

**PROFESSIONAL SERVICES
SUPPLEMENT AGREEMENT #4
For
PACKAGE 1 STREET RECONSTRUCTION**

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

This Supplemental Service Agreement No. 3 to a contract for Professional Services is made by and between the City of Pflugerville, Texas ("City") and Halff 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 26th day of January, 2022 for Package 1 Street Reconstruction ("Project") in the amount of \$ 467,198.76 ; and

WHEREAS, the City and Consultant executed Professional Services Supplemental Agreement #1 to Professional Services in the amount of \$ 271,815.93, on the 1st day of November, 2022 to add Street Maintenance for the Willow Creek Subdivision as Package 1B to the Agreement; and

WHEREAS, the City and Consultant executed Professional Services Supplemental Agreement #2 to Professional Services in the amount of \$ 0.00, on the 14th day of September, 2023 to add Competitive Sealed Proposal Evaluation and Design of Storm Drainage Repairs and remove Subsurface Utility Engineering Scope of Work to the Agreement; and

WHEREAS, the City and Consultant executed Professional Services Supplemental Agreement #3 to Professional Services in the amount of \$ 9,266.50, on the day of January, 2024 to add 1B Technical Review Committee services and 1B Competitive Sealed Proposal Evaluation to the Agreement; and

WHEREAS, the City and Consultant desire to enter into a Supplemental Service Agreement #4 to Professional Services in the amount of \$ 272,420.30, on the 5th day of January, 2024 to add FY 2024 Street Maintenance to the Agreement; and

WHEREAS, it has become necessary to amend the Agreement to modify the provisions for the Scope of Services, Subcontractors 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 XI. Assignment and Subcontracting, Section 11.2 shall be amended by adding Contour Collective as an approved subcontractor.

Article IV. Compensation to Consultant and Exhibit B (Fee Schedule), shall be amended by increasing by \$ 272,420.30 the amount payable under the Supplemental Agreement for a total of \$ 1,020,701.49 as set forth in the attached addendum to Exhibit B.

2.

Except as amended hereby, and as previously amended as indicated above, 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: Eric J. Ratzman

Vice President
Title: Halff Associates, Inc.

Date: _____

APPROVED AS TO FORM:

Charles E. Zech

City Attorney

DENTON NAVARRO RODRIGUEZ BERNAL

SANTEE & ZECH, P.C.

EXHIBIT "A"
PROPOSED SCOPE OF SERVICES
For
SUPPLEMENT SERVICE #4
FY24 STREET MAINTENANCE ROADS
CITY OF PFLUGERVILLE, TEXAS

Herein is Supplement #4 to the existing Package 1 Street Reconstruction agreement with the City of Pflugerville dated January 26, 2022.

The proposed Scope of Services delineates the items that Halff Associates, Inc. ("CONSULTANT") will provide to the City of Pflugerville ("CITY"). The project includes pavement rehabilitation for the roadways listed below and shown in Exhibit "C" totaling approximately 8,400 linear feet. Services include survey, geotechnical investigation, pavement design, preliminary engineering analysis, construction documents, bid phase services and construction phase services. Services will be performed for the following roadways:

Roadway	From	To	Length (LF)
Fenway Park	Timber Bend Dr.	Rocky Creek Dr.	885
Felsmere Dr.	Mattapan Dr.	Rocky Creek Dr.	830
Mattapan Dr.	Felsmere Dr.	Rocky Creek Dr.	1105
Brophy Dr.	Woodlawn Dr.	Rocky Creek Dr.	850
Woodlawn Dr.	Brophy Dr.	Rocky Creek Dr.	670
Milton Cove.	Rocky Creek Dr.	End	290
Bell Rock Cir.	Rocky Creek Dr.	Rocky Creek Dr.	1130
Palmwood Trl.	Timber Bend Dr.	Teakwood Trl.	600
Teakwood Trl.	Split Oak Dr.	Palmwood Trl.	335
Twin Creek Dr.	Split Oak Dr.	End	390
Pecan Creek Dr.	Split Oak Dr.	End	330
Hickory Ridge Trl.	Rocky Creek Dr.	Maplewood Dr.	575
Maplewood Dr.	Split Oak Dr.	Hickory Ridge Trl.	285
Split Oak Cv.	Split Oak Dr.	End	125
TOTAL LF			8,400

The services are separated into the following Tasks and described in more detail below:

- Task 1.0:** Project Administration and Coordination Services
- Task 2.0:** Surveying Services
- Task 3.0:** Geotechnical Engineering Services
- Task 4.0:** Preliminary Engineering Services
- Task 5.0:** Design Plans and Construction Documents
- Task 6.0:** Public Involvement
- Task 7.0:** Bid Phase Services
- Task 8.0:** Construction Phase Services

1.0 PROJECT ADMINISTRATION AND COORDINATION SERVICES

The CONSULTANT will provide the following Project Administration Services:

- 1.1 Submit to the CITY invoices of services completed and compensation due, arranged by tasks. Invoices will include the budgeted and currently authorized amounts for each task, along with the invoiced and to-date amounts. The invoice must be submitted to the CITY by the 10th calendar day of each month.
- 1.2 Submit with each invoice an updated schedule and monthly status report of work performed including any decisions or agreements made, tasks planned for upcoming periods and any unresolved or pending issues requiring CITY involvement or decision.

