

**PROFESSIONAL SERVICES  
SUPPLEMENTAL AGREEMENT # 1  
FOR  
E PECAN ST.**

**STATE OF TEXAS           §  
  §  
COUNTY OF TRAVIS       §**

This Supplemental Agreement No. 1 to a contract for Professional Services is made by and between the City of Pflugerville, Texas ("City") and Kimley-Horn and Associates, Inc. ("Consultant"). City and Consultant may be referred to herein singularly as "Party" or collectively as the "Parties."

WHEREAS, the City and Consultant executed an Agreement for Professional Services ("Agreement") on the 5 day of August, 2021 for the E Pecan St. project ("Project") in the amount of \$791,024.30; and

WHEREAS, the City and Consultant entered into a Supplemental Agreement #1 for Professional Services for the Project in the amount of \$92,307.89, on the 4 day of March, 2022 to add innovative intersection modeling, geotechnical design services, and additional preparation of parcel maps to the Agreement; and

WHEREAS, it has become necessary to amend the Agreement to modify the provisions for the Scope of Services, and Compensation; and

WHEREAS, it is necessary for the City to amend its agreements from time to time to comply with changes in state law relating to contracts of municipalities.

NOW, THEREFORE, premises considered, the City and the Consultant agree that said Agreement is amended as follows:

**1.**

Article III. Scope of Services and Exhibit A, shall be amended as set forth in the attached Addendum to Exhibit A.

Article IV. Compensation to Consultant and Exhibit B (Fee Schedule), shall be amended by increasing by \$92,307.89 the amount payable under the Agreement for a total of \$883,332.19, as shown by the attached Addendum to Exhibit B (Fee Schedule).

**2.**

Except as amended hereby, the terms of the Agreement shall remain unchanged and in full force and effect.

**EXECUTED** and **AGREED** to as of the dates indicated below.

**CITY OF  
PFLUGERVILLE**

**CONSULTANT**

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

Printed Name: Sereniah Breland

Title: City Manager

Date: \_\_\_\_\_

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

Printed Name: **Trey Neal**

Title: **Vice President**

Date: 4/12/2022

APPROVED AS TO FORM:



\_\_\_\_\_  
Charles E. Zech  
City Attorney  
DENTON NAVARRO ROCHA BERNAL & ZECH, P.C.

**ADDENDUM TO EXHIBIT A  
SUPPLEMENTAL AGREEMENT #1**

**PROJECT UNDERSTANDING**

This supplemental consists of adding innovative intersection modeling, additional preparation of parcel maps, legal descriptions (metes and bounds descriptions, and right-of-way justification exhibits (RJE), and additional geotechnical analysis to evaluate existing pavement life and rehabilitation options.

**SERVICES TO BE PROVIDED BY THE ENGINEER**

The Engineer's Services consist of the services specifically described in Sections 1 through 16 including the specific engineering services to be performed through the following consulting disciplines as subcontractors to the Engineer:

- (1) Halff Associates, Inc (Halff) – Survey, ROW, SUE
- (2) Raba Kistner Consultants, Inc. (RKCI) – Geotechnical investigation and Pavement Engineering

**1. PROJECT ADMINISTRATION AND COORDINATION SERVICES**

Task 1 is not anticipated to be a part of this supplemental agreement

**2. PROJECT DESIGN CRITERIA**

Task 2 is not anticipated to be a part of this supplemental agreement.

**3. ENVIRONMENTAL SERVICES**

Task 3 is not anticipated to be a part of this supplemental agreement.

**4. SURVEYING SERVICES**

This task consists of adding up to seven parcels for preparation of parcel maps, legal descriptions (metes and bounds descriptions) through a subcontractor (Halff), and right-of-way justification exhibits (RJE)

- 4.1. The Surveyor shall prepare a Property Description for each parcel or tract consisting of two parts: (1) a metes and bounds description of the property and (2) a parcel plat. Each part of a Property Description must be signed and sealed by a RPLS. For purposes of this contract, three (3) parcels are included.
  - Metes and bounds description

- A metes and bounds description must be prepared for each parcel of land to be acquired. Metes and bounds descriptions must include, but need not be limited to, the following items of information:
  - State, County, and Survey within which the proposed parcel of land to be acquired is located.
  - A reference to unrecorded and recorded subdivisions by name, lot, block, and recording data to the extent applicable.
  - A reference by name to the grantor and grantee and recording data of the most current instrument(s) of conveyance describing the parent tract.
  - A point of beginning with the appropriate N and E surface coordinates.
  - A series of courses, identified by number and proceeding in a clockwise direction, describing the perimeter of the parcel of land to be acquired, and delineated with appropriate bearings, distances, and curve data.
  - Curve data must include the radius, delta angle, arc length, and long chord bearing and distance.
  - Each course must be identified either as a proposed right-of-way line, an existing right-of-way line, or a property line of the parent tract. Each property line of the parent tract must be described with an appropriate adjoiner call.
  - A description of all monumentation set or found shall include, as a minimum, size and material.
  - A reference to the source of bearings, coordinates, and datum used.
- Parcel plat
  - A parcel plat must be prepared for each parcel of land to be acquired.

