	45 days following receipt of comments from City on Draft PER Submittal
20% Design Layout	60 days following approval of City approval of alignments
Draft Lift Station Design Manual	30 days following submittal of Draft PER
Final Lift Station Design Manual	21 days following receipt of comments from City on Draft Lift Station Design Manual

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.

Exhibit 3 - Project Schedule

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	**Preliminary Phase**	**148 days**	**Tue 2/2/21**	**Tue 6/29/21**		
2	**Scoping**	**58 days**	**Tue 2/2/21**	**Wed 3/31/21**		
3	COSM / FNI Scoping Meeting	1 day	Tue 2/2/21	Tue 2/2/21		
4	Finalize Scope	43 days	Wed 2/3/21	Wed 3/17/21	3	
5	FNI PSA Submittal	14 days	Thu 3/18/21	Wed 3/31/21	4	
6	**Professional Service Contract**	**90 days**	**Thu 4/1/21**	**Tue 6/29/21**		
7	Negotiate Contract	30 days	Thu 4/1/21	Fri 4/30/21	5	
8	Prepare ARF/Verify Funds with Finance - May need reimbursement form	14 days	Sat 5/1/21	Fri 5/14/21	7	
9	ARF Review Process (Min 29 Days)	31 days	Sat 5/15/21	Mon 6/14/21	8	
10	City Council (Typically Tuesday)	1 day	Tue 6/15/21	Tue 6/15/21	9	
11	Execute Contract	14 days	Wed 6/16/21	Tue 6/29/21	10	
12	**Design Phase**	**856 days**	**Wed 6/30/21**	**Thu 11/2/23**		
13	**Preliminary Design**	**320 days**	**Wed 6/30/21**	**Sun 5/15/22**		
14	Kick Off Meeting	14 days	Wed 6/30/21	Tue 7/13/21	11	
15	Manhole Survey	45 days	Wed 7/14/21	Fri 8/27/21	14	
16	**Master Plan Update**	**180 days**	**Wed 7/14/21**	**Sun 1/9/22**		
17	Data Collection/Update Land Use/Flows	45 days	Wed 7/14/21	Fri 8/27/21	14	
18	Meeting #1 - LU Assumptions & Flows	0 days	Fri 8/27/21	Fri 8/27/21	17	
19	Hydraulics & Improvement Alternatives	30 days	Sat 8/28/21	Sun 9/26/21	18	
20	Meeting #2 - Hydraulics & Improvements	0 days	Sun 9/26/21	Sun 9/26/21	19	
21	CIP Update	45 days	Mon 9/27/21	Wed 11/10/21	20	
22	Draft Master Plan Update TM Submittal	45 days	Mon 9/27/21	Wed 11/10/21	20	
23	COSM Review - Draft Master Plan Update	30 days	Thu 11/11/21	Fri 12/10/21	22	
24	Meeting #3 - Draft Master Plan TM	0 days	Fri 12/10/21	Fri 12/10/21	23	
25	FNI Finalizes Master Plan Update TM	30 days	Sat 12/11/21	Sun 1/9/22	24	
26	**Alignment Analysis**	**121 days**	**Sat 8/28/21**	**Sun 12/26/21**		
27	Data Collection	30 days	Sat 8/28/21	Sun 9/26/21	19FF	
28	Develop Alignment Alternatives	60 days	Mon 9/27/21	Thu 11/25/21	27	
29	COSM Review - Draft Alignment Alt.	30 days	Fri 11/26/21	Sat 12/25/21	28	
30	Meeting - Alignment Alternatives	1 day	Sun 12/26/21	Sun 12/26/21	29	
31	**PER**	**165 days**	**Fri 11/26/21**	**Mon 5/9/22**		
32	FNI Prepare Draft PER	90 days	Fri 11/26/21	Wed 2/23/22	15,23FS-15	
33	COSM Reviews Draft PER	30 days	Thu 2/24/22	Fri 3/25/22	32	
34	Draft PER Review Meeting	0 days	Fri 3/25/22	Fri 3/25/22	33	
35	FNI Finalizes PER	45 days	Sat 3/26/22	Mon 5/9/22	34	
