

**HIDALGO COUNTY**  
**Professional Engineering Services**  
**Agreement C-23-0498-01-09**

**WORK AUTHORIZATION NO. 1**

**THIS WORK AUTHORIZATION** is made pursuant to the terms and conditions of the Professional Engineering Services Agreement No. C-23-0498-01-09, incorporated herein by reference, for the **“On-Call Professional Engineering Services for Geotechnical and Construction Material Testing”** project made by and between HIDALGO COUNTY, action herein by and through the Commissioner’s Court, hereinafter called the **“Owner,”** and Raba Kistner, Inc., hereinafter called **“Engineer”**.

**PART 1. SCOPE OF WORK**

The purpose of this Work Authorization is for the **Engineer** to provide Geotechnical Services for “Administration 1 Building Expansion Project”, for and during the construction of the Project, or portions of the Project, as approved by the COUNTY.

The **Engineer** is to provide the scope of Services as required by the Agreement with Owner.

The scope of services to be provided by the **Engineer** is identified in **Attachment “A”** – “*Scope of Services to be provided by Engineer*” attached hereto and incorporated by reference.

**PART 2. ESTIMATED COST**

The estimated cost for services under this Work Authorization is **\$6,677.00..** This amount is based upon the costs outlined in the **Attachment “B”** – “*Fee Proposal*” attached hereto and incorporated by reference.

**PART 3. PAYMENT**

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the **Professional Engineering Services Agreement No. C-23-0498-01-09** between the **Owner** and the **Engineer**.

**PART 4. FUNDING**

This Work Authorization No. 1 shall be funded through funding source:

Account No. 4-1100-419-40-220-050-0-334

Requisition Number \_\_\_\_\_ (**MUST BE INCLUDED AFTER CC APPROVAL**)

**PART 5. PERIOD OF SERVICE**

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate **upon completion of the scopes of the Work Authorization, within the limits of Agreement No. C-23-0498-01-09, provided in this Work Authorization; or on** ( \_\_\_\_\_ **DATE** \_\_\_\_\_ ). *If applicable:* Engineer shall conform to the

approved "Work/Project Schedule", attached hereto and incorporated by reference herein as Attachment "C".

**PART 6. RESPONSIBILITIES AND OBLIGATIONS**

This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement No. C-23-0498-01-09.

**PART 7. ACKNOWLEDGEMENT AND CONFIRMATION**

Acknowledgement and confirmation by **Hidalgo County Precinct 4, Commissioner Ellie Torres**, as to content and detail of this **Work Authorization No. 1**.

**HIDALGO COUNTY PRECINCT No. 4**

By: \_\_\_\_\_  
**Ellie Torres**, Commissioner

**PART 8. ACCEPTANCE AND APPROVAL**

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on September 24<sup>th</sup>, 2024 as indicated below and effective as of **24<sup>th</sup> day of September, 2024**.

**EXECUTED** as of the day and year first written above.

**APPROVED BY COMMISSIONERS' COURT ON SEPTEMBER 24<sup>th</sup>, 2024.**

**Agenda Item No. 96687**

**Executive Office:** \_\_\_\_\_

**ENGINEER:**  
RABA KISTNER, INC.

**COUNTY:**  
COUNTY OF HIDALGO

\_\_\_\_\_  
Katrin M. Leonard

\_\_\_\_\_  
Hon. Richard F. Cortez, County Judge

**ATTEST:**

\_\_\_\_\_  
Arturo Guajardo, Jr., County Clerk

**LIST OF ATTACHMENTS:**

**Attachment "A"** – *Scope of Services to be provided by Engineer*

**Attachment "B"** – *Fee Proposal*

**Attachment "C"** – *Approved Work/Project Schedule (If applicable)*

**ATTACHMENT A**  
**- Scope of Services -**

Proposal No. PMA24-056-00 (Revised)  
September 17, 2024

Mr. Hector A. Garcia, CTCM  
Division Manager  
County of Hidalgo Construction Department  
2802 S. Business Highway 281  
Edinburg, Texas 78539

**Re: Revised Proposal for Geotechnical Engineering Services  
Proposed Building Addition Within the Existing  
Hidalgo County Planning, Purchasing, and Fire Marshall Facility  
2802 South Closner Boulevard  
Edinburg, Hidalgo County, Texas**

Dear Mr. Garcia:

On the basis of our meeting held with you and the design team on Tuesday, September 10, 2024, we thank you for selecting **RKI** to provide Geotechnical Engineering Services to Hidalgo County (CLIENT) for the above-referenced project. The broad objectives of our study will be to evaluate subsurface conditions at the subject site, and to provide foundation and construction recommendations for the proposed building addition. Described in this letter are:

- our understanding of pertinent project characteristics;
- our proposed scope for field and laboratory study;
- our proposed scope for engineering evaluation and reporting;
- our tentative project schedule; and
- our project lump sum fee.