#### GENERAL SPECIFICATIONS

- For purposes of this Contract, the following general specifications for right-of-way mapping apply:
  - Parcel plats must be submitted to the City on 8 ½ inch by 11 inch paper with respective borders of 7 ½ inches by 10 inches, positioned ½ inch from the top, bottom, and right edge of the sheet. Match lines must be used where more than one sheet is required.
  - Property descriptions shall be submitted on 8 ½ inch by 11 inch paper.

#### GENERAL REQUIREMENTS

- For purposes of this Contract, the following general requirements shall apply:
  - Copies of instruments of record submitted to the City must be indexed by parcel number.

- Coordinates appearing on parcel plats and in property descriptions must be surface coordinates based on the Texas Coordinate System. The appropriate combined adjustment factors (sea level factor multiplied by the scale factor) for each zone of the coordinate system must be noted.
    - In order to obtain surface coordinates, the Surveyor shall multiply grid coordinates by the appropriate combined adjustment factor for each zone, (The Grid coordinates multiplied by the combined adjustment factor = surface coordinates).
  - Line and curve tables may be used when necessary.
  - A 1/2 inch Iron Rod with a plastic cap stamped “HALFF” (or other appropriate monument) will be set on the proposed right-of-way line.
- 4.2. The Engineer shall prepare up to three Right-of-Way Justification Exhibits (RJE) for up to 3 parcels to accompany survey acquisition deliverables. The RJE’s will consist of the following information:
- Existing Infrastructure and Proposed Infrastructure
  - Existing Utilities and Proposed Utilities
  - Existing and proposed ROW/Easement Lines and adjacent property boundary lines
  - Existing TCAD PID labeled on the exhibit.

Deliverables will consist of:

- A Base Map (Working Sketch) as described above in DGN format.
- Three Property Descriptions and the associated Sketches to be used for acquisition.
- RJE for up to 3 parcels

## **5. GEOTECHNICAL ENGINEERING SERVICES**

This task will consist of evaluating the existing pavement conditions at the site and providing an estimated remaining pavement life, and pavement rehabilitation alternatives. A geotechnical investigation and geotechnical design will be performed via a subconsultant (RKCI). RKCI will perform the following:

- 5.1. Falling Weight Deflectometer (FWD) testing, Ground Penetrating Radar (GPR), and two additional pavement borings to evaluate the condition of the existing pavements within the project limits.
- 5.2. All proposed field work will be performed within the limits of the existing pavement structure. FWD testing will be performed at a 50 ft interval alternating between lanes. The additional pavement borings will be drilled to a depth of 5 ft below ground surface for use in calibrating the GPR results.
- 5.3. The results of the findings along with backcalculated pavement layer moduli, required structural overlay, estimated remaining pavement life, and pavement rehabilitation alternatives will be presented in a letter supplemental to our geotechnical engineering report.

The Engineer will provide the following deliverables during this task:

- One (1) electronic copy of Draft Geotechnical Engineering Report
- One (1) electronic copy of Final Geotechnical Engineering Report

## **6. UTILITY COORDINATION SERVICES**

Task 6 is not anticipated to be a part of this supplemental agreement.

## **7. SUBSURFACE UTILITY ENGINEERING (SUE) SERVICES**

Task 7 is not anticipated to be a part of this supplemental agreement.

## **8. TRAFFIC CONTROL PLAN SERVICES**

Task 8 is not anticipated to be a part of this supplemental agreement.

## **9. ROADWAY DESIGN SERVICES**

This task consists of adding design services for one innovative intersection for a preliminary exhibit to identify ROW needs. The Engineer will:

- 9.1. Evaluate and design horizontal and vertical alignments and geometrics for one innovative intersection at E Pecan St/Weiss Ln
- 9.2. Prepare preliminary cross sections at a spacing no less than 100 feet at one innovative intersection. These cross-sections will show pavement and subgrade, right-of-way limits, side slopes, pavement cross-slopes, curbs, and sidewalks.
- 9.3. Prepare one preliminary opinion of probable construction cost (OPCC)
- 9.4. Prepare one preliminary exhibit roll plot for the innovative intersection. The exhibit will be limited to existing topography and utilities, horizontal alignments, intersection horizontal alignments and profiles (where applicable), identified easements, existing and proposed right-of-way, existing and proposed pavement edges, proposed sidewalks, and proposed lane striping.
- 9.5. The Engineer will perform Quality Control/Quality Assurance on each deliverable.
- 9.6. Attend up to one (1) Design Review meeting with the City for the conceptual preliminary exhibit. Prepare meeting minutes and distribute to project attendees. Prepare comment responses for comments received during design review submittals.

