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June 11, 2025

Ken Carley
McKinney National Airport
1500 Industrial Blvd, Suite 201
McKinney, TX 75069

Re: McKinney National Airport (TKI)
Taxiway A (Phase II)
Engineering Services Proposal

Dear Mr. Carley,

Garver is pleased to submit this proposal to provide professional services relating to the improvements listed in "Exhibit A - Scope of Services" for the referenced project.

COMPENSATION

For the McKinney National Airport Taxiway A (Phase II) project, the lump sum not-to-exceed fee of **\$449,800** is based upon the scope of services provided in Exhibit A.

	<u>FEE AMOUNT</u>	<u>FEE TYPE</u>
Services		
Surveys – TOPO and SACS (White Hawk Engineering)	\$48,000.00	LUMP SUM
Geotechnical Investigation (Terracon)	\$42,000.00	LUMP SUM
Preliminary Design (60%)	\$265,600.00	LUMP SUM
Final Design (90%)	\$67,800.00	LUMP SUM
Bidding Services	\$26,400.00	LUMP SUM
TOTAL FEE	\$449,800.00	NOT-TO-EXCEED

Garver is pleased to have this opportunity to submit this proposal and look forward to working with you on this project. If you have any questions or would like any additional information, please feel free to call me anytime at 214-619-9048.

Sincerely,
GARVER

Sara Andrews, PE
Project Manager

Attachments: Exhibit A – Scope of Services
Exhibit B – Fee Summary
Exhibit C – Project Site Layout
Exhibit D – WHE Proposal
Exhibit E – Terracon Geotechnical Proposal



EXHIBIT A (SCOPE OF SERVICES)

Generally, the Scope of Services includes professional services for improvements to Taxiway A (Phase II) at McKinney National Airport (TKI). Improvements will consist primarily of the reconstruction of Taxiway A between Taxiway B4 and Taxiway A4 and shown in Exhibit C. The following professional services are included in this agreement.

- Surveying Services
- Geotechnical Services
- Design Services
 - 60% Preliminary Design
 - 90% Final Design
 - 100% Issued for Bid
- Bidding Services

1. SURVEYING SERVICES

- 1.1. Design Surveys. White Hawk Engineering, as a subconsultant to Garver, will provide field survey data from field work for designing the project, and this survey will be tied to the Owner's control network. White Hawk Engineering has provided a lump-sum cost within their proposal found in Exhibit D.
- 1.2. Team members will be escorted by Garver staff currently badged at the Airport or Survey team members will complete badge training at the Airport prior to conducting survey
- 1.3. White Hawk Engineering will conduct field surveys, utilizing radial topography methods, at intervals and for distances at and/or along the project site as appropriate for modeling the existing ground, including locations of pertinent features or improvements. Buildings and other structures, airfield pavements, streets, drainage features, airfield lights and signs, fences, trees over eight inches in diameter, visible utilities as well as those underground utilities marked by their owners and/or representatives, and any other pertinent topographic features that may be present at and/or along the project site, will be located. Control points will be established for use during construction. All surveys shall be conducted during normal working hours.
- 1.4. White Hawk Engineering will assemble data obtained during the performance of the field surveys in an AutoCAD Civil3D base map drawing to be utilized for design of the project.
- 1.5. SACS Relocation. White Hawk Engineering will provide services to relocate the existing SACS monument located adjacent to Taxiway A, including all necessary coordination with NGS and FAA for approval.

2. GEOTECHNICAL SERVICES

- 2.1. Terracon, as a subconsultant to Garver, will be responsible for obtaining, interpreting, and evaluating geotechnical data necessary for the design of this project. The summary of the geotechnical services provided under this Scope of Services is noted in Exhibit E.



3. DESIGN SERVICES

3.1. General: Garver will prepare detailed construction drawings, specifications, instructions to bidders, and general provisions and special provisions, all based on guides furnished to Garver by the Owner and FAA, or internally developed by Garver. Contract Documents (Plans, Specifications, and Estimates) will be prepared for award of one (1) construction contract. These designs shall conform to the standards of practice ordinarily used by members of Garver's profession practicing under similar conditions and shall be submitted to TxDOT Aviation from which approval must be obtained.

3.2. Project Administration

3.2.1. Garver will serve as the Owner's representative for the project and furnish consultation and advice to the Owner during the performance of this service. Garver will attend conferences alone or with Owner's representatives, local officials, state and federal agencies, and others regarding the scope of the proposed project, its general design, functions, and impacts.

3.2.2. Garver will assist in the development of grant reimbursement packets for review, execution, and submittal to TxDOT Aviation by the Owner.

3.3. Owner / Agency Coordination: Garver's project manager and/or design team will coordinate with the Owner as necessary to coordinate design decisions, site visits, document procurement, or other design needs.

3.4. Project Management Plan / Quality Control Procedures

5.3.1 Garver will develop a project specific project management plan. The project management plan will include the project background, scope of work, stakeholder contact information, project team organization and roles, design criteria, project schedule, deliverables, and quality control procedures.

5.3.2 Garver will complete quality control reviews for each deliverable prior to any design submission to Owner and/or FAA. Quality control reviews will be completed by qualified project managers and project engineers who are experienced in the relevant discipline and design elements under review. Weekly internal progress meetings will be held during all design phases to ensure adequate quality control throughout the design phases.

3.5. Environmental Coordination

3.5.1. Garver will develop a Stormwater Pollution Prevention Plan (SWPPP), including erosion control plans and details. Upon Owner review, the SWPPP shall be submitted to TxDOT Aviation for review. Garver will incorporate comments from the review agency.