### **PROJECT DESCRIPTION**

We understand that the proposed project consists of the design and construction of a single story, about 5,800 ft<sup>2</sup>, building addition. The proposed building addition is planned to be located along the west side of the existing Hidalgo County Planning, Purchasing, and Fire Marshall facility, situated at 2802 South Closner Boulevard in Edinburg, Hidalgo County, Texas. The proposed building addition is expected to create relatively light to moderate loads to be carried by the foundation system, which is anticipated to consist of a shallow foundation system.

### **FIELD STUDY**

On the basis of the project's information provided to us by the CLIENT, geologic evidence, and our experience with subsurface conditions in the vicinity of the site, we propose to conduct the following drilling scheme:

<b>Proposed Structure</b>	<b>Number of Borings</b>	<b>Depth, ft. *</b>
Building Addition	2	25

\* below the existing ground surface elevation, or auger refusal, whichever occurs first.

Borings will be located in the field utilizing tape and right angle measurements from existing benchmarks. Our scope of services does not include surveying of the boring locations. However, **RKI** recommends that the final boring locations be surveyed in the field by the CLIENT or their representative.

Samples will be taken using conventional split-spoon and/or Shelby tube sampling techniques in general accordance with applicable American Society for Testing and Materials (ASTM) standards. Representative portions of the samples will be sealed, identified, packaged, and transported to our laboratory for subsequent testing and classification.

Upon completion of drilling activities, water level readings, if applicable, will be recorded in the open boreholes and the boreholes will be backfilled using the auger cuttings generated during the drilling operations.

### **LABORATORY STUDY**

Upon completion of the subsurface exploration, a general testing program will be designed to define the classification and engineering characteristics of the subsurface strata. The laboratory testing is anticipated to include moisture content tests, Atterberg Limits (plasticity) tests, unconfined compressive strength tests, dry unit weight determinations, and grain size analyses. The laboratory testing will be performed in general accordance with applicable ASTM standards.

### **ENGINEERING REPORT**

The results of the field and laboratory phases of the study will be reviewed by our staff of engineers. The results of our review, together with the supporting field and laboratory data, will be presented in a written engineering report. Included therein will be recommendations concerning the design and construction of the foundation system for the proposed building addition. The Geotechnical Engineering Report may also include the following information and recommendations:

- A summary of the field and laboratory sampling and testing program;
- Boring logs and laboratory testing results;
- A review of the general site conditions including a description of the site, the subsurface stratigraphy, groundwater conditions, and the presence and condition of fill materials, if encountered.
- Foundation design considerations and recommendations, including:
  - expansive, soil-related movements using an empirical method for predicting the Potential Vertical Rise (PVR) developed by the Texas Department of Transportation (TxDOT);
  - methods for reducing expansive, soil-related movements to about 1 inch, which is the typical tolerance for ground-supported floor slabs in this region;
  - shallow foundation recommendations;

- available soil-bearing pressures;
- settlement estimations, where applicable; and
- groundwater considerations.
- Foundation construction considerations, including:
  - site drainage;
  - site preparation;
  - select fill materials;
  - shallow foundation excavations;
  - potential reuse of on-site materials as select fill materials;
  - excavation considerations; and
  - fill placement compaction requirements.
- Seismic region condition evaluations.

Since site grading plans can result in changes in the foundation subgrade conditions, final site grading plans will be helpful information in the preparation of engineering recommendations. In the absence of final site grading information, we will prepare recommendations based on the existing ground surface elevations.

The final report will be submitted only in a PDF format via electronic-mail attachment. Upon the CLIENT's request, we will reproduce the report in a spirally-bound copy.

#### **TENTATIVE PROJECT SCHEDULE**

Based on our present workload and weather permitting, it is anticipated that the field exploration phase of this study can begin within five working days of receiving written authorization to proceed, provided that the site is accessible to our truck-mounted drill rig and the CLIENT has supplied us with all available information regarding existing utilities and below-grade structures on site. The field exploration and laboratory testing phases of the study are expected to take approximately twelve working days to complete. The engineering report will be submitted within an additional twelve working days following completion of the laboratory testing. The above schedule does not account for delays due to inclement weather. We will be pleased to provide the design team with verbal design information as the data becomes available.

