### WORK AUTHORIZATION NO. 2

## PROJECT: Construction Materials Testing River Ranch County Park Phase I

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated <u>December 01, 2016</u> and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and <u>Raba Kistner Consultants</u>, <u>Inc.</u> (the "Engineer").

- Part1. The Engineer will provide the following Engineering Services set forth in Attachment "B" of this Work Authorization.
- Part 2. The maximum amount payable for services under this Work Authorization without modification is \$62,475.31.
- Part 3. Payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the Contract.
- Part 4. This Work Authorization shall become effective on the date of final acceptance and full execution of the parties hereto and shall terminate on <u>July 31, 2019</u>. The Engineering Services set forth in Attachment "B" of this Work Authorization shall be fully completed on or before said date unless extended by a Supplemental Work Authorization.
- Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.
- Part 6. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. Engineer understands and agrees that County's payment of amounts under this Work Authorization is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Engineer that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Engineer.
- Part 7. This Work Authorization is hereby accepted and acknowledged below.

| EXECUTED this day of              | _, 20                    |
|-----------------------------------|--------------------------|
|                                   |                          |
| ENGINEER:                         | COUNTY:                  |
| Raba Kistner Consultants, Inc.    | Williamson County, Texas |
| By: DrondOndas Signature          | By:Signature             |
| Gabriel Ornelas, Jr. Printed Name | Printed Name             |
| Senior Vice President Title       | Title                    |

# LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

# Attachment A - Services to be Provided by County

- 1. County will direct type of services to be provided.
- 2. County will provide timely reviews and decisions necessary to enable Raba Kistner to maintain an agreed upon project schedule as developed in attached Attachment C.
- 3. County will provide points of contact to be identified upon Notice to Proceed.
- 4. County will provide project management.

# Attachment B - Services to be Provided by Engineer

### Attachment C - Work Schedule

Raba Kistner Consultants, Inc. shall provide a work schedule for the assigned tasks. Work shall begin immediately upon receipt of agreement between County and Raba Kistner Consultants, Inc. on the work schedule and authorization to proceed on assigned services.

## Attachment D - Fee Schedule



[Delivery by Email: dbutler@wilco.org]

Proposal No. PAA18-034-00 February 27, 2018 Raba Kistner Consultants, Inc. 8100 Cameron Road, Suite B-150 Austin, TX 78754 www.rkci.com

> P 512 :: 339 :: 1745 F 512 :: 339 :: 6174 TBPE Firm F-3257

Mr. Dale Butler Project Manager Williamson County Facilities 3101 SE Inner Loop Georgetown, Texas 78626

RE: Geotechnical Engineering Study

**River Ranch County Park Interpretive Center** 

Williamson County, Texas

In accordance with your request, RABA KISTNER Consultants Inc. (RKCI) is pleased to submit this proposal for Geotechnical Engineering Services for the referenced project. The broad objectives of our study will be to determine soil conditions at the site and to develop foundation design recommendations for a new interpretive center at River Ranch County Park in Williamson County, Texas. 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 lump sum study cost.

#### **Project Description**

Under consideration in this study is a new, single story Interpretive Center facility to be located within the existing River Ranch County Park in Williamson County, Texas. Based on information provided by the structural engineer, Mr. Vic Winter, P.E., with Winter Engineering, we understand shallow foundations are preferred provided expansive soil-related movements do not pose a concern. We also understand building pad preparation for the proposed 5,500 square foot building should result in a potential vertical rise (PVR) of 1 in. or less.

#### Field Study

To explore subsurface conditions in the vicinity of the new Interpretive Center, RKCI recommends one (1) soil boring to a depth of 15 ft below the existing ground surface.

Samples will be taken using conventional split-spoon, Shelby-tube and/or NX rock core sampling techniques. The boring will be located in the field utilizing a recreation grade hand-held GPS device and/or tape and right angle measurements from existing benchmarks. Our scope of service does not include surveying in the boring location.

Upon completion of drilling, the boring will be backfilled utilizing auger cuttings and bentonite hole plug.

#### **Engineering Deliverable**

The field and laboratory phases of the study will be reviewed by our staff of engineers and geologists. The results of our review, together with the supporting field and laboratory data, will be presented in a written engineering letter with attachments to include the following:

- Boring Location Map;
- Log of Boring;
- Estimated PVR:
- Required building pad preparation to reduce RVR to 1 in.; and
- Shallow foundation recommendations.