3.5.2. Garver will coordinate and complete documentation for submission to FAA to receive environmental clearance for the project. Documentation will include that required by the documented Section 163 and CATEx questionnaire of FAA SOP 5.0. No environmental agency coordination is expected for this project area



- 3.6. Airspace Analysis: Garver will prepare and submit the project to the FAA for permanent airspace clearance on the Obstruction Evaluation and Airport Airspace Analysis (OE/AAA) website and coordinate with FAA representatives.
- 3.7. Construction Safety and Phasing Plan
- 3.7.1. Garver will develop a construction safety and phasing plan (CSPP) for the project. During development of the CSPP, Garver will hold a meeting with Airport staff and other stakeholders at the Airport's request to obtain feedback regarding operations during each proposed phase of construction.
- 3.7.2. After receiving comments from the meeting, Garver will develop a preliminary CSPP for the Owner's review prior to submission to the FAA. After incorporating Owner comments, the CSPP will be submitted to FAA for review through the OE/AAA website.
- 3.8. Existing Conditions Review
- 3.8.1. Record Document Review: Garver will review record document data from the vicinity of the construction site to evaluate existing conditions. Record document data may include record drawings, record surveys, utility maps, GIS data, and previous design reports.
- 3.8.2. Site Visits: Garver's civil and electrical engineers will perform up to two (2) site visits to the project site to review existing conditions and evaluate survey and record document data.
- 3.9. Pavement Design: Garver will develop a fleet mix for the proposed project based on aircraft fleet data from the Airport Operator / Airport Master Plan / Traffic Flow Management System Counts (TFMSC). Upon completion of the aircraft fleet mix, Garver will submit the fleet to the Owner for review. Upon approval by the Owner, Garver will use FAARFIELD and life cycle cost analysis methods to develop a recommendation for the most economical pavement design. Based on this analysis and discussions with the Owner, a pavement design for the project will be chosen. For concrete pavement design, Garver will design joint patterns and jointing details.
- 3.10. Geometric Design: Garver will provide geometric design in accordance with FAA AC 150/5300-13 (latest edition) or other local standards. The following design criteria will be used for airfield design:
- Airplane Design Group (ADG) – III
 - Aircraft Approach Category (AAC) – D
 - Taxiway Design Group (TDG) – 3
- 3.11. Modeling: Garver will develop preliminary vertical alignments based on the requirements of FAA AC 150/5300-13 (latest edition). Upon the completion of vertical alignments, assemblies will be developed based on the pavement design and corridors will be modeled for each taxiway alignment. Modeling will include all surface changes from centerline of corridor to tie into existing grade for the project site. At the completion of individual corridor developments, all corridors will be combined into a final grading surface. Modeling will be an iterative process to determine the most efficient design solution.



- 3.12. Grading and Drainage: Grading and drainage design shall be completed in accordance with FAA AC 150/5300-13 (Airport Design), FAA AC 150-5320-5 (Airport Drainage Design), and applicable local drainage codes.
- 3.13. Airfield Electrical
- 3.13.1. Airfield Lighting and Signage: Garver will provide electrical engineering services to design the new lighting improvements on the project including but not limited to the following: taxiway edge lighting, guidance signage.
- 3.14. Specifications and Contract Documents
- 3.14.1. Technical Specifications: Detailed specifications shall be developed using FAA "Standards for Specifying Construction for Airports" AC 150/5370-10 (latest edition) or other appropriate standards approved for use by the FAA. Additional supplementary specifications will be developed for project requirements not covered by FAA AC150/5370-10 or when state or local standards are approved by the FAA.
- 3.14.2. Construction Contract Documents: Garver will develop construction contract documents based on TxDOT Aviation standards. TxDOT Aviation will complete all front-end documents. A specimen copy of the General Provisions and applicable prevailing wage rates will be obtained by Garver from the FAA and/or Department of Labor as appropriate for incorporation into the specifications for the proposed project. Final construction contract documents will be submitted to the Owner for final review and approval.
- 3.15. Quantities and Engineer's Opinion of Probable Cost: Garver will develop detailed quantities in PDF format for use in construction cost estimating for each design phase. Quantities will be completed by pay item. Upon the completion of quantity development, Garver will review previous cost data and market conditions and complete an Engineer's Opinion of Probable Cost.
- 3.16. Design Services Submission and Meeting Summary: The following design submittal phases shall be included in the fee summary. A summary of each design phase and the associated review meetings is included below.
- 3.16.1. 60% Preliminary Design
- 3.16.1.1. Garver will develop 60% preliminary design plans, specifications, and engineer's report and submit these to the Owner and TxDOT for review. It is anticipated that the Owner and TxDOT will review the design submission within one week.
- 3.16.1.2. At the completion of the Owner review period, Garver will meet with the Owner and TxDOT to review the 60% preliminary design plans, specifications, and engineer's report and to receive Owner and TxDOT comments and direction.
- 3.16.2. 90% Final Design
- 3.16.2.1. Garver will develop 90% final design plans, specifications, and engineer's report and submit these to the Owner and TxDOT.



3.16.2.2. At the completion of the Owner review period, Garver will meet with the Owner and TxDOT to review the 90% Final design plans, specifications, and engineer's report and to receive Owner and TxDOT comments and direction.

3.16.3. 100% Issued for Bid (IFB)

3.16.3.1. Garver will develop 100% IFB plans and specifications and submit these to the Owner for review. It is anticipated that the Owner will review the IFB submission within two weeks.

4. BIDDING SERVICES

- 4.1. Bidding. Garver will assist City of McKinney in advertising for and obtaining bids or negotiating proposals for one prime contract for construction, materials, equipment and services; and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend a pre-bid conference, and attend the Bid Opening. The Owner will pay advertising costs outside of this contract.
- 4.2. Garver will issue addenda as appropriate to interpret, clarify or expand the Bidding Documents. Garver will consult with and advise the Owner as to the acceptability of subcontractors, suppliers and other persons and organizations proposed by the prime contractor(s) (herein called "Contractor(s)") for those portions of the work as to which such acceptability is required by the Bidding Documents. Garver will consult with the Owner concerning the acceptability of substitute materials and equipment proposed by Contractor(s) when substitution prior to the award of contracts is allowed by the Bidding Documents.
- 4.3. Garver will attend the bid opening, prepare a bid tabulation, and assist the Owner in evaluating bids or proposals and in assembling and awarding contracts for construction, materials, equipment, and services. Garver will assist the Owner in the execution of all contract documents and furnish a sufficient number of executed documents for the Owner, Contractor and TxDOT Aviation.

5. PROJECT DELIVERABLES

- 5.1. The following deliverables will be submitted to the parties identified below. Unless otherwise noted below, all deliverables shall be electronic.
 - 60% Preliminary Design Plans, Specifications, and Engineer's Estimate of Probable Cost to the Owner, and TxDOT Aviation.
 - 90% Final Design Plans, Specifications, and Engineer's Estimate of Probable Cost to the Owner, and TxDOT Aviation. Other electronic files as requested.
 - 100% Issued for Bid Plans, Specifications, and Engineer's Estimate of Probable Cost to the Owner and FAA.
 - Other electronic files as requested

6. ADDITIONAL SERVICES

- 6.1. The following items are not included under this agreement but will be considered as additional services to be added under Amendment if requested by the Owner.