#### **LUMP SUM FEE**

**The total lump sum fee for the Geotechnical Engineering Study outlined herein is \$6,677.00.** Please refer to Attachment I for the breakdown of charges. Should unusual subsurface conditions be encountered in the field which indicate the desirability of significantly broadening the scope of the study, we will contact you to receive written authorization before proceeding with any additional work. Additional services will be billed on a unit basis.

It should be noted that our study scope (and project fee) do not include plan review or earthwork and foundation excavation observations during the construction of the project. However, plan review and construction observation costs should be included in the project budget.

It should also be noted that our study scope (and project fee) do not include professional time or travel expenses for participation in multiple design team meetings. If these services are required, they will be billed at our standard billing rates for professional time plus expenses.

**ACCEPTANCE**

We appreciate the opportunity of submitting this proposal and look forward to working with Hidalgo County in the development of this project.

Please return one signed original of this contract to provide written authorization for our firm to perform work on the services outlined herein. Our invoices are due and payable upon receipt at P.O. Box 971037, Dallas, Dallas County, Texas 75397-1037.

**RK** considers the data and information contained in this proposal to be proprietary. This statement of qualifications and any information contained herein shall not be disclosed and shall not be duplicated or used in whole or in part of any purpose other than to evaluate this proposal.

Very truly yours,

**RABA KISTNER, INC.**

Accepted By:



Adamari Davila, EIT  
Graduate Engineer

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Typed or Printed Name)



Saul Cruz, E.I.T.  
Graduate Engineer

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Date)

Copies submitted:      Above (1)

Attachment I

**ATTACHMENT B**  
**- Fee Schedule -**

**Attachment I**

**PROJECT TYPE:** Geotechnical Engineering Services  
**PROJECT NAME:** Proposed Building Addition - Hidalgo County  
**DATE:** Wednesday, September 11, 2024

**ATTN:** Mr. Hetcor A. Garcia, CTCM  
Division Manager  
Hidalgo County Construction Department  
2802 S. Business Highway 281  
Edinburg, Texas 78539

Structure	Number	Depth	Total Footage
Structure Addition	2	25	50
			0
			0
<b>Totals</b>	2	25	50

**FIELD OPERATIONS**

	<u>QUANTITY</u>	<u>UNIT PRICE</u>	<u>TOTAL</u>
Mobilization Truck-Mounted Rig, Drill Crew and Support	1 l.s.	\$327.50	\$327.50
Soil (Existing Ground Surface to 50 ft.)	50 l.f.	\$15.50	\$775.00
Field Logger Trip Charge	100 mile	\$1.25	\$125.00
Field Coordination - Field Engineer (E.I.T.)	2 hrs.	\$156.00	\$312.00
Field Coordination - Engineering Technician (Flagman)	4 hrs.	\$67.00	\$268.00
Field Logging Services - Engineering Technician	10 hrs.	\$67.00	\$670.00
Concrete/Asphalt Patch	2 hrs.	\$55.00	\$110.00

**Field Operations Subtotal:** \$2,587.50

**LABORATORY TESTS**

	<u>QUANTITY</u>	<u>UNIT PRICE</u>	<u>TOTAL</u>
Plasticity Index (Atterberg Limits)	4 ea.	\$114.50	\$458.00
Amount Finer Than No. 200 Sieve	4 ea.	\$77.50	\$310.00
Unconfined Compression (Includes Unit Dry Weight)	2 ea.	\$67.00	\$134.00
Moisture Content	16 ea.	\$14.00	\$224.00

**Laboratory Testing Subtotal:** \$1,126.00

**ENGINEERING AND REPORT**

	<u>QUANTITY</u>	<u>UNIT PRICE</u>	<u>TOTAL</u>
Licensed Professional Engineer (P.E.)	2 hrs.	\$172.00	\$344.00
Staff Engineer, E.I.T.	15 hrs.	\$136.50	\$2,047.50
Draftsman	2 hrs.	\$111.00	\$222.00
Secretarial	5 hrs.	\$70.00	\$350.00

**Engineering and Report Writing Subtotal:** \$2,963.50

**TOTAL:** \$6,677.00

