GIVLER ENGINEERING, INC.
515 Busby Drive, Suite 101, San Antonio, Texas 78209
TBPE No. F-2573

August 9, 2021

Mr. Tommy Weir, Precinct 1 County Commissioner
Blanco County Commissioners Court
P.O. Box 1437
Blanco, Texas 78606

Re: **Professional Services Agreement and Proposal for**
Designing a Low Water Crossing and New Alignment for Wuest Road
Project No. BLANCOCO-001

Dear Mr. Weir:

Thank you for requesting a proposal for the subject work from Givler Engineering Inc. We understand that Trainer Wuest Road crosses an unnamed tributary of the Blanco River by an existing low water crossing. The crossing is located near 2032 Trainer Wuest Road at a severe dog leg in the alignment.

Blanco County has acquired approximately 850 linear feet of 60-foot-wide right-of-way and four pieces of arch CMPs with one mitered end on each piece. The pieces will assemble to form two 31-foot-long culverts (top length) with mitered ends.

The County wishes for GEI to use the acquired culverts to design a low water crossing within the new right-of-way. The new crossing will not be an all-weather crossing and will be impassible at times due to high water. The county is not specifying a minimum design level of service for the culverts. The county wishes for the design to be based on the available culverts regardless of the level of service with respect to flood return periods allowing vehicle crossings. The new road alignment must accommodate trucks and trailers. The road is to be realigned so that the curve will be less severe, and the new crossing will cross the creek alignment more or less at a right angle.

Scope of Work

GEI proposes to team with Flash Topo to perform the following tasks:

Survey, Topographic Mapping & Site Visit

1. Develop a project approach.
2. Fly the work area (1,000 feet x 60 feet) with drones equipped with photogrammetric and/or LiDAR equipment to acquire topographic and elevation data.
3. Develop topographic mapping of the work area in hard form and in CAD format to serve as base maps to design the road and low water crossing.
4. Perform a limited elevation survey to identify critical elevations that determine achievable design grades. Supplement the topographic survey with spot elevations acquired with the limited elevation survey.

Drainage Study

1. Obtain regional topographic mapping.
2. Delineate boundaries of the drainage area that contributes flow to the proposed low water crossing.
3. Perform hydrologic calculations to determine peak discharge rates for 2-year, 5-year, 10-year, 25-year, 50-year, and 100-year rain events.
4. Determine the level of service that the proposed crossing with the county-provided culverts will provide.
5. Develop hydrologic and hydraulic calculation sheets for the plans.

Geotechnical Study

1. Obtain county's assistance in excavating up to 4 test pits.
2. Obtain soil samples from each pit.
3. Deliver soil samples to geotechnical lab for testing.
4. Obtain geotechnical recommendations for subgrade preparation.

Preliminary Design

1. Obtain topographic mapping from Flash Topo.
2. Obtain digital version of right-of-way survey from county's surveyor, WCR Land Surveying.
3. Overlay the topographic, boundary, and tree surveys to develop an existing condition plan.
4. Design and plot a rough road alignment that connects to the existing road on both sides of the creek and includes a low water crossing.
5. Design and plot a rough road profile showing existing ground, the top of rock in the vicinity of the creek, the proposed road centerline, and the proposed culverts.
6. Meet with county to discuss the layout and to make adjustments if necessary.

Detailed Design

1. Incorporate county comments into plan.
2. Update the alignment and profile plans to create Plan and Profile sheets with layouts at the top of the sheets and profiles at the bottom.
3. Design a grading plan with a table of important elevations, including
   a. Centerline,
   b. Left Edge of Pavement,
   c. Right Edge of Pavement, and
   d. Culvert Inverts.
4. Design details and develop detail sheets to include:
   a. Guardrails
   b. Signs
   c. Intermittent Curbs
   d. Culvert Headwalls and Backfill
   e. Pavement Cross Sections
5. Develop general notes and specifications. All specifications will be on the plans. No specification manual will be developed.
6. Incorporate the hydrology and hydraulic sheets from the drainage study.
7. Develop an engineering opinion of quantities and costs.

The Scope of Work does not include developing demolition plans for portions of the existing road that are outside the new right-of-way. It also does not include construction administration services. Please let us know if you wish for us to provide a proposal for any additional items.

Basis of Compensation

The fee for performing the tasks listed in the Scope of Work will be performed for the following fixed fee amounts:

Survey, Topographic Mapping & Site Visit	**$ 9,000**
Drainage Study	**$ 3,000**
Geotechnical Study	**$ 3,000**
Preliminary Design	**$ 8,000**
Detailed Design	**$16,000**
Total Engineering Fee	**$39,000**

Additional services may be authorized by mutual agreement at the following rates:

Principal Engineer	**$200**
Sr. Civil Engineer	**$200**
Sr. Geologist	**$200**
Sr. Engineer in Training	**$150**
Engineer in Training/CAD Technician	**$135**
Researcher	**$100**
Assistant	**$ 75**
Expenses (courier, reproduction, etc.)	**x 1.15**
Mileage	**IRS Business Rate x 1.15**

Prompt Payment Act 28.002

Invoices will be issued at approximately 1-month intervals. You agree to pay invoices within 30 35 days of issuance. Any unpaid balance is subject to a 1.5% per month service charge, which is an annual percentage rate of 18%. NO, statutory rate 28.004 Prompt Payment Act

No additional tasks will be performed unless first authorized by the County. Invoices will be issued at approximately 1-month intervals. The County agrees to pay invoices within 30 days of issuance. BB 8/17/21

Schedule

GEI proposes to complete the topographic survey and issue preliminary design plans within 5 weeks of receiving an executed agreement. GEI proposes to complete the detailed design plans within 4 weeks of receiving the county's comments on the preliminary design.

Certification

Givler Engineering, Inc. will not be required to execute any document that would result in its certifying, guaranteeing or warranting the existence of conditions whose existence Givler Engineering, Inc. cannot ascertain.

Engineer's Standard of Care

Engineer shall provide its services under this Agreement with the same degree of care, skill and diligence as is ordinarily provided by a professional engineer under similar circumstances for a similar project. Engineer represents that it has the capability, experience, available personnel, and means required to perform the services contemplated by this Contract. Services will be performed using personnel and equipment qualified and/or suitable to perform the work requested by the County. County retains the right to report to Engineer any unsatisfactory performance of Engineer personnel for appropriate corrective action. Engineer shall comply with applicable federal, state, and local laws in connection with any work performed hereunder.

givler@givlerengineering.com

Authorization

Thank you for the opportunity to submit this proposal. The offer in this proposal is valid until October 15, 2021. In order to approve this contract and to indicate your acceptance, please send a signed copy back to our office. Please do not hesitate to contact me if you have questions or if you need to discuss any of the terms of this Agreement.

Sincerely,

L. David Givler, MSCE, PE
President, Givler Engineering, Inc.

Acceptance and Approval

Name: Brett Bray - Blanco County

Signature: Brett Bray

Title: County Judge

Date: 8/17/2021