- Redesign for the Owner's convenience or due to changed conditions after previous alternate direction. Changes conditions may include, but are not limited to major changes to pavement, building, or utility alignments.
- Deliverables beyond those listed herein.
- Design of any utility relocation
- Subsurface Utility Exploration (SUE).
- Underdrain Design.
- DBE Program Goal Setting or Reporting.
- Preliminary Engineering Report
- Final Engineering Report
- Pavement Design beyond that furnished in the Geotechnical Report.
- Runway Safety Area Inventory
- Engineering, architectural, or other professional services beyond those listed herein.
- Retaining walls or other significant structural design.
- Construction Administration Services, On-Site Construction Observation, and/or Construction Materials Testing.
- Environmental Handling and Documentation, including wetlands identification or mitigation plans or other work related to environmentally or historically (culturally) significant items.
- Permitting for environmentally sensitive areas.
- Coordination with FEMA and preparation/submittal of a CLOMR and/or LOMR.
- Services after construction, such as warranty follow-up, operations support, and Part 139 inspection support.
- The construction contract documents will require the Contractor to prepare, maintain, and submit a SWPPP to DEQ

7. SCHEDULE

- 7.1. Garver shall begin work under this Agreement within a mutually agreeable schedule with the Owner and execution of this Agreement. All design phases will start with a Notice to Proceed (NTP) and stakeholder review comments from the subsequent phase.

Design Phase	Calendar Days
60% Preliminary Design	6 Weeks from Agreement Execution, NTP, and Design Kickoff Meeting
90% Final Design	5 Weeks from Receipt of 60% Preliminary Design Comments
100% Issued for Bid	2 Weeks from Receipt of 90% Final Design Comments

Exhibit B

McKinney National Airport (TKI) Taxiway A (Phase II)

FEE SUMMARY

	Service	Estimated Fees	
Lump Sum	<i>Surveys (White Hawk Engineering)</i>	\$	48,000.00
Lump Sum	<i>Geotechnical (Terracon)</i>	\$	42,000.00
Lump Sum	60% Preliminary Design	\$	265,600.00
Lump Sum	90% Final Design	\$	67,800.00
Lump Sum	Bidding Services	\$	26,400.00
	Total for Services	\$	449,800.00

Exhibit B

McKinney National Airport (TKI) Taxiway A (Phase II)

60% Preliminary Design

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	D-2	AM-2
	hr	hr	hr	hr	hr	hr	hr
1. Civil Engineering							
Coordination with FAA	4	8	8				
Coordination with Airport (TKI)	4	8	8				
Coordination with TxDOT	2	8	8				
Internal Weekly Progress Meetings		6	6	6	6	6	6
Design Kickoff Meeting	2	2	2	2	2	2	2
Site Visit (3 people, 1 trip)		6		6	6		
Project Management Plan Development		4	8				
Base Map Setup			2	4	8	16	
Establish Design Criteria and Parameters		1	2	8			
Review As-Built Drawings			2	4	8		
Develop Preliminary Construction Safety and Phasing Plan		1	2	6	12		
CSPP Submission to FAA Through OEAAA			2	4	8		
CATEX Documentation		2	4	8		4	6
Develop Geometric Layout			2	4	16		
Develop Horizontal Alignments			2	4	20		
Develop Vertical Alignments			2	4	30		
Develop Assemblies			1	2	12		
Develop Corridor Model			2	8	44		
Develop Fleet Mix		1	2	4			
Develop Pavement Design		6	2	4			
Drainage Basin Development		1	1	2	8		
Pre-Development Flow Calculations		1	1	2	8		
Post-Development Flow Calculations		1	1	2	8		
Drainage Structural Design Calculations		2					
Preliminary Plans							
Cover Sheet			1	2		2	
Sheet Index			1	2		2	
General Notes			1	2		4	
Project Layout Plan			1	4		8	
Survey Control Plan			1	4		8	
Construction Safety Plans			1	8		12	
Construction Safety Details			1	4		8	
Existing Conditions Plans			1	4		8	
Erosion Control Plans			1	6		12	
Erosion Control Details			1	4		8	
Demolition Plans			2	8		16	
Demolition Details			1	4		8	
Drainage Plans			4	12		24	
Drainage Details		2	1	4		8	
Typical Sections			2	8		16	
Paving Plans			2	8		16	
Paving Details			1	4		8	
Grading Plans			2	8		16	
Grading Details			1	2		8	
Joint Layout Plans			1	2		8	
Joint Details			1	2		8	
Pavement Marking Plans			2	8		16	
Pavement Marking Details			1	2		8	
Develop Preliminary Construction Contract Documents		2	4	6			
Develop Preliminary Technical Specifications		2	4	6			
Develop Preliminary Supplemental Specifications		1	4	6			
Develop Preliminary Quantities		1	2	12	16		
Develop Preliminary Opinions of Probable Construction Costs		4	8				
Internal Quality Control (QC) Review	4	16	16		16		16
Incorporate QC Review Comments		2	4	8	24	24	
Prepare for Preliminary Plan Review Meeting		2	4	8			2
Attend Preliminary Plan Review Meeting (3 People, on-site)		6	6	6			
Prepare and Distribute Preliminary Review Meeting Minutes and Tasks		1	2	4			2
Prepare and Submit Permanent Airspace Study			1	2	4		
Subtotal - Civil Engineering	16	97	156	254	256	284	34

Exhibit B**McKinney National Airport (TKI)
Taxiway A (Phase II)****60% Preliminary Design**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	D-2	AM-2
	hr	hr	hr	hr	hr	hr	hr
2. Electrical Engineering							
Coordination with TxDOT and TKI		4					
Internal Weekly Progress Meetings		8		8			
Design Kickoff Meeting		2		2			
Site Visit (2 people, 1 trip)		6		6			
Review As-Built Drawings		2		4			
Lighting and Signage Assessment		2		4			
CCR Load Calculations		2		6			
Develop One-Line Diagram		4		6			
Preliminary Plans							
Electrical Notes		1		2		4	
Lighting Removal Plans		2		6		8	
Lighting Installation Plans		2		10		16	
Lighting Details		2		4		8	
Duct Bank Profiles		1		2		4	
Develop Preliminary Technical Specifications		2		8			
Develop Preliminary Supplemental Specifications		2		12			
Develop Preliminary Quantities		1		4		8	
Develop Preliminary Opinions of Probable Construction Costs		1		2			
Internal Quality Control (QC) Review		8		8			
Incorporate QC Review Comments		1		4		12	
Subtotal - Electrical Engineering	0	53	0	98	0	60	0