The Engineer will provide the following deliverables during this task:

- Draft preliminary exhibit - Two (2) copies and one (1) electronic copy of the roll plots at a scale of 1 inch = 50 feet
- Final preliminary exhibit - Two (2) copies and one (1) electronic copy of the roll plots at a scale of 1 inch = 50 feet
- Two (2) copies and one (1) electronic copy of the 30% Cross Sections
- One (1) copy and one (1) electronic copy of Opinions of Probable Construction Cost for preliminary exhibit

## **10. DRAINAGE DESIGN SERVICES**

Task 10 is not anticipated to be a part of this supplemental agreement.

## **11. TRAFFIC, SIGNING AND PAVEMENT MARKINGS SERVICES**

### **11.1. VISSIM Analysis for Innovative intersections:**

- Create an existing conditions AM and PM peak hour microsimulation models using VISSIM 11 for the following intersections:
  - E Pecan St / SH 130 SBFR
  - E Pecan St / SH 130 NBFR
  - E Pecan St / Weiss LaneThis task will analyze two scenarios:
  - Existing conditions AM peak hour
  - Existing conditions PM peak hour.
- Calibrate the existing conditions models to acceptable standards to simulate the conditions observed in previous data collection.
- Develop up to one (1) future year build analysis for up to one (1) innovative intersection at E Pecan St / Weiss Lane as well as a No-build standard intersection scenario. Future year is to be identified by the City at the outset of this task. For the future year analysis, up to two (2) peak hour scenarios will be analyzed. This task will analyze four scenarios:
  - Future year standard intersection AM
  - Future year standard intersection PM
  - Future year innovative intersection AM
  - Future year innovative intersection PM
- Conduct a failure analysis for one peak hour for the identified innovative intersection to determine when further improvements would be required to maintain a Level of Service D at the intersection. This task will require one scenario:
  - Failure year innovative intersection peak hour
- Develop up to one (1) VISSIM video for one (1) scenario. The video will include a view of each intersection approach and not exceed 15 minutes. The video will not include 3D renderings or backgrounds.

The Engineer will provide the following deliverables during this task:

- Summarize findings and recommendations of the VISSIM analysis in a Technical Memorandum. The memorandum will include calibration methodology, MOEs presentation for all scenarios and final recommendation.
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## **12. ENVIRONMENTAL, STORM WATER MANAGEMENT PLAN, AND TREE PRESERVATION SERVICES**

Task 12 is not anticipated to be a part of this supplemental agreement.

**13. SUBMITTAL REQUIREMENTS**

Task 13 is not anticipated to be a part of this supplemental agreement.

**14. BID PHASE SERVICES**

Task 14 is not anticipated to be a part of this supplemental agreement

**15. CONSTRUCTION PHASE SERVICES**

Task 15 is not anticipated to be a part of this supplemental agreement

**16. ADDITIONAL SERVICES**

Task 16 is not anticipated to be a part of this supplemental agreement

The following services are not included in this Agreement at present and are specifically considered to be additional services:

- a. PS&E services
- b. Right-of-Way/easement acquisition and/or condemnation assistance;
- c. Traffic Signal Design services
- d. Landscaping and streetscaping services
- e. Construction Phase and Bidding Phase services
- f. Illumination design services
- g. Franchise Utility relocation design
- h. Construction inspection, construction staking, and material testing
- i. Appearing as an expert witness in any litigation for the City.
- j. Formal coordination with the USFWS
- k. Threatened and endangered species presence/absence surveys
- l. Waters of the US determination and wetland delineation
- m. Section 6(f) or 4(f) analysis
- n. Historic resources survey or archeological testing, data recovery, or construction-phase monitoring
- o. Geologic Assessment
- p. Hazardous Materials Phase I or II analysis
- q. USACE Pre-Construction Notification or Individual Permit preparation
- r. Preparing final conditions Letter of Map Revision for FEMA



**ADDENDUM TO EXHIBIT B  
FEE SUMMARY FOR PROFESSIONAL SERVICES SUPPLEMENTAL #1**

Project Name: E Pecan St  
Prepared By: Kimley-Horn and Associates, Inc.