36	**20% Design**	**90 days**	**Mon 12/27/21**	**Sat 3/26/22**		
37	FNI Prepare Preliminary Layout (20%)	60 days	Mon 12/27/21	Thu 2/24/22	32FF,30	
38	COSM Reviews 20% Design	30 days	Fri 2/25/22	Sat 3/26/22	37	
39	20% Review Meeting	0 days	Sat 3/26/22	Sat 3/26/22	38	
40	**Lift Station Design Manual**	**81 days**	**Thu 2/24/22**	**Sun 5/15/22**		
41	FNI Prepare Draft Design Manual	30 days	Thu 2/24/22	Fri 3/25/22	32	
42	COSM Reviews Draft Design Manual	30 days	Sat 3/26/22	Sun 4/24/22	41	
43	Draft Design Manual Review Meeting	0 days	Sun 4/24/22	Sun 4/24/22	42	
44	FNI Finalizes Design Manual	21 days	Mon 4/25/22	Sun 5/15/22	43	
45	**Final Design (Future Contract)**	**616 days**	**Fri 2/25/22**	**Thu 11/2/23**		
46	Negotiate CIS #1	30 days	Fri 2/25/22	Sat 3/26/22	37	
47	Prepare ARF/Verify Funds with Finance - May	11 days	Sun 3/27/22	Wed 4/6/22	46	
48	ARF Review Process (Min 29 Days)	33 days	Thu 4/7/22	Mon 5/9/22	47	
49	City Council (Typically Tuesday)	1 day	Tue 5/10/22	Tue 5/10/22	48	
50	Execute CIS #1	1 day	Wed 5/11/22	Wed 5/11/22	49	
51	Kick Off Meeting	14 days	Thu 5/12/22	Wed 5/25/22	50	
52	Topographic & Boundary Survey	30 days	Thu 5/26/22	Fri 6/24/22	51	
53	FNI Prepare Preliminary Layout (30%)	90 days	Thu 5/26/22	Tue 8/23/22	39,51	
54	COSM Reviews 30% Design	30 days	Wed 8/24/22	Thu 9/22/22	53	
55	30% Review Meeting	1 day	Fri 9/23/22	Fri 9/23/22	54	
56	FNI Prepare 60%	60 days	Sat 9/24/22	Tue 11/22/22	55,39	
57	COSM Reviews 60% Design	30 days	Wed 11/23/22	Thu 12/22/22	56	
58	60% Review Meeting	1 day	Fri 12/23/22	Fri 12/23/22	57	
59	FNI Prepare 90%	60 days	Sat 12/24/22	Tue 2/21/23	58	
60	COSM Reviews 90% Design	30 days	Wed 2/22/23	Thu 3/23/23	59	
61	90% Review Meeting	1 day	Fri 3/24/23	Fri 3/24/23	60	
62	FNI Seals 100% Plans	30 days	Sat 3/25/23	Sun 4/23/23	61	
63	Float	180 days	Mon 4/24/23	Fri 10/20/23	62	
64	Meeting with Purchasing To Advertise	13 days	Sat 10/21/23	Thu 11/2/23	92,97,63	
65	**Easements (Future Contract)**	**394 days**	**Thu 5/12/22**	**Fri 6/9/23**		
66	**Easements/ROW Acquisitions**	**394 days**	**Thu 5/12/22**	**Fri 6/9/23**		
67	**License Agreements**	**186 days**	**Thu 5/12/22**	**Sun 11/13/22**		
68	Prepare License Agreement Exhibits	30 days	Thu 5/12/22	Fri 6/10/22	50	
69	Prepare offer letter	14 days	Sat 6/11/22	Fri 6/24/22	68	
70	Negation with owners	120 days	Sat 6/25/22	Sat 10/22/22	69	
71	Offer accepted: Letter agreement, Exhil	7 days	Sun 10/23/22	Sat 10/29/22	70	
72	Request check	14 days	Sun 10/30/22	Sat 11/12/22	71	
73	Possession of Real Estate from Close	1 day	Sun 11/13/22	Sun 11/13/22	72	
74	**Easements and ROW**	**332 days**	**Thu 5/12/22**	**Sat 4/8/23**		
75	Survey/Exhibit/Field Notes Prepared	21 days	Thu 5/12/22	Wed 6/1/22	50	
76	Field Notes to appraiser	1 day	Thu 6/2/22	Thu 6/2/22	75	
77	Notice of intent to acquire sent to prope	14 days	Thu 6/2/22	Wed 6/15/22	75	