Hours	16	150	156	352	256	344	34
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SUBTOTAL - SALARIES:	\$264,158.00
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DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly	\$492.00
Postage/Freight/Courier	\$50.00
Office Supplies/Equipment	\$200.00
Computer Modeling/Software Use	\$500.00
Travel Costs	\$200.00

SUBTOTAL - DIRECT NON-LABOR EXPENSES:	\$1,442.00
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SUBTOTAL:	\$265,600.00
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SUBCONSULTANTS FEE:	\$0.00
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TOTAL FEE:	\$265,600.00
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Exhibit B

McKinney National Airport (TKI) Taxiway A (Phase II)

90% Final Design

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	D-2	AM-2
	hr	hr	hr	hr	hr	hr	hr
1. Civil Engineering							
Coordination with FAA		2	2				
Coordination with Airport (TKI)		2	2				
Coordination with TxDOT		2	2				
Internal Weekly Progress Meetings		3	3	3	3	3	3
Site Visit (2 people, 1 trip)			4	4			
Update Construction Safety and Phasing Plan				1	2		
Update Geometric Layout				1	2		
Update Horizontal Alignments				1	2		
Update Vertical Alignments				1	2		
Update Assemblies				1	2		
Update Corridor Model			1	2	4		
Update Drainage Design and Calculations		1	2	4	4		
Incorporate Plan Comments from 90% Submittal			4	20		40	
Cross Sections			2	4		16	
Develop Final Construction Contract Documents		1	2	4			
Develop Final Technical Specifications		1	2	4			
Develop Final Supplemental Specifications			2	4			
Develop Final Quantities			1	6	8		
Develop Final Opinions of Probable Construction Costs		2	4				
Internal Quality Control (QC) Review	2	10	10		10		4
Incorporate QC Review Comments		1	2	4	4	12	
Subtotal - Civil Engineering	2	25	45	64	43	71	7
3. Electrical Engineering							
CCR Load Calculations		2		4			
Internal Weekly Progress Meetings		4		4			
Update One-Line Diagram		2		4			
Incorporate Plan Comments from 90% Submittal		2		4		8	
Develop Final Technical Specifications		1		2			
Develop Final Supplemental Specifications		1		2			
Develop Final Quantities		1		1		2	
Develop Final Opinions of Probable Construction Costs		1		1			
Internal Quality Control (QC) Review		6		6			
Incorporate QC Review Comments		1		4		8	
Subtotal - Electrical Engineering	0	21	0	32	0	18	0

Hours	2	46	45	96	43	89	7
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SUBTOTAL - SALARIES: **\$67,480.00**

DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly	\$95.00
Postage/Freight/Courier	\$25.00
Office Supplies/Equipment	\$50.00
Computer Modeling/Software Use	\$100.00
Travel Costs	\$50.00

SUBTOTAL - DIRECT NON-LABOR EXPENSES: **\$320.00**

SUBTOTAL: **\$67,800.00**

SUBCONSULTANTS FEE: **\$0.00**

TOTAL FEE: **\$67,800.00**

Exhibit B**McKinney National Airport (TKI)
Taxiway A (Phase II)****Bidding Services**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	D-2	AM-2
	hr	hr	hr	hr	hr	hr	hr
1. Civil Engineering							
Coordination with TxDOT and TKI		8					
Dispense Plans and Specs to Prospective Bidders				4	4		
Review and Respond to Bidder Questions		12	8	8			
Draft and Distribute Addendums		4		6			
Prepare for Pre-Bid Meeting		4		4			
Attend Pre-Bid Meeting (2 people, on-site)		2		2			
Bid Opening (2 people, on-site)		2		2			
Prepare Bid Tabulation				2			
Evaluate Bids and Prepare Recommendation of Award	1	2		2			
Prepare Contract Documents		2		2			
Prepare Issued for Construction Plans and Specifications		2		4		4	
Subtotal - Civil Engineering	1	38	8	36	4	4	0
2. Electrical Engineering							
Draft Addendums		6					
Prepare for Pre-Bid Meeting		2					
Attend Pre-Bid Meeting		2					
Evaluate Bids		2					
Prepare Issued for Construction Plans and Specifications		2				4	
Subtotal - Electrical Engineering	0	14	0	0	0	4	0

Hours	1	52	8	36	4	8	0
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SUBTOTAL - SALARIES:	\$26,141.00
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DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly	\$159.00
Postage/Freight/Courier	\$50.00
Office Supplies/Equipment	\$0.00
Travel Costs	\$50.00

