

FILED  
AT 2:00 O'CLOCK P M  
NOV 02 2017  
ARTURO GUAJARDO, JR. COUNTY CLERK  
HIDALGO COUNTY, TEXAS  
BY \_\_\_\_\_ DEPUTY

**HIDALGO COUNTY**  
**Professional Engineering Services**  
**"Geo-Technical and Construction Material Testing Services"**  
**Agreement #C-17-281-10-24**

**WORK AUTHORIZATION NO. 1**

**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 Consultants, 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 Construction Materials Testing & Engineering Services.

The scope of services to be provided by the **Owner** is identified in **EXHIBIT "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 **EXHIBIT "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 \$32,408.86. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "D"**.

**PART 3. PAYMENT**

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section 4 of the Agreement.

**PART 4. FUNDING**

This Work Authorization No. 1 shall be funded through funding source:  
Account No. 7-1351-431-00-121-239-0721  
Requisition Number 360130 (**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 scope of the work authorization.

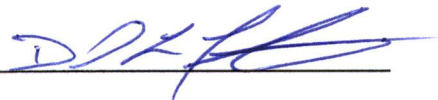
**PART 6. RESPONSIBILITIES AND OBLIGATIONS**

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.1, Commissioner, David Fuentes, as to content and detail of this **Work Authorization No. 1.**

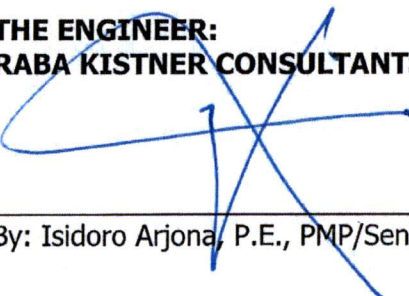
**HIDALGO COUNTY  
COMMISSIONER PRECINCT No. 1:**

BY: 

**PART 8. ACCEPTANCE AND APPROVAL**

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on 10-24-17 as indicated below and effective as of 24<sup>th</sup> day of October, 2017.

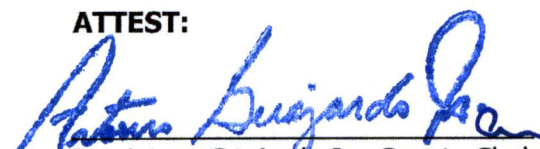
**THE ENGINEER:  
RABA KISTNER CONSULTANTS, INC.**

  
By: Isidoro Arjona, P.E., PMP/Senior Vice President

**THE OWNER:  
HIDALGO COUNTY**

  
By: Ramon Garcia, County Judge

**ATTEST:**

  
By: Arturo Guajardo Jr., County Clerk



APPROVED BY  
COMMISSIONERS' COURT  
ON: 10/24/17 ms

**LIST OF ATTACHMENTS:**

- EXHIBIT A – Services to be Provided by the Owner
- EXHIBIT B – Services to be Provided by the Laboratory
- EXHIBIT C – Work Schedule
- EXHIBIT D – Cost Proposal

## **EXHIBIT A**

### **-Services to be Provided by Owner-**

The following provides an outline of the services to be provided by the Owner in the development of Projects (as defined and more particularly identified in Exhibit "A" attached to this Agreement).

#### **General:**

The Owner will provide to the Laboratory the following:

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

## **EXHIBIT B**

### **-Services to be Provided by Laboratory-**

The services to be provided by the LABORATORY in providing Geotechnical Laboratory services, Construction Materials Testing Services, Construction Observation Services and Environmental Services for: Hidalgo County Precinct No.3 Projects, **“ON A AS NEEDED BASIS”** and projects is as follows:

#### **A. Preliminary Phase:**

- 1) Attend preliminary conferences with the OWNER and, if requested, with the funding agency and other government agencies or interested parties regarding the Project.
- 2) Provide for the necessary geotechnical investigation and testing necessary to develop design.
- 3) Provide assistance to the OWNER in providing material requirements and specifications for design, construction and maintenance projects.
- 4) Provide assistance to the OWNER in providing pavement design recommendations for the design, construction and maintenance projects.
- 5) Provide assistance to the OWNER in providing pavement rehabilitation recommendations for the design, and maintenance projects.
- 6) Provide assistance to the OWNER in providing pavement condition studies.