The CONSULTANT will provide the following Project Coordination Services:

- 1.3 Attend the following meetings as needed with the City and will prepare and distribute meeting minutes within three (3) business days of the meeting;
 - a. Project kick-off meeting
 - b. Monthly progress meetings
 - c. Comment review meetings after the Preliminary and 90% submittals

TASK 1 Deliverables:

- Monthly progress reports, invoicing and schedule updates
- Meeting minutes

2.0 SURVEYING SERVICES

The CONSULTANT will obtain the services of a Registered Professional Land Surveyor to perform field surveys for the Project. All survey services will comply with the latest revision of the Professional Land Surveying Practice Act of the State of Texas and will be accomplished under the direct supervision of a currently licensed State of Texas Registered Professional Land Surveyor. A ROW permit shall be submitted to the City for review and approval prior to consultant or subs engaging in any type of surveying activities.

It is assumed that survey can be performed utilizing a combination of GPS, conventional, and terrestrial LiDAR survey methods for data collection.

Surveying Services will include the following:

- 2.1 Topographic Survey of the subject area(s) shown on the attached Exhibit "C". The following specific services will be provided:
 - a. Obtain break lines and spot elevations sufficient for 1-foot contours.
 - b. Obtain line and grade on handicap ramps, crosswalks, and sidewalks.
 - c. Locate above ground visible improvements.
 - d. Locate visible above-ground utility locations, either found by our surveyors or located for us by utility companies and/or other agencies.
 - e. Provide spot elevations at center point of manhole covers and access vaults.
 - f. Provide location, pipe size (if possible) and invert elevation of existing storm drain structures.
 - g. Process field collected data for field survey.
 - h. Perform quality control for survey requirements.
- 2.2 Survey Control
 - a. Vertical datum will be NAVD88(Geoid 18) unless otherwise specified by others prior to

- the commencement of the project.
- b. Horizontal datum will be Texas State Plane Coordinate System of 1983 (NAD83/ Central Zone) surface coordinates.
 - c. Establish a minimum of two control monuments.
 - Coordinates will be determined by static observations and/or differential leveling.

TASK 2 Deliverables:

- Civil3D CAD file containing the following:
 - Survey data
 - Linear features
 - Digital terrain model
- 11x17 survey control sheets in PDF format.

3.0 GEOTECHNICAL ENGINEERING SERVICES

See attached scope of services to be performed by Raba Kistner Consultants, Inc. A ROW permit shall be submitted to the City for review and approval prior to subs engaging in any type of geotechnical engineering activities in the field.

4.0 PRELIMINARY ENGINEERING SERVICES

The CONSULTANT will provide the following Preliminary Engineering Services:

- 4.1 Proposed typical roadway sections showing pavement design.
- 4.2 Preliminary traffic control sequencing and phasing .
- 4.3 Estimate of probable construction costs of the pavement design alternatives provided by the Geotechnical Engineer (broken out by roadway).
- 4.4 Site visit to evaluate sidewalks, driveways and curb & gutter to determine need for removal and replacement based on sagging/ heaving/ cracking/ ponding. Identify locations where accessible curb ramps need to be added or replaced. Identify areas of visible drainage issues.

TASK 4 Deliverables:

- One (1) Technical Memorandum containing:
 - Recommended pavement sections by street
 - Engineer's estimate of probable construction costs
 - Phased construction sequence
 - Preliminary curb & gutter, sidewalk, and curb ramp replacements/additions
 - Discussion of anticipated utility conflicts (if any) and general design strategies for mitigating them

5.0 DESIGN PLANS AND CONSTRUCTION DOCUMENTS

Design Criteria will be as follows:

- The design standards to be used will include but not be limited to the City of Pflugerville Engineering Design Manual, City of Austin Drainage Criteria Manual, TxDOT Roadway Design Manual, Texas Manual on Uniform Traffic Control Devices and ADA Accessibility Guidelines;
- Project specifications will be developed using the latest City of Pflugerville Technical Standards and Specifications and City of Austin Technical Standards and Specifications and/or the Texas Department of Transportation Standard Specifications as needed;

5.1 The CONSULTANT will provide the following for all Roadway design:

- a. Typical sections: showing pavement widths based off existing curb line, centerline, pavement design, cross-slope, lane widths, sidewalk, right-of-way and station limits
- b. Centerlines and horizontal alignment data
- c. Limits of construction
- d. Limits of curb & gutter and driveway removal and replacement needed to achieve positive drainage. In addition to the results from the Preliminary Engineering site visit, the CONSULTANT shall analyze the survey data provided to identify and mitigate any areas of ponding or low spots.
- e. Pavement markings and sign relocations (no separate signage & pavement markings plan)
- f. Location of proposed ADA curb ramps
- g. Existing valve covers and manhole lids to be adjusted