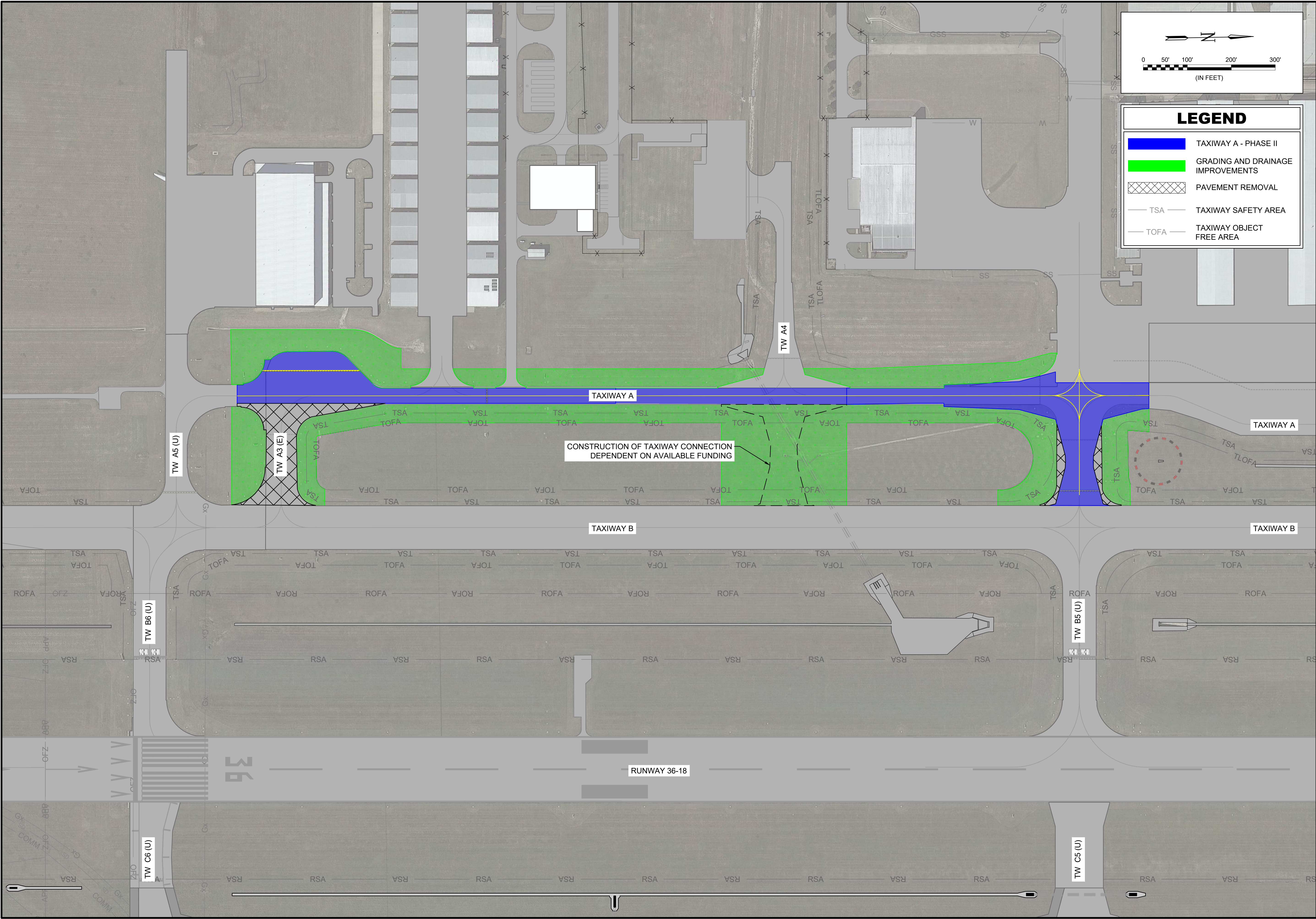
SUBTOTAL - DIRECT NON-LABOR EXPENSES:	\$259.00
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SUBTOTAL:	\$26,400.00
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SUBCONSULTANTS FEE:	\$0.00
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TOTAL FEE:	\$26,400.00
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File: L:\2023\23A11173 - TKI - Taxiway Alpha Phase II\Drawings\EXHIBITS\Phase II\TKI LAYOUT - ULTIMATE EXHIBITS.dwg Last Save: 5/19/2025 5:09 PM Last saved by: RUTierney
Last plotted by: Tierney, R. (Jim) Plot Style: AECmono.ctb Plot Scale: 1:1 Plot Date: 5/20/2025 2:48 PM Plotter used: DWG To PDF.pc3





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REGISTRATION NO. F-5713

NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	BY

McKINNEY NATIONAL AIRPORT (TKI)
McKINNEY, TEXAS

TAXIWAY A - PHASE II

TAXIWAY A PHASE II PROJECT OVERVIEW

JOB NO.: 23A11173
DATE: MAY 2025
DESIGNED BY: PMT
DRAWN BY: PMT

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER
EX-001

SHEET NUMBER
1



+469.342.6844



WhiteHawkEngineering.com



309 S. Jupiter Road, Suite 200
Allen, TX 75002



5/23/2025

Garver
Attn: Austin Hayes, PE
3000 Internet Blvd., Suite 400
Frisco, TX 75034

RE: Request for Survey Proposal
McKinney National Airport (TKI)
Taxiway A Phase II - Survey Support

Dear Mr. Hayes:

White Hawk Engineering is pleased to offer this proposal for surveying services for the McKinney National Airport (TKI) Taxiway A Phase II - Survey Support RFP dated 05/19/2025 (*attached to this proposal*).

We propose providing the following Survey Scope of Work:

- 1) Design Survey: \$26,680.00 Lump Sum
 - i) Topographic Survey as outlined in attached RFP
 - ii) Verification of existing Horizontal & Vertical Control and set up to 3 (Three) additional Horizontal & Vertical Control points.
- 2) NGS Pac/Sac Replacement Not to exceed \$15,070.00:

See attached cost estimate.

Thank you for this opportunity. If you have any questions or comments, please contact me.

Sincerely,

Jeremy J. Katerberg, RPLS, PS
Texas Survey Manager
WHITE HAWK ENGINEERING & DESIGN, LLC



Client: Garver
 Project Name: TKI - Taxiway A (Phase 2)
 Location: McKinney Tx

Labor Classification		Admin/ Clerical	RPLS Manager	Survey SIT	CADD Tech	2-Man Field Crew	3-Man Field Crew	Total Hours Per Task	Total Cost Per Task
Hourly Rates		\$ 120.00	\$ 250.00	\$ 150.00	\$ 120.00	\$ 185.00	\$ 250.00		
Task	Task Description								
1	Taxiway A (Phase 2) TOPOGRAPHIC SURVEY	1	12	25	40	80		158	\$ 26,470.00
3	NGS PAC/SAC Replacement (Not to Exceed)	1	10	12	24	42		89	\$ 15,070.00
5								0	\$ -
6								0	\$ -
7								0	\$ -
8								0	\$ -
9								0	\$ -
10								0	\$ -
11								0	\$ -
12								0	\$ -
13								0	\$ -
14								0	\$ -
15								0	\$ -
16								0	\$ -
17								0	\$ -
18								0	\$ -
19								0	\$ -
20								0	\$ -
Hours Per Labor Category		2	22	37	64	122	0	Total Project Hours	Total Labor Cost
Cost Per Labor Category		\$ 240.00	\$ 5,500.00	\$ 5,550.00	\$ 7,680.00	\$ 22,570.00	\$ -	247	\$ 41,540.00

Direct Expenses		Quantity	Unit	Rate	Total
	Mobilization	0		\$ -	\$ -
	Mileage	300	Mile	\$ 0.70	\$ 210.00
	Lodging/Hotel	0	Day/Person	\$ 183.00	\$ -
	Meals	0	Day/Person	\$ 64.00	\$ -
	Deed Copies		Each	\$ 0.75	\$ -
	Photo Copies		Each	\$ 0.25	\$ -
Total Direct Expense				\$	210.00

Number of Miles per Trip	25
Number of Trips	12
Number of People	
Number of Days	

Total Project Fee	\$ 41,750.00
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3000 Internet Blvd
Suite 400
Frisco, TX 75034
TEL 972.377.7480
FAX 972.377.8380
www.GarverUSA.com

May 19, 2025

Jeremy Katerberg
White Hawk Engineering & Design
12801 N Central Expressway, Suite 1250
Dallas, TX 75243

Re: Request for Survey Proposal
McKinney National Airport (TKI)
Taxiway A Phase 2

Dear Mr. Katerberg:

Garver is requesting proposals for Survey Services for the Taxiway A Phase 2 project at McKinney National Airport (TKI). Please review the project information and anticipated scope of services detailed in this RFP. Please submit your proposal in accordance with the instructions provided in this RFP no later than **Thursday, May 22** to Austin Hayes at ARHayes@garverusa.com. The proposal must remain valid at least one hundred twenty (120) days from the due date indicated herein. Each proposal shall include a summary of the proposed scope of work and a proposed timeline for completion of the work. Survey services are expected to begin in June 2025.

