

04/17/2026
1000-25-0091v4

Andrew Zagars, P.E.
City Engineer
Engineering Division
3201-A S.W.S Young Drive
City of Killeen, Texas 76542-6157
P 254-616-3179 | F 254-616-3182
azagars@killeentexas.gov

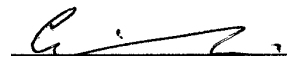
Subject: Proposal for Engineering Services for Design and Construction of the Low Water Crossing Phase 1 Project, Killeen, TX (28th Street Diversion Channel)

Scheibe Consulting, LLC was asked to provide a proposal for civil engineering services to assist with the design and construction of the S. 28th St Diversion Channel Project for the City of Killeen, TX

Attachment A is a lump sum fee proposal for engineering services. The lump sum fee will be billed monthly based on percent complete.

I appreciate the opportunity to be of service. Please let me know if you have any questions.

Sincerely,
Scheibe Consulting, LLC



Eric Scheibe, PE, CFM
President

ATTACHMENT A

SCOPE OF WORK

Design and Construction of the Low Water Crossing Phase 1 Project, Killeen , TX

Introduction

The City of Killeen has a desire to improve the drainage along S. 28th Street, near the intersection of S. 28th and BUS 190 in Killeen, TX (See **Figure A**). The main goal of this project is to improve drainage along the segment of S. 28th St ROW from BUS 190, north to the main channel of Nolan Creek. This design will follow current drainage design standards, as per the 2011 Drainage Design Standards Manual. These design standards specifically include:

- Design of open channels to convey the 25-yr flood,
- Design should ensure that the 100-yr flood is contained within dedicated easements and ROW,
- Design of storm sewers to convey the 25-yr flood, &
- Design of storm sewers and curb gutters to convey the 100-yr flood within dedicated ROW.

As part of the on-going Drainage Master Plan, Scheibe has a draft H&H model for the drainage area to this channel and will utilize this model for this effort.



Figure A – Project Area Map (Red is Existing Channel, Blue is Proposed Diversion)

The following is a summary of tasks needed to complete this project:

A. Project Management

ENGINEER will provide project management, coordination, schedule, and quality control activities. Progress activities will be reviewed with the CITY on a regular basis and any issues will be discussed as they are noted.

Prepare and submit monthly invoices based on engineer's estimate of percent complete. Each submittal will include a summary of activities of which the current invoice is covering costs incurred for that billing cycle. Invoice format and content will comply with the Master Services Agreement. The duration of this activity is anticipated for 18 months (design through construction).

Develop project schedule primarily evaluating timing between the various tasks and the anticipated construction schedule. Schedule to be updated following the completion of each task below.

For the duration of the contract, conduct monthly project team meetings to be attended in-person or virtually as necessary with CITY to discuss ongoing progress of the project. All meetings described below are inclusive of this effort unless specifically identified and quantified separately. ENGINEER will prepare agenda for each meeting and subsequent minutes. It is assumed that there will be 6 virtual meetings total for the duration of the design.

Quality control activities are assumed to include internal review of subconsultants work, review of internal staff activities, review of subconsultant invoices, and overall quality control reviews for all submittals to the CITY.

Coordination is anticipated to include the following agencies:

- KILLEEN

Deliverables will include:

- *Meeting Minutes*
- *Monthly Invoices and Progress Report*

B. Data Collection

Consultant will initiate field data collection for the project site, which will consist of the following:

1. Field topographic and boundary survey of the project area.
2. Survey of Existing Stomsewer System in project area.
3. Bathymetric/Topographic Survey for approximate outfall location of open channel
4. Right-of-Entry for all private property needing access.
5. *Geotechnical data collection is excluded from this scope. If this is required to better define rock layers and outfall structure foundation layers, then additional scope and fee will be necessary.*
6. Environmental investigation – *It is assumed that all activities will remaining outside the OHWM and no environmental permitting will be required.*

Various reports, figures, and memos will be provided at the completion of this task.

Deliverables will include:

- *CAD file for Survey in Surface Coordinates*
- *PDF of existing survey*
- *Boundary/ROW Survey*
- *Geotechnical Engineering Report*

C. Environmental Permitting

No Environmental permitting is anticipated for this project as it is assumed that all proposed improvements will remain outside the limits of Waters of the US.