Task # Subtask Number	Task Name Subtask Name/Description	Assumptions	Direct Labor (Person-Hours)						Project Controller	Admin	Labor Total (hours)	Misc. Direct Expense (\$)
			Senior Prof II	Senior Prof I	Prof	Analyst	CADD					
4	<b>SURVEYING SERVICES</b>		\$285.00	230.00	185.00	155.00	125.00	105.00	\$100.00			
	Half Survey Fee											\$4,480.00
	5% Half sub mark up - survey										0	\$224.00
	Coordination of ROW docs and QC/QA		2	6	6	4					18	
	Right of Way Justification Exhibits	Up to 3 additional parcels	2	4	6	16					28	
											0	
	<b>Task Total (Hours)</b>		4	10	12	20	0	0	0		46	
	<b>Task Total (Dollars)</b>		\$1,140	\$2,300	\$2,220	\$3,100	\$0	\$0	\$0		\$8,760.00	\$4,704.00
5	<b>GEOTECHNICAL ENGINEERING SERVICES</b>											
	Raba Fee											\$28,303.70
	PSA remaining geotech fee	Unused traffic control									0	-\$10,000.00
	5% Raba sub mark up - geotech			4	4						8	\$915.19
	Geotech review and coordination										8	
	<b>Task Total (Hours)</b>		0	4	4	0	0	0	0		8	
	<b>Task Total (Dollars)</b>		\$0	\$920	\$740	\$0	\$0	\$0	\$0		\$1,660.00	\$19,218.89
9	<b>ROADWAY DESIGN SERVICES</b>											
	Prepare preliminary innovative intersection exhibit		4	8	16	24						
	Prepare preliminary innovative intersection cross sections		2	4	8	16						
	Prepare preliminary innovative intersection OPCC		1	2	2	4						
	PSA roadway task shift	Shift hours to innovative intersection	-7	-14	-26	-44						
	<b>Task Total (Dollars)</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0.00	\$0.00
11	<b>TRAFFIC, ILLUMINATION SIGNING AND PAVEMENT MARKINGS SERVICES</b>											
	Existing Models and Calibration		5	10	20	54						
	Future Year Analysis of One (1) Innovative Intersections		5	10	30	54						
	Future Year Failure Analysis of Chosen Alternative		5	10	10	32						
	Develop Simulation Videos			5	10	16						
	Develop Technical Report		4	10	14	16						
	<b>Task Total (Hours)</b>		19	45	84	172	0	0	0		0	
	<b>Task Total (Dollars)</b>		\$5,415	\$10,350	\$15,540	\$26,660	\$0	\$0	\$0		\$57,965.00	\$0.00
	<b>KIMLEY-HORN TOTAL (Hours)</b>		23	59	100	192	0	0	0		54	
	<b>KIMLEY-HORN TOTAL (Dollars)</b>		\$6,555	\$13,570	\$18,500	\$29,760	\$0	\$0	\$0		\$68,385.00	
	<b>SUBCONSULTANT (HALFF - Survey/ROW/SUE)</b>										\$4,480.00	
	<b>SUBCONSULTANT (CMEC - Environmental)</b>										\$0.00	
	<b>SUBCONSULTANT (Raba-Geotechnical)</b>										\$18,303.70	
	<b>SUBCONSULTANT (Quality Counts)</b>										\$0.00	
	<b>PRIME PROVIDER MARK UP (5%)</b>										\$1,139.19	
	<b>REIMBURSABLE EXPENSES (KH)</b>										\$0.00	
	<b>GRAND TOTAL</b>										\$92,307.89	

Job name	<b>Pecan Street Additional Surveying</b>																
Prospect #:																	
Client:	<b>Kimley Horn</b>																
Type of work:	<b>Survey Team 64 Work (Excludes SUE)</b>																
Office or Team work is for:																	
Link to drawing:																	
									Link to KMZ:								
Team Unit	Special Considerations (project standards, field accessibility, review process, schedule)	Senior RPLS Team Leader	RPLS Project Manager	Geospatial Manager	FAA 107 UAS Pilot	3D Laser Scanner Tech	Senior Survey Tech/ SIT/ Senior Geospatial Tech	Survey Tech/ Geospatial Tech	CADD Drafter	1 man crew	2 man crew	3 man crew	Clerical	3D Laser Scanner (daily rate \$1,300)	UAS LiDAR (daily rate \$2,000)	UAS Photogrammetry (daily rate \$500)	unit total
Hourly rate		\$225.00	\$165.00	\$210.00	\$150.00	\$170.00	\$120.00	\$100.00	\$90.00	\$130.00	\$175.00	\$235.00	\$80.00	\$162.50	\$250.00	\$62.50	
<b>Right-of-Way Survey</b>	<b>total time per Team Unit (hours):</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$4,480.00</b>
Prepare Property Description & Sketch			6				15										\$2,790.00
Pin sets											4						\$700.00
QA/QC			3														\$495.00
Boundary analysis (side line)			3														\$495.00
<b>TOTAL: \$4,480.00</b>																	