The proposal should include a lump sum fee for both the Topographic Survey and the SACS establishment. The lump sum fee amount shall cover all salaries; expenses such as supplies, travel, printing, reproduction, computer use, and equipment/vehicle use; taxes; fringe benefits; other overhead costs; subconsultant and subcontractor costs; and profit.

Requests for clarification or other questions regarding this request may be directed to Austin Hayes at ARHayes@garverusa.com. After receipt of an acceptable proposal from you, we will send you a contract incorporating the acceptable terms in your proposal.

Thank you for your time and consideration, and we look forward to hearing from you.

Respectfully,

GARVER, LLC



Austin Hayes, PE
Project Manager

1. Project Overview

The City of McKinney, Texas is planning improvements at the McKinney National Airport located at 1500 Industrial Blvd. STE 201, McKinney, Texas. The proposed project includes reconstruction of Taxiway A from the terminal apron (Phase 1 limits) to Taxiway A5 in accordance with AC 150/5300-13B Airport Design.

The existing Taxiway A pavement is 40 feet wide and constructed from asphalt. The proposed taxiway will be reconstructed in concrete. The project also includes reconstruction of a taxiway connector, construction of a new taxiway connector, and removal of another existing connector. Noted distresses include three evenly spaced longitudinal cracks down the entire length of the taxiway. These cracks are consistent with the original paving lanes joints, and the pavement shows typical transverse cracking on the western lane, but noticeable increased crack density and alligator cracking on the two eastern lanes. New pavement grades will roughly match existing pavement grades to promote surface drainage from the apron to the drainage infield to the west. Earthwork will be required for the pavement that extends into the existing infield. Remediation of the underlying subgrade may be needed, depending upon the findings of the geotechnical study. The new pavement will extend into the existing infield and will require the relocation of drainage culverts and headwalls in this area. The project will also require relocation of the existing SACS monument (TKI B).

Survey limits for the Taxiway A pavement area shown in the KMZ file attached to this RFP and are also shown in the attached Exhibit to this RFP.

2. Project Documents & Design Criteria

Enclosed within this RFP are the following documents for your use:

- Exhibit – Overall Project Survey Layout
- TKI Taxiway A Phase 2 KMZ – Survey Limits
- Draft Subconsultant Agreement

3. Site Access and Work Hour Restrictions

Access to the site is limited. Field work will be completed within the AOA as shown in attached Exhibit

Work Hour Restrictions:

Area	Available Work Hours	Notes
Project Limits	Daylight between 0600 – 2200	Coordinate with the airport for all necessary escorting. Low profile lighted aircraft barricades will need to be provided as directed by airport operations.

4. Scope of Work

a. Project Control

Establish Horizontal & Vertical Control utilizing the Primary & Secondary Airport Control stations. Provide a control statement describing how horizontal and vertical control is established. All control will be based on NAD83 (2011) horizontal datum and NAVD88 Geoid 12B vertical datum.

- i. Provide survey shots of the published runway end points/pins.
- ii. Establish a minimum of two horizontal control points and one vertical bench mark for each quarter mile or route survey or each 15 acres of site survey, unless otherwise specified.
- iii. Survey shall be provided in grid (Texas North Central Zone 4202) coordinates with a conversion factor for ground.

b. Topographic Survey

Subconsultant will provide a topographic design survey within the area generally defined in the attached Exhibit and KMZ file. The survey shall utilize the proper tool/method to meet the requirements of the scope as agreed upon.

At a minimum, the design survey shall provide field measurements at distances as appropriate for modeling the existing ground to one half foot (0.5') contour intervals, including locations of pertinent features and improvements, with a minimum grid of 50 feet. Items to be tied in include, but are not limited to:

- i. Ditches & swales with flow line, top & toe of bank
- ii. Electrical structures, edge lights (including center of light and foundation) , signs (foundations), cable and duct markers
- iii. Storm Sewer Manholes and pipes with flow line and outfall data to the next drainage structure, even if located outside project limits, as well as pipe sizes.
 - 1. Note invert flow directions based on N, S, E, W, or NW, SE, etc.
 - 2. Pipe sizes, shape, and material.
 - 3. For inlets, note the number and size of grates.
- iv. Utilities (call One Call)
 - 1. Existing visible aboveground utility structure and markers shall be located and referenced by name (i.e. Oncor, Verizon, AT&T, FAA, etc.)
- v. Pavement centerlines, edges, joints, and lips. All survey limits shall end at the nearest existing pavement joint.
- vi. Other pavement features (gravel, asphalt roads, etc.) within limits.
- vii. Pavement markings.
- viii. Building finished floor elevations.
- ix. Navigational Aids (wind cone, glideslope, signs, PAPI's, lights, etc.)
- x. Provide survey for design tie-in location as shown in the attached exhibit. This information shall include elevation points at the edge of pavement tie-in and elevation points one concrete panel away from the edge of the pavement tie-in.

c. Subsurface Utility Engineering (SUE)

Mr. Katerberg
5/19/2025
Page 4 of 6

Provide Level A SUE investigation as defined in ASCE 38-02. Locations will be provided at request. Plan for approximately three (3) Level A SUE locations for existing sanitary sewer and underground electrical lines. Prepare a Level D SUE CAD file.

d. SACS Establishment.

NGS Monument TKI B (SACS) is expected to be relocated as part of the project. Provide all necessary survey, control point construction, documentation (including work plan and final report), and FAA submissions required to decommission the current SACS and establish a new SACS, including approvals from FAA and/or NGS in accordance with FAA AC 150/5300-16B.