#### **B. Design Phase:**

- 1) Attend the OWNER'S and respective Party's meeting as requested for the purpose of explaining geotechnical investigation report recommendations and preliminary testing results and their impact to proposed design activities.
- 2) Perform any additional geotechnical investigations, testing and environmental studies necessary to collect information required in the design of the Project.
- 3) Provide assistance to the OWNER in providing material requirements and specifications for design, construction and maintenance projects.
- 4) Provide assistance to the OWNER in providing pavement design recommendations for the design, construction and maintenance projects.
- 5) Provide assistance to the OWNER in providing pavement rehabilitation recommendation for the design, construction and maintenance projects.
- 6) Provide assistance to the OWNER in providing pavement condition studies.
- 7) Furnish the OWNER all necessary report for preliminary design, design, and construction and maintenance projects.

**C. Construction/Maintenance Phase:**

- 1) Attend the OWNER'S and respective Party's pre-construction and construction meetings as requested for the purpose of explaining geotechnical investigation report recommendation and preliminary testing results and their impact to proposed construction activities and establish coordination and lines of communication for proposed construction materials testing during construction activities.
- 2) Consult and advise with the OWNER during construction.
- 3) Provide construction materials testing for construction and maintenance project as required by the project plans and specifications and/or specified by the project design Laboratory.
- 4) Review all material designs as requested by the OWNER and/or project design Laboratory.
- 5) Furnish the OWNER all necessary reports for construction and maintenance projects.
- 6) Provide construction observation services as requested by the OWNER on construction and maintenance projects.

**D. Miscellaneous/Other:**

- 1) Act for Owner in professional manner, using that degree of care and skill ordinarily exercised by and consistent with the standards of the profession.
- 2) Perform all technical services under the general direction of a Licensed Professional Laboratory in the State of Texas and in substantial accordance with the basic requirements of the appropriate Standards of the American Society for Testing and Materials, where applicable, or other standards designated by County.
- 3) Employ testing machines which have been calibrated within a period not exceeding twelve (12) months from the time of use by devices of accuracy traceable to the National Institute for Standards and Technology (NIST) of the United States Department of Commerce, and, upon request, submit to the OWNER or its authorized representative documentation of such calibration.
- 4) Promptly submit formal construction materials testing reports for all tests, observations and services performed indicating where applicable, compliance with OWNER specifications or other documents. Such reports shall be completed and factual, citing the tests performed, methods employed, values obtained, parts of the structure and location at which tests were made.
- 5) The plans and specifications prepared under this Agreement shall become the property of the OWNER upon completion of the work and payment in full of all monies due to the Laboratory.

- 6) Retain all pertinent records relating to the services performed for a period of five (5) years following submission of all reports, during which period the records will be made available to the Owner within a reasonable time.

**NOTE:** Change in and/or additional services to Scope will require prior approval from Owner prior to undertaking.

## **EXHIBIT C**

### **-Work Schedule-**

- For the geotechnical engineering services, weather permitting, it is anticipated that the field exploration phase of this study can begin within five (5) 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 fifteen (15) working days to complete. The engineering report will be submitted within an additional twelve (12) working days following completion of the laboratory testing. The above schedule does not account for delays due to inclement weather. If needed, **RKCI** will provide the design team with verbal design information as the data becomes available.
- The construction materials testing & engineering services will be provided on-site on as needed basis.
- A 24-hr notice will be required to schedule any service.

**EXHIBIT D**  
-Cost Proposal-



Proposal No.: PMD17-097-00  
October 10, 2017

Commissioner David Fuentes  
Hidalgo County Precinct No.1  
1902 Joe Stephens Ave.  
Ste. 101  
Weslaco, Texas 78599

Raba Kistner  
Consultants, Inc.  
800 E. Hackberry  
McAllen, TX 78501  
www.rkci.com

P 956 :: 682 :: 5332  
F 956 :: 682 :: 5487  
TBPE Firm F-3257  
TBPLS Firm 10193784

**RE: Proposal for Geotechnical Engineering Services and  
Construction Materials Observation and Testing Services  
Midway Road Improvement  
Between Hooks Avenue (U.S. E Business Highway 83) and W. 18<sup>th</sup> Street  
Donna, Hidalgo County, Texas**

Dear Comm. Fuentes:

**RABA KISTNER Consultants, Inc. (RKCI)** is pleased to submit this proposal to provide Geotechnical Engineering Services and Construction Materials Observation and Testing Services for the above referenced project.

The total amount for geotechnical engineering services and construction materials observation and testing services for this project is **\$32,408.86**. In the event that additional geotechnical engineering services are required, we will request your written authorization for the additional scope and cost before proceeding.

