WORK AUTHORIZATION NO. 2

PROJECT: Child Advocacy Center Annex (P530)

This Work Authorization is made pursuant to the terms and conditions of the **Contract for Engineering Services**, being dated **May 5, 2020,** and entered into by and between **Williamson County** a political subdivision of the State of Texas, ("County"), and **[Kleinfelder, Inc.]**, ("Engineer").

ARTICLE 1

Engineer shall provide Geotechnical Engineering Services set forth in **Attachment A** of this Work Authorization.

ARTICLE 2

The maximum amount payable for Basic Services under this Work Authorization without modification is **Twelve Thousand, Three Hundred Sixty-Five Dollars ($ 12,365.00)** as set forth in **Attachment B** of this Work Authorization.

ARTICLE 3

Payment to Engineer for the services established under this Work Authorization shall be made in accordance with the Agreement.

ARTICLE 4

This Work Authorization shall become effective on the date of final acceptance and full execution of the parties hereto and shall terminate on **January 31, 2021** as set forth in **Attachment C** of this Work Authorization. The Engineering Services set forth in **Attachment A** of this Work Authorization shall be fully completed on or before said date unless extended by a Supplemental Work Authorization.

ARTICLE 5

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

ARTICLE 6

County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. A/E understands and agrees that County's payment of amounts under this Work Authorization is contingent on County receiving appropriations or other expenditure authority sufficient to allow County, in the exercise of reasonable

administrative discretion, to continue to make payments under this Agreement. It is further understood and agreed by A/E that County shall have the right to terminate this Agreement 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 affect such termination by giving written notice of termination to A/E.

ARTICLE 7

This Work Authorization is hereby accepted and acknowledged below.

EXECUTED this 29th day of September, 2020.

A/E:

Kleinfelder, Inc.

By: _____
Signature

Jason Reeves, PE
Printed Name

Texas Materials Testing Manager
Title

COUNTY:

Williamson County, Texas

By: _____
Signature

Bill Gravell Jr.
Printed Name

County Judge
Title

ATTACHMENT A

SERVICES PROVIDED BY ENGINEER

Site Reconnaissance and Utility Clearance

Prior to drilling operations, we will contact the Texas 811 system for utility locations; however, be aware that the Texas 811 system only locates buried utilities within existing public easement and rights-of-way. All private on-site utilities such as irrigation lines, data lines, fire lines, electric lines, gas lines, and any other underground features must be located by Williamson County prior to the start of our field work. Due to safety concerns, it is critical that the underground utilities are properly located. Notifying the Texas 811 system alone may not provide the level of assurance required by Williamson County. The disruption of utilities or damage to underground structures which have not been marked by their owner will be the responsibility of others. To achieve a higher level of assurance, it may be required by Engineer to retain a utility locator (for an additional fee) to locate these utilities (marked or unmarked) prior to drilling. Engineer will consult with Williamson County to determine whether this step is necessary on a case-by-case basis. Also, Engineer can provide the name of a private utility locator that Williamson County can retain directly for these services, if needed.

Prior to the start of field activities, Engineer will prepare a site-specific Health and Safety Plan, which designates Personal Protective Equipment (PPE) and safe work practices to be used during field exploration activities.

Engineer will record the boring locations with a hand-held global positioning system (GPS) device (horizontal accuracy of approximately 15 feet). Locations may also be located by field measuring distances from a known location on the site map for better accuracy.

Field Exploration

Based on conversations with Williamson County, it is understood that the borings are accessible to truck-mounted drilling equipment, and no special training or permits will be required to access the boring locations on airport property. The borings will be drilled with a truck-mounted drill rig. Field work for this project will be performed under the direct supervision of a professional engineer, and soils will be logged in the field by Engineer's representative. Field exploration will include the following:

- Coordinate field activities with Williamson County personnel.
- One (1) boring to a depth of 15 feet, and two (2) borings to a depth of 25 feet within the building addition footprint.
- Three (3) borings to a depth of 10 feet within the proposed pavement addition.
- Borings will be completed with a truck-mounted drill rig during regular working hours (Monday to Friday 7 am to 6pm). No weekend or evening work will be required. Our proposal assumes boring are accessible to truck-mounted drilling equipment, and clearing, grading, traffic control, and permits will not be required to conduct our field exploration.
- Obtain relatively undisturbed tube samples and standard penetration test (SPT) samples as appropriate for the soils encountered.
- Core rock with an NX-size core barrel or evaluate with the Texas Cone Penetrometer test (TCP) if competent bedrock is encountered.
- Observe for groundwater seepage during drilling and at completion of individual borings; when considered necessary. Observations may also be made at the end of the day.
- Loosely backfill boreholes with cuttings upon completion or after delayed water levels are recorded. Extra cuttings will be spread on the ground surface nearby in grass-covered areas.
- Patch boring that are located in pavement areas with cold asphalt at the surface.

During the course of drilling, we will check for the presence of groundwater and record the depths.

Laboratory Testing

Select laboratory testing will be conducted on representative samples obtained during the field exploration. The tests will be used to classify the soils, identify subsurface site characteristics, and provide data for analysis. These tests may include:

- Moisture content;
- Atterberg limits (liquid and plastic limits);
- Unconfined compressive strength;
- Percent passing No. 200 sieve;
- Swell Tests; and
- Soil chemistry including pH, electrical resistivity, sulfates, sulfides, chlorides, and oxidation reduction.

Kleinfelder will retain soil/rock samples for 30 days after submission of the final report, at which time samples will be discarded. Further storage or transfer of samples can be made at owner expense upon written request.

Geotechnical Report

Evaluation of the field and laboratory data will be performed for the project, based on available project concepts. A report will be prepared under the direction of a registered professional engineer. Information to be provided in the report will include:

- Plan of borings illustrating the approximate location of each boring.
- A log of each boring indicating the boring number, depth of each stratum, soil and rock classification and description, and groundwater information.
- Description of the field exploration and laboratory testing.
- General discussion of the site geology.
- Discussion of subsurface soil, rock, and groundwater conditions.
- Calculated potential vertical rise (PVR) from expansive soil.
- Recommended remedial measures for the floor slab subgrade to reduce the impact of expansive soil.
- Recommendations for foundation type, depths, and allowable bearing pressures.
- Earthwork recommendations, including suitability of on-site materials for use as structural fill and remedial measures (if necessary) for existing fill.
- Seismic geotechnical criteria based on IBC 2015.
- Recommendations for pavement thickness. For pavements with concentrated truck and bus traffic, Williamson County must provide an estimate of the anticipated traffic.

ATTACHMENT B

COST OF SERVICES

Engineer proposes to perform the *Scope of Services* for a **Not to Exceed fee of $12,365.** Invoices will be issued on a monthly basis and upon completion of the project. These amounts will not be exceeded without prior approval. Williamson County and Engineer may subsequently agree in writing to provide for additional services to be rendered under this agreement for additional, negotiated compensation.

The schedule summarized above may be significantly impacted by work limitations imposed by government mandates and general health concerns related to COVID-19. If the work is limited due to these concerns, our schedule will be extended. We will notify Williamson County immediately if this occurs.

ATTACHMENT C SCHEDULE

OF SERVICES

The field exploration will begin approximately 5 to 7 days from the time written authorization is received, depending on driller availability. The fieldwork will require approximately 2 days, depending on weather conditions and site accessibility. The laboratory testing should be completed within 2 weeks after completion of the field exploration. The report preparation should be completed within 2 weeks after completion of the laboratory testing.