5.2 The CONSULTANT will provide the following for all Traffic Control design:

- a. Detailed plan sheets, phasing, detours and advance warning sign layout for traffic control during construction, including signing, barricades and temporary paving as needed
- b. Sequence of Work Narrative including a phase-by-phase, step-by-step written account of the proposed activities throughout the construction process
- c. Typical Sections for each phase of construction as needed
- d. All erosion control measures required during construction

5.3 In addition to the services above, the Construction Documents will include the following:

- a. Title Sheet with all pertinent project information and index of sheets
- b. General notes
- c. Project Layout Sheet(s)
- d. Miscellaneous Roadway Details as needed
- e. City of Pflugerville, City of Austin and/or TxDOT standard details as needed
- f. Special specifications or special provisions, as needed
- g. Opinion of Probable Construction Cost with tabulated quantities
- h. Project Manual

5.4 The CONSULTANT will coordinate with a Registered Accessibility Specialist (RAS) to review the plans and register the project with the Texas Department of Licensing and Regulation (TDLR). See attached scope of services to be performed by Contour Collective

TASK 5 Deliverables:

- One bid set/ bid package for all roadways (with quantities and costs separated per roadway)
- 90% Construction Plans (11x17 plan sheets) and OPCC, submitted electronically (with quantities

- and costs separated per roadway)
- Final Construction Plans (11x17 plan sheets) and OPCC, signed and sealed by a licensed Professional Engineer in the State of Texas
- Responses to 90% CITY review comments
- One Project Manual at 90% and 100% (including schedule of work, special conditions, and wage rates)
- Electronic bid documentation for advertisement and posting

6.0 PUBLIC INVOLVEMENT

- 6.1 The CONSULTANT will prepare presentation materials and attend one (1) Public Meeting with City staff. Public notifications will be handled by the city PIO.
- 6.2 The CONSULTANT will provide up to ten (10) color exhibits for use at the Public Meetings, which includes the PowerPoint slides and roadway schematics.

TASK 6 Deliverables:

- Public meeting exhibits

7.0 BID PHASE SERVICES

The CONSULTANT will provide the following Bid Phase Services. It is understood that contractors will submit Competitive Sealed Proposals (CSP) for evaluation and scoring.

- 7.1 Attend the Pre-Proposal Meeting with the CITY and prospective bidders. The CONSULTANT will prepare meeting minutes and submit to the CITY within three (3) business days of the meeting.
- 7.2 Respond to Contractor questions raised during the bidding process and develop addenda to the Bid Documentation as required.
- 7.3 Attend the formal proposal opening.
- 7.4 The CONSULTANT will support the evaluation of contractor CSPs including preparing the bid tabulation, attending interviews, scoring the proposals and providing the Engineer's Letter of Recommendation to Award.
- 7.5 Furnish a set of Final Conformed Construction Contract Documents to the awarded Contractor including all Addenda.

TASK 7 Deliverables:

- Bid tabulation for all submitted contractor proposals
- Recommendation to Award letter
- Conformed construction documents

8.0 CONSTRUCTION PHASE SERVICES

The CONSULTANT will provide the following Construction Phase Services:

- 8.1 Attend the following meetings as needed with the CITY and the awarded Contractor and will prepare and distribute meeting minutes within three (3) business days of the meeting.
 - a. Pre-construction meeting
 - b. Monthly progress meetings (6 meetings budgeted)
- 8.2 Review the Contractor's submittals for general conformance with the plans and specifications.

- 8.3 Respond to Contractor Requests for Information (RFI) and provide design clarifications and additional information to the City as required.
- 8.4 Review monthly pay estimates and recommend approval or other appropriate action.
- 8.5 Attend final walk through of the Project to observe any apparent defects in the completed construction with regard to conformance with the design concept and intent of the specifications and provide a final Punch List within one (1) business day of the final walk through.
- 8.6 Prepare and compile all closeout documents required by the City's Final Acceptance Process including a set of Record Drawings and concurrence letter of final completion.

TASK 8 Deliverables:

- Meeting minutes
- Punch list
- Record drawings
- Engineer's Letter of Concurrence

ITEMS EXCLUDED FROM THE SCOPE OF SERVICES

1. Drainage analysis not specifically stated above (drainage areas, runoff, inlet capacity, etc.)
2. Right-of-Entry
3. Storm Water Pollution Prevention Plan (SWPPP)
4. Design of public and franchised utility relocations
5. Utility coordination
6. Permitting beyond city ROW permit for field work
7. Environmental services
8. Public engagement other than those specified in this proposal
9. Design of water quality or detention ponds
10. Property acquisition or negotiations
11. Preparing property parcels for acquisition
12. Traffic signal analysis or design
13. Landscaping
14. Coordination with individual property owners
15. Using a different surveyor's certificate; or changes made to the survey after completion (if so required), will be charged as Additional Services at established hourly rates.
16. Return trips to reset damaged control points.
17. Right-of-way boundary retracement. Any request for boundary retracement will be charged as Additional Services at established hourly rates.
18. Research efforts normally performed by a title company.