Our scope of services for geotechnical engineering services includes conducting six borings within the proposed street alignment footprint area extending to a maximum depth of 5 ft below the existing pavement surface elevation or auger refusal, whichever occurs first. Samples will be taken using conventional split-spoon 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. The borings drilled within existing road alignments will be capped with a cold-mix asphalt patch. The laboratory testing is anticipated to include moisture content tests, Atterberg Limits (plasticity) tests, Lime Series determinations, sulfate content, and grain size analyses. The laboratory testing will be performed in general accordance with applicable ASTM standards. 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 flexible pavements for the proposed road improvement.

Our proposed scope of services for construction materials observation and testing services, and estimated item quantities are based on the verbal information provided to us during our telephone call




held on Monday, October 2, 2017 with the Hidalgo County Precinct No. 1 Administrative Staff, and are without the aid of the general contractor's schedule. The scope and quantity of services provided will be dependent upon the actual services required/requested by you and/or your representatives. Charges will be assessed only for actual services rendered. All services authorized or requested by you and/or your representatives in excess of the quantities of observation and testing services shown herein will be charged at the appropriate unit rate for such services. Charges will be invoiced on a monthly basis and will show a computerized composite total of services rendered for each service category.

Invoices will be submitted monthly for work in progress in our standard format. Our invoices are due and payable upon receipt at P.O. Box 971037, Dallas, Dallas County, Texas 75397-1037. All parties hereby agree that this contract upon acceptance will be performable in Bexar County, Texas. In the event that the State of Texas legislates a sales tax on professional services, the amount of tax applicable will be added to the appropriate service rate charged by **RKCI**.

We appreciate the opportunity of submitting this proposal and look forward to working with you during the construction of this project. Please return one signed copy of this letter proposal to provide written authorization for our firm to commence work on the services outlined herein. Please complete the attached Project Data Sheet for invoicing and reporting information.

Very truly yours,

**RABA KISTNER Consultants, Inc.**

  
Jorge L. Perez  
Supervisor, CME

JLP/KML

Attachments: Basic Charges  
I- Standard Terms and Conditions  
II- Schedules of Fees

Accepted By \_\_\_\_\_  
(Signature)

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

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

Date \_\_\_\_\_

Copies submitted:      Above (1) Email

**BASIC CHARGES**

1. A vehicle travel charge will be assessed for round trip travel from our office to the project site, material supplier, etc. and back to our office. The charges for travel from our office to the project site and return to our office will be as follows:

Travel Time (round trip) \_\_\_\_\_ 1.00 /hour(s)

Vehicle Trip Charge \_\_\_\_\_ \$ 26.50 /trip

2. Service Charges are based on the hourly rates stated herein and will be assessed from the time the Engineer or Technician leaves our office until he returns from the project.
3. Any engineering and/or technical services provided on Saturday, Sunday and all work in excess of "normal" work hours, as stated herein, Monday through Friday, will be charged at an overtime rate of 1.5 times the appropriate hourly rate. Our total cost of services is based upon the assumption most services will be provided during "normal" work hours. Providing an excessive amount of services during days and/or hours requiring overtime rates may significantly increase the total cost of services shown herein.
4. "Normal" work hours are between 7:00 a.m. and 6:00 p.m., including travel time to and from the site unless stated otherwise. Overtime charges will be assessed after eight (8) continuous hours of service rendered during "normal" work hours.
5. Minimum of 2 hours billing per visit to project site.
6. A ten (10) percent project management and administration cost will be added to all invoices.
7. Our opinion of probable cost for each proposal to be submitted is based upon an estimate of the construction materials observation and testing services required to meet the project requirements. Because the general contractor has control over the project and determines the means and methods used to build/construct the project, our proposed scope of services is an estimate. On the basis of the general contractor's schedule, potential retesting of non-compliance items, weather related issues, the actual total services and fees may be higher or lower than the estimates in our proposal. **RKCI** will keep you **CLIENT** apprised of our billings in comparison to our opinion of probable cost (project budget) over the life of the project. All tests noted as retests of previously non-complaint areas will be billed to the **CLIENT**. **RKCI** will invoice these tests separately to allow **CLIENT** to segregate the charges from our normal charges. This will allow **CLIENT** to back charge the general contractor as necessary. **CLIENT** will be responsible for payment of all services rendered by **RKCI** for the project.
8. **RKCI** will utilize the on-site initial field curing facilities provided by the contractor. The cost of providing and maintaining these initial curing facilities is not included in our proposal.