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 site grading information, we will prepare recommendations based on the existing topography.

The final letter will be reproduced in an electronic PDF will be delivered via email.

#### **Tentative Project Schedule**

Based on our present workload, we anticipate that we could begin the field exploration phase of this study within 3 to 4 working days of receiving your written authorization. The field exploration and laboratory testing phase of the study is expected to take approximately 1 to 1-1/2 weeks to complete. Engineering analyses and preparation of the engineering letter is expected to take an additional 1 to 2 weeks to complete. We will be pleased to provide the design team with verbal design information as the data becomes available.

### **Project Cost**

The cost plus max for the base study scope outlined herein is \$2,462.71.

Should unusual soil conditions be encountered in the field that indicates the desirability of significantly broadening the scope of the study, we will contact you to receive authorization before proceeding with any additional work.

Any additional professional time or travel expenses for participation in design team meetings, if required, will be billed at our approved billing rates for professional time plus expenses.

### **Acceptance**

We appreciate the opportunity of submitting this proposal and look forward to working with you, which will be carried out in accordance with the ON CALL GEOTECHNICAL AND LAB TESTING SERVICES contract between Williamson County and Raba Kistner Consultants, Inc., executed on February 5, 2016.

Proposal No. PAA18-034-00 February 27, 2018

Please return one signed copy of this letter proposal to provide written authorization for our firm to complete work on the services outlined herein.

RKCl 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 CONSULTANTS, INC.                 | Accepted<br>By: | Signature             |  |
|--|-----------------|-----------------------|--|
| 1. 4 1   | υγ.             | Signature             |  |
| Gronne J. Shoman<br>Yvonne Garcia Thomas, P.E. |                 |                       |  |
| Yvonne Garcia Thomas, P.E.<br>Associate        |                 | Typed or Printed Name |  |
| YGT: tlc                                       |                 |                       |  |
| Copies Submitted: Above (1)                    |                 | Title                 |  |
|  |                 |                       |  |
|  |                 | Date                  |  |

[Delivered by e-mail to: rlubecker@wilco.org] PAD18-155-00 November 9, 2018

Bullding Better Tomorrows
8100 Cameron R

Mr. Bob Lubecker Williamson County Facilities 3101 SE Inner Loop Georgetown, TX 78626 8100 Cameron Road Ste. B-150 Austin, TX 78754 www.rkci.com

P 512.339.1745 F 512.339.6174
TBPE Firm F-3257

Preliminary Cost Estimate for Construction Materials Testing River Ranch County Park – Phase 1

County Road 282 & Hwy 1869, Williamson County, Texas

Dear Mr. Lubecker:

Re:

Raba Kistner Consultants, Inc. (RKCI) is pleased to submit our preliminary estimate to provide the construction materials observation and testing services on the above-referenced project. This estimate was prepared utilizing the unit rates accepted in the On Call Geotechnical and Lab Testing Services Contract Work Authorization No. 1, dated February 18, 2015 and Amendment No. 1, dated June 6, 2017.

We propose a preliminary estimated budget of \$60,012.00 for construction materials testing and observation services for the referenced project. This budget is based on our limited understanding of the project, an estimate of quantities that include very broad assumptions, a review of Design Development Documents, and past experience with similar projects. A cost estimate breakdown is presented in the attached spreadsheet. Construction sequencing, delays, and the number of times that the client or their representative requests our services will affect the suggested budget. Services will be provided on a call out basis for the unit fees attached to the proposal.

The scope of work includes the observation and testing of the following construction materials:

- Earthwork observations.
- Reinforcing steel observations,
- Concrete compressive strength specimen sampling, testing, and reporting,
- Asphalt observation

This proposal may serve as RKCl's work agreement for the referenced project. Please sign this proposal, initial every page of each attachment, fill out the Report Distribution List, and return one signed original to our office as authorization for RKCl to provide these services. If you choose to issue your own purchase order or work agreement, please reference our proposal number.

Thank you for allowing RKCI the opportunity to submit our proposal for the construction materials observation and testing services. We have a fully equipped AASHTO Accredited laboratory and we look forward to providing these services to you during the construction of this project. If you have any questions concerning our proposal or need any additional information, please call us at (512) 339-1745.