5. Project Deliverables

The Surveyor shall process the survey data and provide the Engineer with the following:

- a. Files suitable for AutoCAD Civil 3D.
 - i. Provide a LandXML file of the final existing ground surface placed in appropriate units and coordinate system.
 - ii. Provide a base map of the processed survey (pavement, break lines, utilities, contours, etc.). These objects will be separated on different layers. The "Description" field shall be populated with a description of what each layer contains.
 - iii. Provide points base map containing all points used to complete survey. These points will be separated on different layers. The "Description" field shall be populated with a description of what each layer contains.
- b. Electronic submittal containing all processed data files or ASCII files of the survey and drawing files. The XYZ files shall be formatted as Point Number; Northing; Easting; Elevation; and Description (PNEZD). Files will be submitted as .CSV unless otherwise approved.
 - i. Provide 1 file containing only control utilized for survey.
 - ii. Provide 1 file containing all other points used to complete the survey.
- c. Provide a copy of the code list including descriptions utilized during survey.
- d. Provide a report on how the control was established and datum used. (NGS monuments, GPS Static Session and OPUS Solution, or other methods). Provide information on Geoid used if RTK was utilized to set control.
- e. Pictures of key surveyed locations, including all drainage structures, monuments, and runway end locations.
- f. All reports and work plans required for FAA approvals required for the new SACS monument.

6. Schedule

The Subconsultant shall begin work within 14 days after the notice to proceed (NTP) and shall complete the work and provide the deliverables above within **thirty (30) calendar days**.

7. Additional Requirements

a. Contractual Requirements

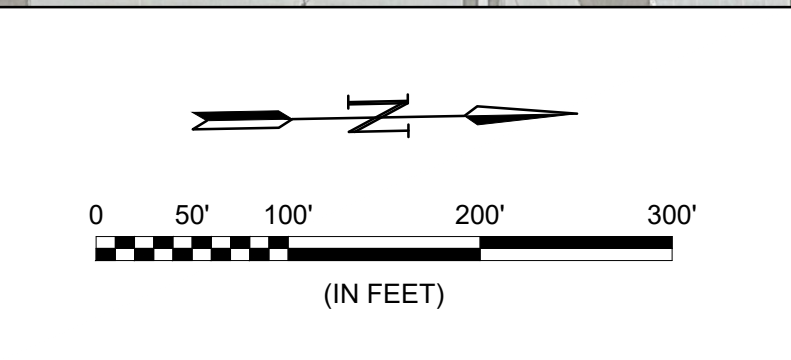
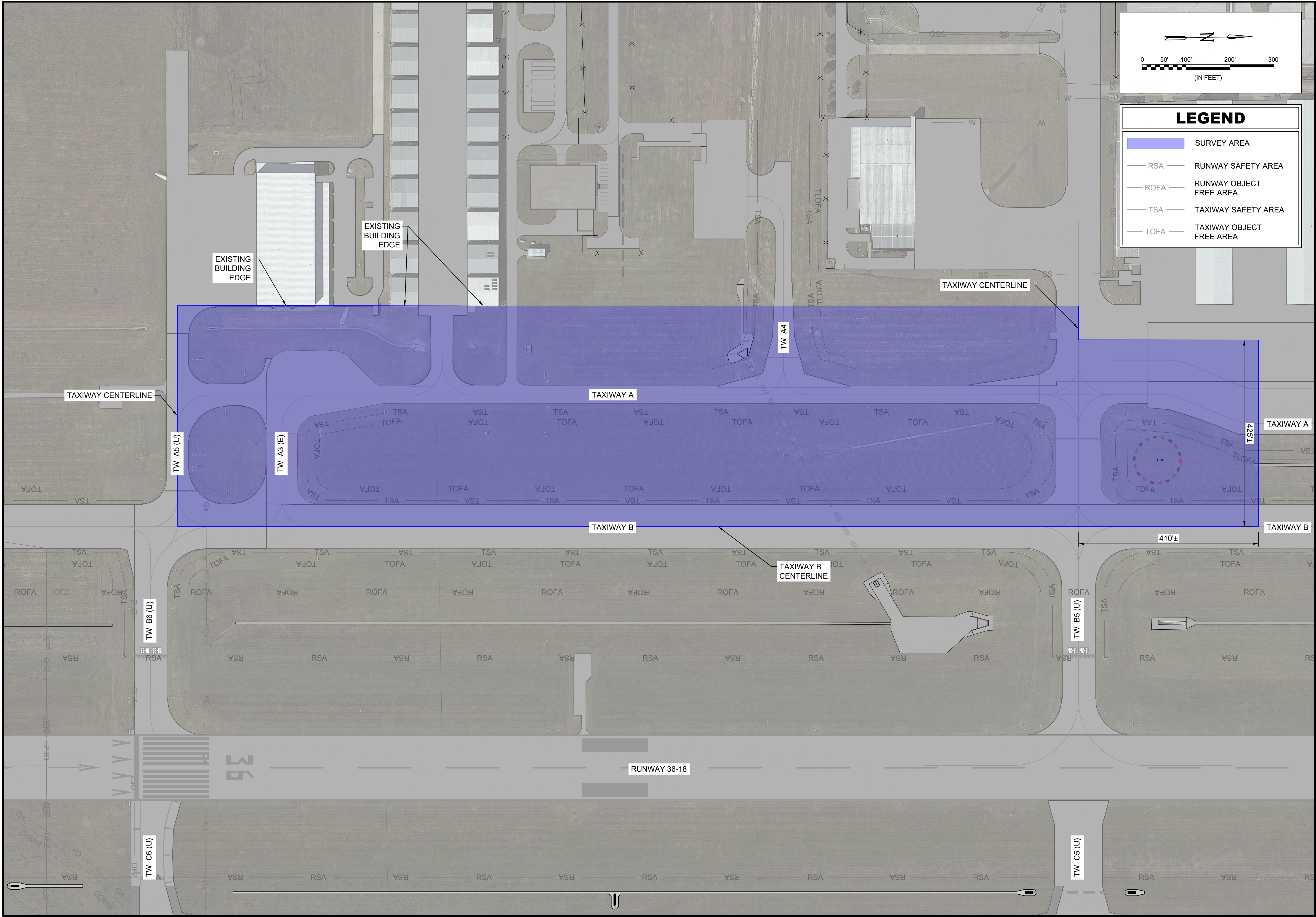
See Exhibit C for minimum insurance requirements and other contractual requirements.

b. Other Requirements

The Subconsultant shall:

- Arrange and be responsible for access to the project site.
- Be responsible for all damage (including structures, pipelines, and utilities) caused by performance of your services and restoration of disturbed surfaces.
- Provide traffic control, barricades, signage, and traffic maintenance personnel as appropriate in accordance with the FAA Advisory Circular 150/5370-2G.
- Comply with the Underground Facilities Damage Prevention Act.