**GEOTECHNICAL ENGINEERING and CONSTRUCTION MATERIALS TESTING UNIT RATES**  
**Midway Road Improvements**

SERVICE	UNIT RATE		QUANTITY	TOTAL
<b>Geotechnical Engineering Services</b>				
1. Mobilization of Drilling Rig	\$293.00	lump sum	1	\$293.00
2. Drilling and Sampling	\$13.50	feet	30	\$405.00
3. Trip Charge	\$26.50	each	1	\$26.50
4. Field Coordination	\$275.50	hour	1	\$275.50
5. Boring layout and logging	\$52.50	hour	8	\$420.00
6. Asphalt Patch	\$41.25	each	6	\$247.50
7. Atterberg Limits Determinations (P.I.) (ASTM/AASHTO)	\$89.75	each	12	\$1,077.00
8. Sieve Analysis -200	\$60.75	each	12	\$729.00
9. Moisture Content	\$11.25	each	30	\$337.50
10. Lime Series Determination	\$442.00	each	2	\$884.00
11. Sulfate Content	\$92.50	each	2	\$185.00
12. Geotechnical Engineer	\$165.50	hour	3	\$496.50
13. Staff Engineer	\$104.00	hour	12	\$1,248.00
14. Drafting	\$88.50	hour	3	\$265.50
15. Clerical	\$54.00	hour	5	\$270.00
				<b>Geotechnical Engineering Services Subtotal:</b>
				<b>\$7,160.00</b>
<b>Civil and Building Pads Earthwork:</b>				
1. Moisture-Density Relationship (Proctor)	\$246.00	each	5	\$1,230.00
2. Atterberg Limits Determinations (P.I.) (ASTM/AASHTO)	\$89.75	each	5	\$448.75
3. Sieve Analysis -200	\$60.75	each	3	\$182.25
4. Sieve Analysis - Flexible Base Material	\$60.75	each	2	\$121.50
5. Proof Rolling Observations	\$52.50			\$0.00
7. Lime Series Curve Determination Including Five pH Determinations	\$442.00	each	2	\$884.00
5. Technician Time Sampling	\$52.50	hour	20	\$1,050.00
6. Field Density Test	\$22.25	each	80	\$1,780.00
7. Technician Time - Density Testing - Building Pad	\$52.50	hour	60	\$3,150.00
8. Vehicle Travel Charge	\$26.50	trip	25	\$662.50
				<b>Earthwork Subtotal:</b>
				<b>\$9,509.00</b>

**GEOTECHNICAL ENGINEERING and CONSTRUCTION MATERIALS TESTING UNIT RATES**  
**Midway Road Improvements**

**Asphalt:**

1. Asphaltic Concrete Laydown Observation	\$63.00	hour	56	\$3,528.00
2. Extraction, Gradation, Bitumen Content and Laboratory Density of Asphaltic Concrete	\$303.75	each	7	\$2,126.25
3. Maximum Theoretical Specific Gravity of Asphalt	\$111.00	each	7	\$777.00
4. Nuclear Densities	\$17.50	each	42	\$735.00
5. Asphaltic Concrete Coring:				
a.) Two Men	\$108.25	hour	20	\$2,165.00
b.) Coring Rig	\$121.25	day	2	\$242.50
c.) Generator	\$102.00	day	2	\$204.00
d.) Bit Wear - Quartz Aggregate (River Gravel)	\$5.50	in.-in.	145.7	\$801.35
e.) Core Density	\$22.50	each	18	\$405.00
5. Vehicle Travel Charge	\$26.50	trip	8	\$212.00

**Asphalt Subtotal: \$11,196.10**

**Professional Services:**

1. Project Coordination	\$110.00	hour	7	\$770.00
2. Geotechnical / Materials Engineer	\$165.50	each	5	\$827.50
3. Vehicle Travel Charge	\$26.50	trip	0	\$0.00

**Professional Services Subtotal: \$1,597.50**

**Other:**

1. Project Administration(Markup of Invoiced Billing Cycle)	10%			\$2,946.26
---	-----	--	--	------------

**Subtotal: \$2,946.26**

**GRAND TOTAL \$32,408.86**

**Fees for Consulting & Coordination Services**

Principal Engineer .....	\$ 190.00 to 320.00/hr
Managing Engineer .....	123.00 to 210.00/hr
Staff Engineer .....	97.00 to 170.00/hr
Laboratory Manager .....	77.00 to 150.00/hr
Construction Services Manager .....	77.00 to 150.00/hr
Outside Professional Services & Reimbursable .....	Cost +15%
Additional Insured .....	225.00/ea
Report Preparation and Administration .....	49.00 to 84.00/hr