D. Preliminary Design Services

Consultant will develop a preliminary design to assist with the final site layout and channel configuration. This may require multiple iterations to accommodate potential properties that can be acquired, as not all landowners have been contacted to-date on the sell of their land or easement acquisition needs. The preliminary design will include 30% level design drawings, calculations, figures, and supporting information necessary for identifying the final location of this proposed channel. This effort will also

include an H&H analysis, using the latest Killeen DMP model for the watershed in question. This model will be refined and modified to include detailed bridge/culvert survey data, and stormsewer data. The DMP model will likely be converted to an InfoWorks ICM model to simulate the 2D hydraulics and stormsewer system.

E. Right-of-Way Acquisition (Supplemental Services)

It is assumed that no easement or ROW will be required for this project. Should this assumption no longer be valid through the course of the design effort, then additional services may be warranted.

As such, a supplemental fee and scope have been developed in the event ROW or easements are necessary and can be executed by the City if desired. These supplemental services will include the following:

*Consultant will assist with the ROW acquisition for this project. ROW effort includes easement field notes, easement document preparation, and development of necessary figures. **City will be responsible for obtaining an appraiser and coordination with landowner to acquire necessary easements and/or Rights of Way for this project.***

F. Final Design Services

Consultant will develop final design construction plans based on the final selected diversion channel alignment. The final design will account for any geotechnical engineering, environmental scientist, and the field topographic conditions data provided. Consultant will develop full civil construction plans, specifications, and bid package for use in bidding this project out to the contractor community. Services will include 90%, and 100% CD submittals, specifications, and construction cost estimates for each submittal milestone. Final design will be submitted to the respective permitting authorities.

This project is located within the 100-yr Zone AE and Floodway of Nolan Creek. As a result a no-rise scenario is required to be achieved within the proposed improvements. Although most of this project will include a cut scenario, there is a change for some minor fill at the outfall of the proposed diversion channel and Nolan Creek. Scheibe will utilize the Nolan Creek FPP model to evaluate these improvements within the Nolan Creek floodplain and ensure a no-rise scenario is achieved. It is assumed that no coordination with FEMA will be required for this project and no LOMR or CLOMR will be necessary.

G. Bid Phase Services

ENGINEER will prepare construction bid documents, including contract language, specifications, bond requirements, bid tab, and bid opening dates. ENGINEER will be available to respond to RFIs, the Pre-Bid Meeting, Bid Opening Meeting, review of bids, interview of bidders, and assistance with final selection. ENGINEER will be available to assist with review of bond documents and ensure all contract documents are signed prior to issuance of notice-to-proceed.

Deliverables will include:

- *Bid Contract Documents*
- *Pre-Bid Meeting Presentation*

- *Bid Tab*
- *Recommendation Letter for selected contractor*

H. Construction Phase Services

ENGINEER will assist with construction phase services once a contractor is selected. ENGINEER will assist with RFIs, CO requests, Periodic Site Inspections, Pay App reviews, regular project meetings, coordination with CITY and contractor, and submittal reviews.

RFIs will include a formal response to all Requests for Information, and will include tabulated list of RFIs and responses throughout the contract period. It is assumed that there will be two (2) RFIs for budgeting purposes.

Regular site Inspections are not provided as part of this effort.

Monthly Teams meetings will occur for the duration of the construction contract. These meetings are assumed to last 1 hour and will total 6 meetings.

Change Order (CO) Requests will be documented similar to the RFIs and will be reviewed per the contract language and for unit price consistency and reasonableness. All COs will be presented to the CITY prior to agreement and will include a support letter or denial letter from the ENGINEER. It is assumed that there will be one (1) Change Order for budgeting purposes.

Pay Application Reviews will include a formal review of all pay applications, a comparison of pay application requests to effort noted in the field, via period site inspections, and denial or approval by the ENGINEER. Pay Applications will be reviewed within 1 week of submittal by the contractor. It is assumed that there will be 6 total pay applications for a construction duration of 6 months.

Submittal reviews will be performed by the ENGINEER for each submittal provided by the Contractor. ENGINEER will provide formal submittal review stamps with concurrence or rejection and will maintain a log of submittals received and outstanding. ENGINEER will also provide a list of submittals needed from the contractor within 2 weeks of notice-to-proceed for construction. It is assumed that there will be four (4) submittals for materials to be reviewed.