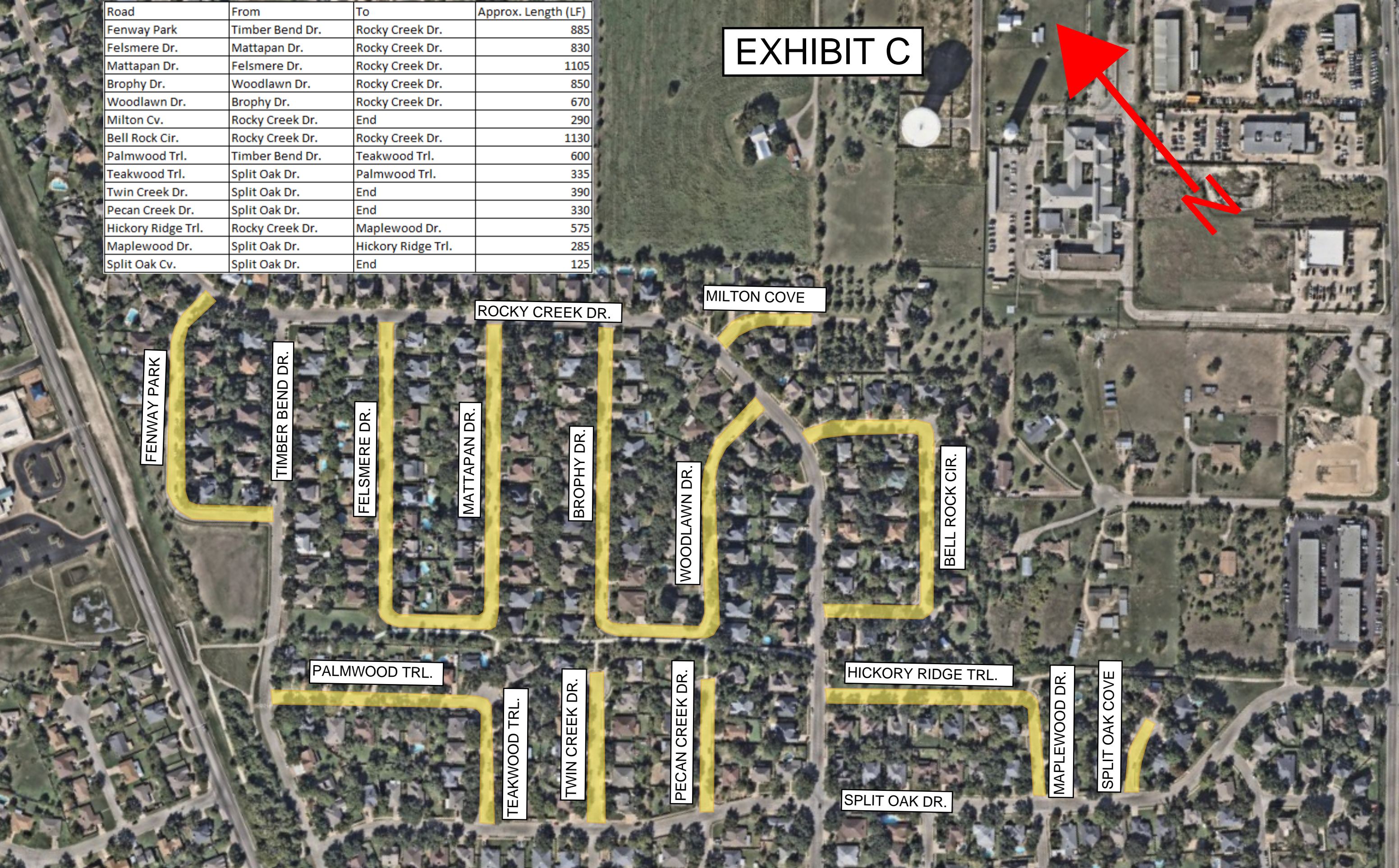
Any additional services required beyond those specifically identified in this proposal are excluded from the scope of services to be provided under this agreement. A scope and commensurate fee for any required additional services would be negotiated and provided under a separate supplemental agreement.

EXHIBIT "B"
Fee Schedule
City of Pflugerville
FY24 Street Maintenance
(Time shown in hours, except as noted)