**PECAN STREET IMPROVEMENTS  
FROM SUN LIGHT NEAR WAY TO WEISS LANE  
PFLUGERVILLE, TEXAS**

TASK	SHEETS/ UNITS	PRINCIPAL	PROJECT MANAGER	SENIOR ENGINEER	ENGINEER	EIT	SR. ENGR. TECH.	ADMIN	Sub Total Hours	Hr/Unit	RCKI Labor Cost
<b>RCKI</b>		\$ 220.00	\$195.00	\$185.00	\$165.00	\$135.00	\$103.71	\$71.72			
<b>PRELIMINARY ENGINEERING - LABOR</b>											
EXISTING PAVEMENTS SURVEY - FWD, GPR, 2 additional borings											\$ -
FIELD WORK COORDINATION (Mark Borings, TCP, Permit, Utility Clearance)					1	1	10		12		\$ 1,337.10
FIELD LOGGING							6		6		\$ 622.26
LABORATORY ASSIGNMENT					1	1			2		\$ 300.00
SOIL BORING LOGS (Including Wincore logs for Bridge and RW borings)					1	2			3		\$ 435.00
SITE PLAN						1	2		3		\$ 342.42
REVISE PAVEMENT DESIGN ANALYSIS FOR WESTBOUND BASED ON FWD											\$ -
SUBGRADE MODULUS			1		2	4			7		\$ 1,065.00
REVISE DRAFT GEOTECHNICAL REPORT PREPARATION		0.5	1		2	4		2	10		\$ 1,318.44
OUTSIDE SERVICE - FWD and GPR (APPLIED RESAERCH ASSOCIATES, INC.)											\$ 18,400.00
TOTALS HOURS:		1	2		7	13	18	2		Row Total = 43 Column Total = 43	
LABOR COST:		\$ 110	\$ 390	\$ -	\$ 1,155	\$ 1,755	\$ 1,867	\$ 143			\$ 23,820.22
		1.2%	4.7%		16.5%	30.6%	42.4%	4.7%			\$ 5,420.22

UNIT EXPENSES:		FIELD OPERATIONS						
2 x 5 ft pavement borings		Mobilization of Drill Rig	1	units			\$495.00 each	\$495.00
		3" Thin-Wall Continuous Sampling or Intermittent Sampling in Granular Soils	10	ft			\$19.50 ft	\$195.00
		NX Core Drilling		ft			\$35.00 ft	
		Texas Cone Penetration (TCP) at 5 ft intervals		units			\$20.00 each	
		In-Place Pavement Core (6-in. diameter)	2	units			\$100.00 each	\$200.00
		Bentonite Backfill	1	bags			\$13.86 bag	\$13.86
		Pavement Surface Patch	2	units			\$40.00 each	\$80.00
		Driller Cleanup	1	hrs			\$233.54 hr	\$233.54
		<b>LABORATORY TESTING</b>						
		Atterberg Limits	2	units			\$105.00 each	\$210.00
		Moisture Content	4	units			\$15.00 each	\$60.00
		Sieve Analysis (passing No. 4, 40, 200)	2	units			\$98.04 each	\$196.08
		Unconfined Compression (Soil)		units			\$30.08 each	
		Unconfined Compression (Rock)		units			\$41.22 each	
		pH		units			\$41.22 each	
	Sulfate Testing		units			\$100.27 each		
	Swell Test (ASTM D 4546 Method B)		units			\$200.00 each		
	Moisture-Density Test Only		units			\$295.00 each		
	Triaxial Compression of Disturbed Soils (Tex-117-E)		units			\$1,200.00 each		
	Lime Series (Tex-121-E Part III)		units			\$410.00 each		
<b>TOTAL UNIT EXPENSES:</b>								<b>\$1,683.48</b>

OTHER DIRECT EXPENSES:								
	Traffic Control Services, Arrow Boards and Attenuator Truck (Medium Project)	1	days				\$2,800.00 day	\$2,800.00
<b>TOTAL OTHER DIRECT EXPENSES:</b>								<b>\$2,800.00</b>
<b>TOTAL PROJECT COST:</b>								<b>\$28,303.70</b>