Deliverables will include:

- *RFI Response Log*
- *CO Log*
- *Signed Pay Applications*
- *Meeting Minutes for Virtual Meetings*
- *Regular Site Inspections (excluded)*
- *Inspection Reports (excluded)*
- *Submittal Log and Submittal Review documents*

- *Final Punch List*
- *Final Approval Letter*

SCHEDULE

The ENGINEER will perform the services as described herein per the following schedule:

FEE (Lump Sum)

See attached **Exhibit A**. **The fee will be billed monthly based on percent complete.**

Low Water Crossing Phase 1

S. 28th St Diversion Project - Schedule																			
4/17/2026																			
Task	Description	Month																	
		5/1/2026	6/1/2026	7/1/2026	8/1/2026	9/1/2026	10/1/2026	11/1/2026	12/1/2026	1/1/2027	2/1/2027	3/1/2027	4/1/2027	5/1/2027	6/1/2027	7/1/2027	8/1/2027	9/1/2027	10/1/2027
A	Project Management																		
B	Data Collection																		
C	Environmental Permitting (N/A)																		
D	Preliminary Engineering		30%	30%	Rev														
E	Right-of-Way Acquisition (If Applicable)																		
F	Final Design Services					90%	90%	90%	Rev	100%									
G	Bid Phase Services																		
H	Construction Phase Services																		