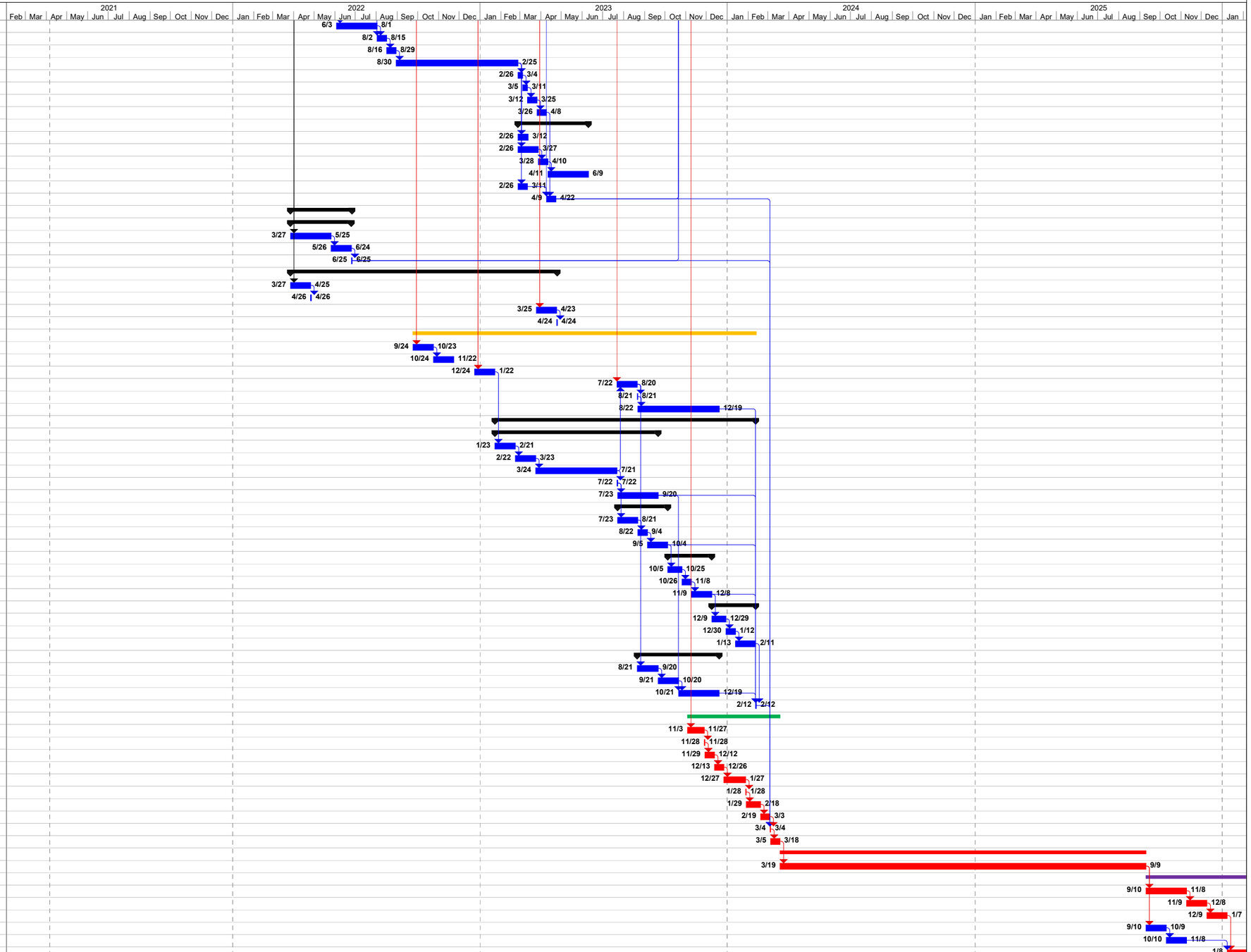


Project: COSM Highway 80 Utility Proj
Date: Tue 4/6/21

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



Project: COSM Highway 80 Utility Proj
Date: Tue 4/6/21

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 4
AUTHORIZATION OF CHANGE IN SERVICE

CONTRACT NO./ CONTRACT NAME:			
CITY REPRESENTATIVE:			
CONTRACTOR:			
CONTRACT EFFECTIVE DATE:			
THIS AUTHORIZATION DATE:		**AUTHORIZATION NO.:**	

DESCRIPTION OF WORK TO BE ADDED TO OR DELETED FROM SCOPE OF SERVICES:

Original Contract Amount:	NTE	$
Previous Increases/Decreases in Contact Amount:	NTE	$
Current Contract Amount:	NTE	$
This Increase/Decrease in Contract Amount:	NTE	$
Revised Contract Amount:	NTE	$

CONTRACTOR:

Signature Date

Print Full Name / Title (if not in individual capacity)

CITY:

Signature Date

Print Name

Title

City Department Use Only Below This Line (PM, etc.).

Account Number(s):		
#	{Date}	{Amount}
#	{Date}	{Amount}
#	{Date}	{Amount}

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Signature Date

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CITY:

Signature Date

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Account Number(s):		
#	{Date}	{Amount}
#	{Date}	{Amount}
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