	PROJECT TASK	Project Principal	Project Manager	Civil Engineer III, PE	Civil Engineer, EIT	CADD Technician	Senior RPLS Team Leader	Geospatial Project Manager	Senior Survey Tech/ SIT/ Senior Geospatial Tech	Survey Tech/ Geospatial Tech/ GIS Tech/ CADD Drafter	Clerical	2-Man Survey Crew	Mobile LiDAR MX9 (LS)	Mileage (per mile)	Direct and Subconsultant Expenses	TOTAL		
	HOURLY RATES	\$245	\$291	\$199	\$128	\$105	\$240	\$180	\$130	\$105	\$90	\$190	\$3,000	\$0.655				
Task 1.0:	Project Administration and Coordination Services																\$23,647.00	
	Project management and coordination	12.0	40.0													\$14,580.00		
	Monthly invoicing, reporting and schedule updates		18.0													\$5,238.00		
	Project coordination meetings		7.0		14.0											\$3,829.00		
Task 2.0:	Surveying Services																\$45,584.30	
	Verify/Establish Topo Targets										4.00	24.00				\$4,920.00		
	Topo											93.00				\$17,670.00		
	Mobile Lidar (MLS)							1.00				2.00				\$560.00		
	Mobilization fees											2.00				\$3,419.30		
	Topo data processing						4.00		5.00	20.00						\$3,710.00		
	Topo COGO, sketches, survey requests						1.00		2.00	4.00						\$920.00		
	Drafting						5.00		7.50	30.00						\$5,325.00		
	Mobile registration							5.00								\$900.00		
	Extraction							2.00	48.00							\$6,600.00		
	DTM							2.00								\$360.00		
	QA/QC						2.00	4.00								\$1,200.00		
Task 3.0:	Geotechnical Engineering Services																\$ 74,318.00	
															\$ 74,318.00	\$74,318.00		
Task 4.0:	Preliminary Engineering Service																\$31,058.00	
	Typical sections and pavement design			8.0	40.0											\$6,712.00		
	Preliminary traffic control phasing		4.0	8.0	16.0											\$4,804.00		
	Preliminary cost estimates		2.0	8.0	16.0											\$4,222.00		
	Site visit		6.0	6.0	6.0											\$3,708.00		
	Prepare memorandum		8.0	16.0	40.0											\$10,632.00		
	QAQC	4.0														\$980.00		
Task 5.0:	Supplemental Design Plans and Construction Documents																\$58,508.00	
	Roadway design		4.0	40.0	90.0	30.0										\$20,644.00		
	Traffic Control design		4.0	30.0	20.0	10.0										\$9,694.00		
	Plan preparation			10.0	30.0	70.0										\$5,830.00		
	Quantities & estimating		1.0	4.0	40.0											\$6,207.00		
	QAQC	8.0	8.0	10.0												\$6,278.00		
	Project Manual, bid form and specifications		1.0	8.0	24.0											\$4,955.00		
	TDLR Registration and Registered Accessibility Consultant (Contour Collective)														\$ 4,900.00	\$4,900.00		
Task 6.0:	Public Involvement																\$15,012.00	
	Prepare exhibits (10 exhibits)		4.0	8.0	64.0											\$10,948.00		
	Public Meeting facilitation and responses to comments		4.0	12.0	4.0											\$4,064.00		
Task 7.0:	Bid Phase Services																\$5,629.00	
	Pre-bid meeting		2.0		2.0											\$838.00		
	Answer questions and prepare addenda			8.0	6.0											\$2,360.00		
	Bid opening meeting			1.0	1.0											\$327.00		
	Bid tabulation and recommendation letter			8.0	4.0											\$2,104.00		
Task 8.0:	Construction Phase Services																\$18,664.00	
	Pre-construction meeting		1.0	1.0												\$490.00		
	Monthly progress meetings (4)		6.0	6.0												\$2,940.00		
	Submittal reviews			2.0	24.0											\$3,470.00		
	Respond to RFIs		2.0	4.0	8.0											\$2,402.00		
	Site visits (4)			12.0	12.0											\$3,924.00		
	Final walk through & punch list preparation			4.0												\$796.00		
	Record drawings			8.0	20.0											\$4,152.00		
	Letter of concurrence		1.0	1.0												\$490.00		
TOTAL Hours		24.0	123.0	223.0	481.0	110.0	12.0	14.0	62.5	54.0	4.0	121.0						
TOTAL PROJECT																	\$272,420.30	

Road	From	To	Approx. Length (LF)
Fenway Park	Timber Bend Dr.	Rocky Creek Dr.	885
Felsmere Dr.	Mattapan Dr.	Rocky Creek Dr.	830
Mattapan Dr.	Felsmere Dr.	Rocky Creek Dr.	1105
Brophy Dr.	Woodlawn Dr.	Rocky Creek Dr.	850
Woodlawn Dr.	Brophy Dr.	Rocky Creek Dr.	670
Milton Cv.	Rocky Creek Dr.	End	290
Bell Rock Cir.	Rocky Creek Dr.	Rocky Creek Dr.	1130
Palmwood Trl.	Timber Bend Dr.	Teakwood Trl.	600
Teakwood Trl.	Split Oak Dr.	Palmwood Trl.	335
Twin Creek Dr.	Split Oak Dr.	End	390
Pecan Creek Dr.	Split Oak Dr.	End	330
Hickory Ridge Trl.	Rocky Creek Dr.	Maplewood Dr.	575
Maplewood Dr.	Split Oak Dr.	Hickory Ridge Trl.	285
Split Oak Cv.	Split Oak Dr.	End	125

EXHIBIT C



**RABA KISTNER CONSULTANTS, INC. SCOPE OF SERVICES
FY 24 PFLUGERVILLE STREET MAINTENANCE ROADS
TRAVIS COUNTY, TEXAS**

PROJECT DESCRIPTION

Under consideration in this study is the rehabilitation of selected streets identified as FY 24 Street Maintenance Roads by Halff.