EXHIBIT A - FEE SCHEDULE																										
Professional Service Description			Total Task Hours (Scheibe)	Total Task Cost	Staff																Expenses	Subconsultants				
					Project Principal	Project Manager	Senior Engineer	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer II	Engineer I	EIT III	EIT II	EIT I	CAD Tech III	RPLS	Drone Survey	2-Man Survey Crew		Admin III	Environmental - TBD	TBD	TBD - Geotech	Scheibe Sub Mark-up
					\$ 280.00	\$280.00	\$250.00	\$220.00	\$200.00	\$175.00	\$165.00	\$155.00	\$145.00	\$130.00	\$125.00	\$115.00	\$105.00	\$185.00	\$250.00	\$200.00	\$95.00	Fee	Fee	Fee	Fee	Fee
A Project Coordination			43.0	\$ 8,496.25																						
1	Meetings with CITY (6 Virtual)		6.0	\$ 1,680.00		6.0																\$ -	\$ -	\$ -	\$ -	\$ -
2	Invoice/Billing/Progress Reports (18 Total)		27.0	\$ 4,316.25		9.0															18.0	\$ 86.25	\$ -	\$ -	\$ -	\$ -
3	Internal Quality Control		10.0	\$ 2,500.00			10.0															\$ -	\$ -	\$ -	\$ -	\$ -
B Field Data Collection			137.5	\$ 24,479.00																						
1	Topographic / Tree Survey Data Collection		54.5	\$ 9,225.60		0.5					2.0						24.0	4.0		24.0		\$ 695.60	\$ -	\$ -	\$ -	\$ -
2	Bathymetric/Topo Survey Data Collection - Outfall		28.5	\$ 5,347.80		0.5				2.0							8.0	2.0		16.0		\$ 467.80	\$ -	\$ -	\$ -	\$ -
3	Boundary / ROW Survey		40.5	\$ 6,847.80		0.5											16.0	8.0		16.0		\$ 347.80	\$ -	\$ -	\$ -	\$ -
4	Geotechnical Data Collection (Excluded)		0.0	\$ -																		\$ -	\$ -	\$ -	\$ -	\$ -
5	One (1) Site Visit		14.0	\$ 3,057.80		4.0					10.0											\$ 287.80	\$ -	\$ -	\$ -	\$ -
C Environmental Permitting			0.0	\$ -																						
1	Data Collection and Agency Coordination - NWP 13 - NO PCN Needed		0.0	\$ -																		\$ -	\$ -	\$ -	\$ -	\$ -
D Preliminary Engineering			198.0	\$ 29,240.00																						
1	30% Design		90.0	\$ 12,220.00		2.0	4.0				4.0				80.0							\$ -	\$ -	\$ -	\$ -	\$ -
2	30% Response to Comments		22.0	\$ 3,060.00		2.0									20.0							\$ -	\$ -	\$ -	\$ -	\$ -
3	H&H Modeling		86.0	\$ 13,960.00		2.0	4.0					80.0										\$ -	\$ -	\$ -	\$ -	\$ -
E Right-of-Way Acquisition			0.0	\$ -																						
1	Easement and ROW Figures (See Supplemental)		0.0	\$ -																		\$ -	\$ -	\$ -	\$ -	\$ -
F Final Design Services			248.0	\$ 34,010.00																						
1	60% Design+Specifications (Excluded)		0.0	\$ -																		\$ -	\$ -	\$ -	\$ -	\$ -
2	60% Response to Comments (Excluded)		0.0	\$ -																		\$ -	\$ -	\$ -	\$ -	\$ -
3	90% Design+Secifications		110.0	\$ 15,195.00		2.0	8.0								100.0							\$ 135.00	\$ -	\$ -	\$ -	\$ -
4	90% Response to Comments		26.0	\$ 3,560.00		2.0									24.0							\$ -	\$ -	\$ -	\$ -	\$ -
5	100% Design+Specifications		86.0	\$ 11,695.00		2.0	4.0								80.0							\$ 135.00	\$ -	\$ -	\$ -	\$ -
6	100% Response to Comments		26.0	\$ 3,560.00		2.0									24.0							\$ -	\$ -	\$ -	\$ -	\$ -
G Bid Phase Services			34.0	\$ 7,300.00																						
1	Bid Document Preparation		18.0	\$ 3,060.00		2.0	4.0								12.0							\$ -	\$ -	\$ -	\$ -	\$ -
2	Pre-Bid Meeting (Virtual)		4.0	\$ 1,060.00		2.0	2.0															\$ -	\$ -	\$ -	\$ -	\$ -
3	Bid Opening (Virtual)		4.0	\$ 1,060.00		2.0	2.0															\$ -	\$ -	\$ -	\$ -	\$ -
4	Recommendation Letter and Interview of Contractor		8.0	\$ 2,120.00		4.0	4.0															\$ -	\$ -	\$ -	\$ -	\$ -
H Construction Phase Services			106.0	\$ 21,317.80																						
1	RFI Response Log (2 RFIs)		26.0	\$ 4,560.00		2.0	8.0								16.0							\$ -	\$ -	\$ -	\$ -	\$ -
2	CO Log (1 Change Order)		14.0	\$ 2,560.00		2.0	4.0								8.0							\$ -	\$ -	\$ -	\$ -	\$ -
3	Pay Application Reviews (6 Total)		18.0	\$ 3,000.00			6.0								12.0							\$ -	\$ -	\$ -	\$ -	\$ -
4	Site Inspections (Excluded)		0.0	\$ -																		\$ -	\$ -	\$ -	\$ -	\$ -
5	Regular Meetings (Teams) (6 Total)		12.0	\$ 2,430.00		6.0									6.0							\$ -	\$ -	\$ -	\$ -	\$ -
6	Submittal Reviews (4)		16.0	\$ 4,490.00		8.0	8.0															\$ 250.00	\$ -	\$ -	\$ -	\$ -
7	Punch List+Final Inspection		12.0	\$ 2,657.80		6.0									6.0							\$ 227.80	\$ -	\$ -	\$ -	\$ -
8	Approval Letter		8.0	\$ 1,620.00		4.0									4.0							\$ -	\$ -	\$ -	\$ -	\$ -
	END BASIC SERVICES																									
	Total Basic Service Hours:		766.5	\$ 124,843.05	0.0	72.5	68.0	0.0	0.0	0.0	18.0	80.0	0.0	0.0	392.0	0.0	48.0	14.0	0.0	56.0	18.0	\$ 2,633.05	\$ -	\$ -	\$ -	\$ -
Total Basic Services			766.5	\$ 124,843.05																						
SUPPLEMENTAL SERVICES																										
1	Easement and ROW Figures		34.0	\$ 5,720.00		2.0	8.0										16.0	8.0				\$ -	\$ -	\$ -	\$ -	\$ -
Total Supplemental Services			34.0	\$ 5,720.00																						
Total Basic + Supplemental Services			800.5	\$ 130,563.05																						