

Work Authorization Form

HIDALGO COUNTY
Professional Engineering Services for
“Geo Technical/Construction Material Testing Services”
Agreement # C-20-687-12-29

WORK AUTHORIZATION NO. 3

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner’s Court**, hereinafter called the “**Owner**,” and, **Raba Kistner, Inc.** professional engineers of McAllen, Texas, hereinafter called “**Engineer**”.

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the “engineering services” to provide geotechnical drilling and engineering services including foundation design and construction recommendations, and construction material testing for the proposed Pueblo de Palmas Park Facility.

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

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

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is \$5,824.00 for Geotechnical engineering services, and an additional about 2% of the construction cost for construction material testing services. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **Attachment “D”**.

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with **Attachment “D”** of the Agreement.

PART 4. FUNDING

This Work Authorization No. 3 shall be funded through funding source:

Account No. 1-1357-452-00-124-223-0-740

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 scopes of the work authorization.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and Confirmation by **Hidalgo County Precinct No.4, Commissioner, Ellie Torres**, as to content and detail of this **Work Authorization No. 3**.

**HIDALGO COUNTY
COMMISSIONER 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 May 11, 2021 as indicated below and effective as of 11th day of May, 2021.

**THE ENGINEER:
RABA KISTNER, INC.**

**THE OWNER:
HIDALGO COUNTY**

By: _____
Isidoro Arjona, P.E., PMP

By: _____
Richard Cortez, County Judge

ATTEST:

By: _____
Arturo Guajardo Jr., County Clerk

ATTACHMENT “A”
SCOPE OF SERVICES TO BE PROVIDED BY THE OWNER

The following provides an outline of the services to be provided by the **Owner** in the development of the proposed improvements to Seminary Road located within Hidalgo County hereinafter denoted as the **Project**.

GENERAL:

The **Owner** will provide to the **Engineer** the following:

- 1) Provide the authorization to proceed with services through coordination with the project consulting and design Engineer.
- 2) Payment for work performed by the **Engineer** and accepted by the **Owner** in accordance with Article 3 of the Agreement.
- 3) Assistance to the **Engineer**, as necessary, to obtain the required data and information from other local, regional, State, and Federal agencies the **Engineer** cannot easily obtain.
- 4) Provide any available relevant data the **Owner** may have on file concerning the **Project**.
- 5) Provide timely review and decisions in response to the **Engineer’s** request for information and/or required submittals and deliverables, in order for the **Engineer** to maintain the agreed-upon work schedule prepared in accordance with Attachment “C” attached to this Work Authorization.
- 6) Attend and participate in progress meetings as required and as coordinated and conducted by **Engineer**.

ATTACHMENT B

Scope of Services to be provided by the Engineer

HIDALGO COUNTY

Professional Engineering Services for

“Geo Technical/Construction Material Testing Services”

Agreement # C-20-687-12-29

Please refer to the attached proposal from Raba Kistner, Inc. (RKCI Proposal No. PMA21-030-00, dated May 5, 2021

Proposal No. PMA21-030-00
May 5, 2021

Ms. Leticia H. Saenz, CPPB
Director of Administrative Operations
Hidalgo County Precinct No. 4
1051 N. Doolittle Road
Edinburg, Texas 78542

**Re: Proposal for Geotechnical Engineering and Construction Materials Testing Services
Proposed Pueblo de Palmas Park Facility
Hidalgo County Precinct No. 4
4550 N. Cesar Chavez Road
Edinburg, Hidalgo County, Texas**

Dear Ms. Saenz:

On the basis of your written request received by our office via electronic-mail attachment Tuesday, May 4, 2021; our telephone conversation held with Mr. Jose Carlos Garza, Project Engineer with Chanin Engineering, LLC, the project's structural engineering firm on Wednesday, May 5, 2021; and the *First Amended Professional Services Agreement to Contract No. C-20-687-12-29*, dated December 29, 2020 between Hidalgo County Precinct No. 4 (CLIENT) and **RABA KISTNER, Inc. (RKCI)**, we thank you for selecting **RKCI** to provide Geo-technical Engineering Services and Construction Material Testing Services to Hidalgo County Precinct No. 4 for the above-referenced project. The broad objectives of our study will be to determine subsurface conditions at the subject site, and to provide foundation and pavement design and construction recommendations for the proposed park project. 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.

1.0 PROJECT DESCRIPTION

We understand that the proposed project consists of the design and construction of recreational park to include: 1) a monument sign structure; 2) a basketball court; 3) a rectangle-shaped, freestanding, pavilion structure; 4) a square-shaped, restroom building; and 5) their associated parking and driveway areas. The proposed recreational park is planned to be located within an undeveloped tract of land, situated at 4550 N. Cesar Chavez Road in Edinburg, Hidalgo County, Texas. The proposed structures expected to create relatively light to moderate loads to be carried by the foundation systems, which are anticipated to consist of shallow foundation systems. The pavement systems are anticipated to consist of flexible (asphalt) and/or rigid (concrete) pavements.



2.0 GEOTECHNICAL ENGINEERING SERVICES

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

Proposed Structure	Number of Borings	Depth, ft. *
Monument Sign	1	20
Basketball Court	1	20
Pavilion	1	20
Restroom Building	1	20
Pavement Areas	2	5

* 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, **RKCI** 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.

2.1 LABORATORY STUDY

Upon completion of the subsurface exploration, a general testing program will be designed to define the classification and shrink/swell characteristics of the subsurface strata. The laboratory testing is anticipated to include moisture content tests, Atterberg Limits (plasticity) tests, unconfined compressive strength determinations, dry unit weight determinations, and grain size analyses. The laboratory testing will be performed in general accordance with applicable ASTM standards. For pavement design analysis, a California Bearing Ratio (CBR) test value will be assumed based on the laboratory test results performed to determine the classification and estimation of the strength characteristics of the subgrade soils.