In 2019, the City of Pflugerville conducted a street condition survey of various streets within the city limits. An overall condition index (OCI) number was assigned to the streets with various condition types ranging from failed to good. This information will be utilized as a basis in understanding the current condition of the roadways being considered in this scope.

The streets being considered in FY 24 are identified in the table below. Additional information related to roadway length and assigned OCI has been summarized.

Street Name	Extents	Approximate Lineal Feet of Roadway	Overall Condition Index	Condition Description Performance
Fenway Park	Timber Bend Drive to Rocky Creek Drive	885	75	Satisfactory
Felsmere Drive	Mattapan Drive to Rocky Creek Drive	830	85	Satisfactory
Mattapan Drive	Felsmere Drive to Rocky Creek Drive	1,105	81	Satisfactory
Brophy Drive	Woodlawn Drive to Rocky Creek Drive	850	71	Satisfactory
Woodlawn Drive	Brophy Drive to Rocky Creek Drive	670	72	Satisfactory
Milton Cove	Rocky Creek Drive to End	290	79	Satisfactory
Bell Rock Circle	Rocky Creek Drive to Rocky Creek Drive	1130	68	Fair
Palmwood Trail	Timber Bend Drive to Teakwood Trail	600	68	Fair
Teakwood Trail	Split Oak Drive to Palmwood Trail	335	75	Satisfactory
Twin Creek Drive	Split Oak Drive to End	390	62 to 69	Fair
Pecan Creek Drive	Split Oak Drive to End	330	57	Fair
Hickory Ridge Trail	Rocky Creek Drive to Maplewood Drive	575	58	Fair
Maplewood Drive	Split Oak Drive to Hickory Ridge Trail	285	63 to 67	Fair
Split Oak Cove	Split Oak Drive to End	125	63	Fair

PROPOSED SCOPE OF WORK

Our scope of services will be to determine subsurface soil conditions at the site and develop flexible pavement design recommendations and construction guidelines for all streets identified above. The design 18-kip Equivalent Single Axle Loads (ESALs) will be determined by either street classification, anticipated average daily traffic (ADT) counts for a 20-year design life for flexible pavements in general accordance with the City of Pflugerville *Engineering Design Manual & Construction Standards*, and/or estimated traffic as provided by the City of Pflugerville.

**RABA KISTNER CONSULTANTS, INC. SCOPE OF SERVICES
FY 24 PFLUGERVILLE STREET MAINTENANCE ROADS
TRAVIS COUNTY, TEXAS**

FIELD SERVICES

As part of our scope of work, RKCI will perform the following:

- Develop soil-boring layout for the City of Pflugerville's approval prior to mobilization.
- Submit a Right-of-Way Application permit for all streets associated with FY 24, which is required for drilling and cut excavations within the street right-of-way. The document will include a cover letter describing the nature of our work, the number of borings and their targeted depths, proposed boring locations vetted against existing utilities (offsets), a traffic and/or pedestrian control plan in conformance with the latest TMUTCD, and a restoration plan (backfill requirements for the boreholes) in accordance with Chapter 96.51 and 96.52. A copy of our Texas 811 utility locate submission will also be included. We understand not all utilities subscribe to Texas 811; therefore, water line utilities will have their own utility locate submission for final clearance.
- The boring locations will be located in the field utilizing tape and right angle measurements from existing benchmarks or using a recreational grade Global Positioning System (GPS) device. Our scope of services does not include surveying of the boring locations.
- Subsurface soil conditions will be explored by drilling 26 borings to depths of 10 ft below the existing ground surface utilizing a truck mounted drilling rig. The following drilling scope is proposed:

Street Name	Approximate Lineal Feet of Roadway	Proposed Number of Borings
Fenway Park	885	2
Felsmere Drive	830	2
Mattapan Drive	1,105	3
Brophy Drive	850	2
Woodlawn Drive	670	3
Milton Cove	290	1
Bell Rock Circle	1130	3
Palmwood Trail	600	2
Teakwood Trail	335	1
Twin Creek Drive	390	2
Pecan Creek Drive	330	1
Hickory Ridge Trail	575	2
Maplewood Drive	285	1
Split Oak Cove	125	1
TOTAL		26

Samples will be taken on 2 ft intervals. The above fieldwork will be supervised by a graduate engineer or geologist familiar with local geology and TxDOT standards for drilling and sampling.

**RABA KISTNER CONSULTANTS, INC. SCOPE OF SERVICES
FY 24 PFLUGERVILLE STREET MAINTENANCE ROADS
TRAVIS COUNTY, TEXAS**

We have assumed that the borings can be drilled during the day, right of entry is provided, and that all boring locations will be accessible to a truck-mounted drill rig.

- Perform dynamic cone penetrometer (DCP) testing at selected boring locations to evaluate subgrade stiffness.

NON-DESTRUCTIVE TESTING (Falling Weight Deflectometer Testing)

Falling Weight Deflectometer (FWD) testing will be performed on all streets within the FY 24 street package. The purpose is to determine the in-place layer moduli using back calculation techniques. This will determine the most appropriate options for rehabilitating the roadway and pinpoint the location of weak layers that warrant addressing. In order to perform the most accurate back calculations, the data must be correlated with asphalt pavement thickness information collected from drilled pavement core data.