Very truly yours,

RABA KISTNER CONSULTANTS, INC.

| 1-1  | 1-18  | Approved<br>By:         | (Signature)    |  |
|--|---|-------------------------|----------------|--|
| Danil a Brown                              |   | (Printed or Typed Name) |                |  |
| David A. Brown<br>CoMET Estimati<br>DB: cr | ng Project Manager  |                         | (Title)        |  |
| Attachments:                               | Cost Estimate Breakdown<br>Scope of Work<br>Report Distribution<br>Terms and Conditions |                         | (Company Name) |  |
|  |   |                         | (Date)         |  |

| SOILS   Laboratory Testing   Laboratory Testing   Laboratory Testing   Laboratory Testing   Laboratory Relationship, TxDOT or ASTM   \$249,00   each   8   \$1   \$1   \$1   \$1   \$2   \$2   \$3   \$3   \$4   \$1   \$3   \$3   \$3   \$4   \$3   \$3   \$4   \$4   | COST ESTIMATE BREAKDOWN                 |                     |                      |              |                      |
|--|---|---------------------|----------------------|--------------|----------------------|
| Client:   Williamson County Facilities   |   |                     |                      |              |                      |
| Contact Name:   Bob Lubecker   | Project Location:                       | County Road 282 &   | Hwy 1869, Williamson | n County, TX |                      |
| Address:   3101 SE Inner Loop  | Contact Name:                           |                     |                      |              |                      |
| Address:   3101 SE Inner Loop  | Client:                                 | Williamson County I | acilties             |              |                      |
| City/State/Zip   Georgetown, Tx, 78626   |   |                     |                      |              | _                    |
| Phone Number:  |   |                     | 200                  |              |                      |
| E-Mail:  |   |                     | 526                  |              |                      |
| TESTING/OBSERVATION ITEM   |   | 512-341-6271        |                      |              |                      |
| No.   Comment  |   | rlubecker@wilco.org |                      |              |                      |
| MolSture Density, Relationship, TxDOT or ASTM  | TESTING/OBSERVATION ITEM                | UNIT COST           | UNIT                 |              | COST                 |
| Moisture Density Relationship, TxDOT or ASTIV   \$249,00   each   8   \$1  | SOILS                                   |                     | -                    |              |                      |
| Atterberg Limits   | Laboratory Testing                      |                     |                      | T            |                      |
| Atterberg Limits   |   | \$249.00            | each                 | 8            | \$1,992.0            |
| Sieve Analysts - washed through No. 200   \$83.00   each   \$2   \$3.00  |   |                     |                      |              | \$664.0              |
| Ulme Series Curve  | Sieve Analysis - washed through No. 200 |                     |                      |              | \$664.0              |
| Sulfate Teathing   |   |                     |                      |              | \$870.0              |
| Field Testing/Observation  |   |                     |                      |              | \$1,500.0            |
| In-Place Nuclear Densities   |   |                     |                      |              |                      |
| Materials Technician   |   |                     |                      |              | \$630.0              |
| Vehicle Travel Charge  |   |                     |                      |              | \$9,225.0            |
| Subtotal   Safe   Saf   |   |                     |                      |              | \$26,000.0           |
| REINFORCING STEEL OBSERVATIONS   |   | \$40.00             | trip                 | 131          | \$5,240.0            |
| Materials Technician   | Subtotal                                |                     |                      |              | \$46,785.0           |
| Materials Technician   \$50.00   hour   40   \$2   \$2   \$3   \$2   \$3   \$3   \$3   \$3   | REINFORCING STEEL OBSERVATIONS          |                     |                      |              |                      |
| Subtotal   S40.00   trip   12   \$   \$   \$   \$   \$   \$   \$   \$   \$   | Field Observation/Testing               |                     |                      |              |                      |
| Subtotal   Size   Siz   |   | \$50.00             | hour                 | 40           | \$2,000.00           |
| CONCRETE   Laboratory Testing   Concrete Compressive Strength Cylinders   \$17.00   each   \$60   \$1,   |   | \$40.00             | trip                 | 12           | \$480.00             |
| Laboratory Testing   Concrete Compressive Strength Cylinders   \$17.00   each   \$60   \$1,  | Subtotal                                |                     |                      |              | \$2,480.00           |
| Concrete Compressive Strength Cylinders   \$17.00   each   \$60   \$1,   Field Testing/Observation   |   |                     |                      |              |                      |
| Field Testing/Observation  |   |                     |                      |              |                      |