2.2 ENGINEERING ANALYSIS AND 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 and pavement systems for the proposed park project. 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.

Also included in the report will be general guidelines for the construction of pavements for the proposed parking and driveway areas. These guidelines will be based on the results of classification testing completed on specimens from the pavement areas and on our experience with similar soils.

Since site grading plans can result in changes in the foundation and pavement 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. Also, specific information concerning anticipated traffic loadings and frequencies for the pavement areas will be critical in the preparation of pavement recommendations.

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.

2.3 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 three 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.

3.0 CONSTRUCTION MATERIALS TESTING SERVICES

We have also been asked by the CLIENT to provide an estimate for the construction material testing services during the construction phase of this project. Construction Materials Testing Services can only be quantified once the project's plans and specifications are issued for construction. The scope and quantity of services provided will be dependent upon the actual services required/requested by the CLIENT. Charges will be assessed only for actual services rendered. Construction Materials Testing Services can only be quantified once the project's plans and specifications are issued for construction. Based on our experience on previous similar projects, the construction materials testing services may include but not limited to:

- 1) Earthwork
 - Moisture-Density Relationship (Proctor)
 - Atterberg Limits Determinations
 - Sieve Analyses
 - Technician Time
 - Proofrolling Observations
 - Field Density Tests
 - Vehicle Travel Charge

- 2) Concrete
 - Concrete Compressive Strength Tests
 - Air Content of Concrete
 - Technician Time
 - Vehicle Travel Charge

- 3) Foundation/Tilt-Up Wall Observations
 - Footing Observations

- Geotechnical Engineer Site Visit
- Reinforcing Steel Observations
- Structural-Steel Observations
- Technician Time
- Vehicle Travel Charge

4.0 LUMP SUM COST

The total lump sum cost for the **Geotechnical Engineering Study** outlined herein is **\$5,824.00**. 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 in accordance with the negotiated fees established in the *Service Contract*, agreed upon by both parties.

RKCI has been provided with a site plan of the project site by the project's architectural firm, illustrating the location of the proposed building. It is our understanding that access to all boring locations for a conventional, truck-mounted drilling rig and underground utility clearance will be provided by the CLIENT prior to our field exploration services.

In order to establish sufficient funds for conducting the construction material testing services during construction, **RKCI** recommends to use about 2% of the estimated construction cost as a preliminary budget since the project plans and specifications are in the process of being developed for the proposed project. Once the project plans and specifications are finalized for the project, then we can review the requirements of the project and provide the CLIENT with a revised estimate for the CQA services.

It should be noted that our study scope (and project cost) 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 cost) 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.

5.0 ACCEPTANCE

We appreciate the opportunity of submitting this proposal and look forward to working with the Hidalgo County Precinct No. 4 in the development of this project, which will be carried out in accordance with this letter and the executed contract between Hidalgo County Precinct No. 4 and **RKCI**.

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.

Very truly yours,

RABA KISTNER CONSULTANTS, INC.

Accepted By:

(Signature)



Saul Cruz, EIT
Graduate Engineer

(Typed or Printed Name)



Katrin M. Leonard, P.E.
Associate

(Title)

(Date)

Copies submitted: Above (1)

Attachment D

PROJECT TYPE: Geotechnical Engineering Services
PROJECT NAME: Proposed Pueblo de Palmas Park - Hidalgo County Precinct No. 4
DATE: Wednesday, May 05, 2021

ATTN: Ms. Leticia H. Saenz, CPPB
Director of Administrative Operations
Hidalgo County Precinct No. 4
1051 N. Doolittle Road
Edinburg, Texas 78542

Structures	Number	Depth	Soil	Total
Monument Sign	1	20	20	20
Basketball Court	1	20	20	20
Pavilion	1	20	20	20
Restroom Building	1	20	20	20
Pavement Areas	2	5	10	10
Totals	4			90

FIELD OPERATIONS	QUANTITY	UNIT PRICE	TOTAL
Mobilization of Drill Rig	1 l.s.	\$350.00	\$350.00
Drilling/Sampling 0 to 50 ft	90 l.f.	\$12.00	\$1,080.00
Trip Charge	2 trip	\$17.00	\$34.00
Field Coordination	2 hrs.	\$105.00	\$210.00
Field Boring Layout & Travel Time	2 hrs.	\$52.00	\$104.00
Field Logging Services	9 hrs.	\$52.00	\$468.00

Field Operations Subtotal: \$2,246.00

LABORATORY TESTS	QUANTITY	UNIT PRICE	TOTAL
Atterberg Limits (PI)	10 ea.	\$96.25	\$962.50
Minus 200-mesh Sieve	8 ea.	\$65.00	\$520.00
Unconfined Compression	2 ea.	\$56.25	\$112.50
Moisture Content	32 ea.	\$12.00	\$384.00

Laboratory Testing Subtotal: \$1,979.00

ENGINEERING AND REPORT	QUANTITY	UNIT PRICE	TOTAL
Geotechnical Engineer (PE)	2 hrs.	\$142.00	\$284.00
Jr. Geotechnical Engineer (EIT)	11 hrs.	\$105.00	\$1,155.00
Drafting	1 hrs.	\$60.00	\$60.00
Secretary/Word Processor (NS)	2 hrs.	\$50.00	\$100.00

Engineering and Report Writing Subtotal: \$1,599.00

TOTAL: \$5,824.00