LABORATORY TESTING

Upon completion of the subsurface exploration, a testing program will be designed to define the strength and classification characteristics of soils. The testing program may include but not limited to moisture content tests, Atterberg Limits (plasticity tests), sulfate testing, particle size analysis tests, and lime series. The type and number of tests will be based on subsurface conditions encountered in the field.

GEOTECHNICAL ENGINEERING REPORT DELIVERABLE

The results of our FWD data collection will be utilized to determine the moduli of the existing asphalt pavement section and underlying subgrade. This information will then be utilized to provide new pavement design recommendations.

The geotechnical engineering report will include the following information and recommendations, if applicable:

- Geotechnical Investigation prepared by a professional geotechnical engineer with 15+ years of experience conducting roadway projects within Travis County.
- The following items will be included in the geotechnical report: soil-boring locations, boring logs, plan of borings, subsurface exploration procedures, field and laboratory test results, description of surface and subsurface conditions, groundwater conditions, and estimated PVR calculations.
- Prepare up to 3 pavement design options for all streets within the FY 24 street package. All pavement design analyses will be performed with TxDOT software FPS-21. At least one option will be for a mill and overlay or other recycled pavement design.
- A Draft Pavement Report will be submitted for all streets within the FY 24 package for design team comments and review. Comments will be incorporated in the final deliverable that will be reproduced in one electronic copy for distribution.

TENTATIVE PROJECT SCHEDULE

**RABA KISTNER CONSULTANTS, INC. SCOPE OF SERVICES
FY 24 PFLUGERVILLE STREET MAINTENANCE ROADS
TRAVIS COUNTY, TEXAS**

Based on our present workload, we anticipate that we could begin the field coordination phase immediately upon authorization. The permit process is estimated to take up to two weeks for City of Pflugerville approval. The field exploration (includes permitting, drilling and FWD Testing) and laboratory-testing phase of the study is generally expected to take approximately 15 to 20 working days to complete. Engineering analyses and preparation of the engineering report is expected to take an additional three to four weeks to complete. We will be pleased to provide the design team with verbal design information as the data becomes available.

FEE ESTIMATE:

The total fee for the task discussed above is not to exceed **\$74,318.00.**

Upon full execution of this Work Order, Raba Kistner Consultants, Inc. shall commence performance of the services defined herein in accordance with the terms as outlined in the contract between Raba Kistner Consultants, Inc. and Halff Associates, Inc. Work Order.

TASK	Hourly Rate:	SHEETS/ UNITS	PRINCIPAL \$ 220.00	PROJECT MANAGER \$205.00	SENIOR ENGINEER \$195.00	PROJECT ENGINEER \$175.00	EIT \$135.00	FIELD COORD. \$110.00	SR. ENGR. TECH. \$100.00	CAD/ENGR TECH \$85.00	ADMIN \$70.00	Sub Total	Hr/Unit	RKCI Labor
Hours												Hours		Cost
GEOTECHNICAL ENGINEERING SERVICES- LABOR														
GEOTECHNICAL INVESTIGATION AND RECOMMENDATIONS												0		\$ -
PROJECT KICKOFF			2	1		1					0.5	4.5		\$ 855.00
FIELD COORDINATION (STAKE BORINGS AND UTILITY LOCATE)						2		18				20		\$ 2,330.00
FIELD EXPLORATION (INCLUDING DYNAMIC ONE PENETROMETER)						3	23		0	20		46		\$ 5,330.00
LABORATORY ASSIGNMENT						2	8					10		\$ 1,430.00
SOIL BORING LOGS							6					6		\$ 810.00
SITE PLAN							1			4		5		\$ 475.00
PAVEMENT DESIGN ANALYSES (PROVIDE FLEXIBLE PAVEMENT OPTION AND SURFACE TREATMENT)						4	8					12		\$ 1,780.00
DRAFT GEOTECHNICAL REPORT PREPARATION			1	2		5	14				3	25		\$ 3,605.00
GEOTECHNICAL REPORT REVIEW & FINALIZATION			1	2		3	0				2	8		\$ 1,295.00
												0		\$ -
DESIGN MEETINGS			2	2								4		\$ 850.00
												0		\$ -
TOTALS HOURS:	0		6	7	0	20	60	18	0	24	6	Row Total = 141 Column Total = 141		
LABOR COST:			\$ 1,320	\$ 1,435	\$ -	\$ 3,500	\$ 8,100	\$ 1,980	\$ -	\$ 2,040	\$ 385			\$ 18,760.00
			4.3%	5.0%	0.0%	14.2%	42.7%	12.8%	0.0%	17.1%	3.9%			\$ 18,760.00
UNIT EXPENSES:														
BASE SCOPE PAVEMENT BORINGS 26 Pavement Borings with DCP		FIELD OPERATIONS												
		Mobilization of Drill Rig				1	units					\$600.00 each		\$600.00
		3" Thin-Wall Continuous Sampling in Soil				156	ft					\$28.00 ft		\$4,368.00
		3" Thin-Wall Continuous Sampling in Rock				104	ft					\$34.00 ft		\$3,536.00
		NX Rock Coring				0	ft					\$40.00 ft		\$0.00
		TCP with Intermittent Sampling				0	ft					\$45.00 ft		\$0.00
		Bentonite Backfill				13	bags					\$18.00 each		\$234.00
		Pavement Core and Patch				26	units					\$150.00 each		\$3,900.00
		Standby (relocation and setup time)				0	hrs					\$250.00 hr		\$0.00
		Driller Cleanup				7	hrs					\$250.00 hr		\$1,750.00
		LABORATORY TESTING												
		Atterberg Limits				26	units					\$125.00 each		\$3,250.00
		Moisture Content				104	units					\$15.00 each		\$1,560.00
		Sieve Analysis (passing No. 4, 40, 200)				18	units					\$120.00 each		\$2,160.00
		Sulfate Testing				6	units					\$125.00 each		\$750.00
		Lime Series (Tex-121-E Part III)				2	units					\$425.00 each		\$850.00
TOTAL UNIT EXPENSES:														\$22,958.00
OTHER DIRECT EXPENSES:		Traffic Control Services (minor roads)				7	days					\$1,000.00 day		\$7,000.00
		Private SUE				26	borings					\$100.00 each		\$2,600.00
		FWD Testing				2	days					\$11,500.00 day		\$23,000.00
TOTAL OTHER DIRECT EXPENSES:														\$32,600.00
TOTAL PROJECT COST:														\$74,318.00