| Materials Technician   \$50.00   hour   \$8   \$3,   |   | \$17.00             | each                 | 60           | \$1,020.00           |
| Vehicle Travel Charge  |   |                     |                      |              |                      |
| Subtotal   State   |   |                     |                      |              | \$3,400.00           |
| ASPHALT  Laboratory Testing  Bag Sample (Extraction, Gradation, A/C content, S459.00 each 3 \$1, Molding Specimens, Laboratory Density of Moldec Specimens, Stability Test, Hveem, Maximum Theoretical spasific Gravity)  Density of Asphalt Cores \$60.00 each 12 \$\$ SHEET TESTING Observation Stability Test, Hveem, Maximum 12 \$\$ Sheet Testing Observation 14 \$\$ Sheet Testing Observation 15 \$\$ Sheet Testing Observation 15 \$\$ Sheet Testing Observation 16 \$\$ Sheet Testing Observation 17 \$\$ Sheet Testing Observation 17 \$\$ Sheet Testing Observation 18 \$\$ Sheet Testing Observation 18 \$\$ Sheet Testing Observation 19 \$\$ Sheet Testing Observation 1   |   | \$40.00             | trip                 | 17           | \$680.00             |
| Company   Comp   | Subtotal                                | +                   |                      |              | \$5,100.00           |
| Sample (Extraction, Gradation, A/C content,   \$459.00   each   3   \$1,   |   |                     |                      |              |                      |
| Molding Specimens, Laboratory Density of Moldec   Specimens, Stability Test, Hiveem, Maximum   Specimens   Specimen   |   |                     |                      |              |                      |
| Specimens, Stability Test, Hveem, Maximum  |   | \$459.00            | each                 | 3            | \$1,377.00           |
| Theoretical spasific Gravity   |   |                     |                      |              |                      |
| Density of Asphalt Cores   |   |                     |                      |              |                      |
| Second   S   |   | *****               |                      |              | 4                    |
| Section   Sect   |   | \$60.00             | eacl                 | 12           | \$720.00             |
| September   Sept   |   | \$50.00             | hour                 | 12           | rcno no              |
| \$2.60   \$2.6 |   |                     |                      |              | \$600.00<br>\$120.00 |
| Senior Engineer         \$200.00 hour         2         \$           Project Manager         \$175.00 hour         6         \$1           Project/Coordinator         \$60.00 hour         12         \$           Zierical         \$55.00 hour         12         \$  |   | \$40.00             | M IP                 |              | \$2,817.00           |
| Project Manager         \$175.00 hour         6         \$1           Project/Coordinator         \$60.00 hour         12         \$           Jerical         \$55.00 hour         12         \$  | PROJECT ADMINISTRATION                  |                     |                      |              |                      |
| Iroject Manager         \$175,00 hour         6         \$1, roject/Coordinator         \$60,00 hour         12         \$ ferical         \$55,00 hour         \$2, roject/Coordinator  | enior Engineer                          | \$200.00            | hour                 | 2            | \$400.00             |
| Project/Coordinator         \$60.00 hour         12         \$           Zierlcal         \$55.00 hour         12         \$   | roject Manager                          |                     |                      |              | \$1,050,0            |
| Ierical         \$55.00 hour         12         \$   |   |                     |                      |              | \$720.0              |
|  | 1erical                                 |                     |                      |              | \$660,0              |
| ubtotal \$2,   | ubtotal                                 |                     |                      |              | \$2,830.00           |
| GRAND TOTAL \$60.0   |   |                     | GRAND TOTAL          |              | \$60,012.00          |

### **REPORT DISTRIBUTION LIST**

Please provide RKCl with project distribution for our submittal of reports on this project. Unless otherwise indicated, testing and observation reports will be distributed via email.

| Client:     | <u> </u>      |        |  |
|-------------|---------------|--------|--|
|             |               |        |  |
|             | Attention:    |        |  |
|             | Phone No.:    |        |  |
| Architect:  |               |        |  |
|             |               |        |  |
|             | Attention:    |        |  |
|             | Phone No.:    |        |  |
| Engineer:   | -             |        |  |
|             |               |        |  |
|             | Attention:    |        |  |
|             | Phone No.:    | Email: |  |
| Contractor: |               |        |  |
|             |               |        |  |
|             |               |        |  |
|             | Phone No.:    | Email: |  |
| Other:      | 5 <del></del> |        |  |
|             | y <del></del> |        |  |
|             | Attention:    |        |  |
|             | Phone No.:    | Email: |  |

Please return this Attachment via fax or mail with signed Authorization.