December 14, 2023

PROPOSAL PREPARED BY:

Contour Collective
Elaine Andersen, RAS 1284
PO Box 143214
Austin, TX 78714-3214

CLIENT:

Halff
c/o Nicole Debevoise
1201 North Bowser Road
Richardson, Texas 75081-2275

PROJECT:

City of Pflugerville Saxony Subdivision Street Reconstruction
Pflugerville, TX



PROJECT SCOPE:

- Pavement rehabilitation project for appx 1.6 miles
- Involves the removal and replacement of non-compliant pedestrian elements
- See attached map outlining scope of work

CODES UNDER REVIEW:

Compliance with Chapter 469 of the Texas Government Code, State of Texas Architectural Barriers Act via the 2012 Texas Accessibility Standards, with current technical memorandums, and administrative rulings.

EXCLUSIONS: The proposal excludes services to determine compliance with other federal, state or local accessibility requirements and accessibility requirements of building and housing codes such as the International Building Code (IBC) and the Americans with Disabilities Act (ADA).

SERVICES PROVIDED, SCHEDULE & DELIVERABLES:



TDLR REGISTRATION

Contour Collective will register the project with TDLR within two working days of receiving the documents noted below. A proof of registration will be provided to the client.

- completed Project Registration Form submitted to Contour by client
- completed and signed Proof of Submission Form provided by the Lead Designer for the project
- *Optional* Owner Agent Form, if the owner designates someone to be their agent for the project.



PLAN REVIEW & REPORT

Contour will perform a plan review of the design drawings provided by the client as a pdf. A detailed report of findings will be provided to the owner and client within ten working days after receiving all required documents. No formal response to this report is required.

**INSPECTION & REPORT**

Within 30 days of project completion, the final inspection must be requested by the owner or designated agent. Contour will schedule the inspection within ten working days of receiving the written request and will issue a detailed report of findings within five working days of performing the inspection.

**CLOSE-OUT**

Contour will close the project with TDLR. If violations were present, a letter of corrective modifications will be provided to the owner and client after receiving required documentation post inspection.

PROPOSED CONSULTING FEES:

This proposal is valid for six months. Once executed, fees are valid for one year, after which may be negotiated.

- TAS Plan Review Report & associated filing with TDLR \$900.00
- TAS Inspection Report & associated filing with TDLR, including project close-out \$2,400.00
- Technical Assistance hours not to exceed 8 hours at \$175 *invoiced only if used* \$1,400.00

PROPOSED REIMBURSABLE FEES:

- Project Registration fee \$200.00
paid by Contour to TDLR @ project registration

TOTAL**\$4,900.00**

The total proposed consulting and reimbursable fees under this agreement is four thousand nine hundred dollars and zero cents (**\$4,900.00**). The inspection fee includes travel for the inspection. The fees listed above are limited to services outlined in this proposal. Additional services are available at an hourly rate of \$175.00/hour.

Client agrees that Contour Collective, LLC's limit of liability for any claim against it for services performed under this contract shall be limited to the total of consulting fees paid to Contour Collective pursuant to this agreement.

To initiate services, please provide: a signed agreement, and payment for the registration and plan review.

CONTOUR COLLECTIVE

c. 512.415.6000

PO Box 143214

Austin, TX 78714-3214

**CLIENT: Halff**

1201 North Bowser Road

Richardson, Texas 75081-2275

Signature: _____

Print Name: Elaine Andersen, Co-FounderDate: December 14, 2023

Elaine@contour-collective.com

Signature: _____

Print Name: _____

Date: _____

c. 512.415.6000