File: L:\2023\23A11173 - TKI - Taxiway Alpha Phase I\Drawings\EXHIBITS\Phase II\TKI_LAYOUT_RFP_EXHIBITS.dwg Last Save: 5/19/2025 2:40 PM Last saved by: T.Machost
Last plotted by: Tieney, R. (Jim) Plot Date: 5/19/2025 3:21 PM Plot Scale: 1:1 Plot Style: AECmon.ctb Plot Size: DWG To PDF.pc3



LEGEND

SURVEY AREA

— RSA —

 RUNWAY SAFETY AREA

— ROFA —


 RUNWAY OBJECT FREE AREA

— TSA —

 TAXIWAY SAFETY AREA

— TOFA —

 TAXIWAY OBJECT FREE AREA



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REGISTRATION NO. F-5713

NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	BY

McKINNEY NATIONAL AIRPORT (TKI)
McKINNEY, TEXAS

TAXIWAY A - PHASE II

TAXIWAY A PHASE II - SURVEY EXHIBIT

JOB NO.: 23A11173
DATE: MAY 2025
DESIGNED BY: PMT
DRAWN BY: PMT

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER
EX-001

SHEET NUMBER
1



8901 John W. Carpenter Freeway
Dallas, Texas 75247
P (214) 630-1010
Terracon.com

May 22, 2025

Garver LLC
3010 Gaylord Pkwy, Suite 1990
Frisco, TX 75034

Attn: Austin Hayes
P: 214-619-9061
E: ARHayes@GarverUSA.com

RE: Proposal for Geotechnical Engineering Services
TKI Taxiway A Phase 2
1500 Industrial Blvd
McKinney, TX
Terracon Proposal No. P94255322

Dear Mr. Hayes:

We appreciate the opportunity to submit this proposal to Garver LLC (Garver) to provide Geotechnical Engineering services for the above referenced project. The following are exhibits to the attached Master Services Agreement Task Order.

Exhibit A	Project Understanding
Exhibit B	Scope of Services
Exhibit C	Compensation and Project Schedule
Exhibit D	Site Location and Nearby Geotechnical Data
Exhibit E	Anticipated Exploration Plan

Our base fee to perform the Scope of Services described in this proposal is provided in Exhibit C which includes details of our fees and consideration of additional services as well as a general breakdown of our anticipated schedule.

Your authorization for Terracon to proceed in accordance with this proposal can be issued by signing and returning a copy of the attached Master Services Agreement Task Order to our office. The Master Services Agreement Task Order refers to the previously signed Master Services Agreement between Terracon and Garver LLC dated December 17, 2021.

Sincerely,

Terracon Consultants, Inc.
Registration No. F-3272

A blue ink signature of Richard Christensen, written in a cursive style.

Richard Christensen, P.E.

Senior Geotechnical Engineer

Saad M. Hineidi, P.E.
Senior Principal

MASTER SERVICES AGREEMENT**TASK ORDER**

This **TASK ORDER** is issued under the **MASTER SERVICES AGREEMENT** dated 12/17/2021 between Garver LLC ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the TKI Terminal Apron project ("Project"), as described in the Project Information section of the Consultant's Task Order Proposal dated 05/23/2025 ("Task Order Proposal") unless the Project is otherwise described below or in Exhibit A to this Task Order (which section or Exhibit are incorporated into this Task Order). This Task Order is incorporated into and part of the Master Services Agreement.

1. Project Information

Refer to Terracon Proposal No. P94255332, dated May 23, 2025.

2. Scope of Services The scope of Services to be provided under this Task Order are described in the Scope of Services section of the Consultant's Task Order Proposal, unless Services are otherwise described below or in Exhibit B to this Task Order.

Refer to Terracon Proposal No. P94255332, dated May 23, 2025.

3. Compensation Client shall pay compensation for the Services performed at the fees stated in the Task Order Proposal unless fees are otherwise stated below or in Exhibit C to this Task Order.

Refer to Terracon Proposal No. P94255332, dated May 23, 2025.

All terms and conditions of the **Master Services Agreement** shall continue in full force and effect. This Task Order is accepted and Consultant is authorized to proceed.

Consultant: **Terracon Consultants, Inc.**
By: _____ Date: **5/23/2025**
Name/Title: **Saad M Hineidi / Regional Geotechnical & Materials Service Line Director**
Address: **8901 John W Carpenter Fwy Ste 100**
Dallas, TX 75247-4547
Phone: **(214) 630-1010** Fax: **(214) 630-7070**
Email: **Saad.Hineidi@terracon.com**

Client: **Garver LLC**
By: _____ Date: _____
Name/Title: **Austin Hayes**
Address: **3010 Gaylord Pkwy, Suite 1990**
Frisco, TX 75034
Phone: **214.619-9061** Fax: _____
Email: **ARHayes@GarverUSA.com**

Exhibit A – Project Understanding

Our Scope of Services is based on our understanding of the project as described by Garver in their RFP for Geotechnical Services dated May 19, 2025 and the expected subsurface conditions as described in this section. We have not visited the project site yet to confirm the information provided. Aspects of the project, undefined or assumed, are highlighted. We request Garver and/or the design team verify all information prior to our initiation of field exploration activities.

Planned Construction

Item	Description
Project Description	Based on the information provided by Garver, we understand about 2,000 foot replacement to Taxiway A. Terracon has been requested to perform field and lab testing and provide earthwork and aircraft pavement subgrade recommendations. Taxiway pavement sections will be determined by Garver.
Grading/Slopes	Cuts and fills will be limited to within ± 2 feet of existing grade.

Site Location and Anticipated Conditions

Item	Description
Parcel Information	The project site is located at 1500 Industrial Blvd in McKinney, TX. Latitude / Longitude (approximate): 33.17763° N, 96.59249° W See Exhibit D
Existing Improvements	Existing Taxiway A
Current Ground Cover	Asphaltic taxiway
Existing Topography	Based on topographical information available from North Central Texas Council of Governments' website (www.dfwmaps.com), the ground surface of the project site relatively level with elevation at EL. 574 feet.
Site Access	We expect the site, and all exploration locations, are accessible with our truck-mounted drilling equipment and support vehicles when the site is dry.



Item	Description
Expected Subsurface Conditions	Our experience near the vicinity of the proposed development and review of geologic maps indicates subsurface conditions consist of clay soils underlain by limestone.

Exhibit B - Scope of Services

Our proposed Scope of Services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

Field Exploration

Garver requested the following boring locations and depths:

Number of Borings	Planned Boring Depth	Planned Location ¹
12	10 feet	Taxiway A
1	10 feet	Grass median between Taxiway A and Taxiway B

1. The planned boring locations are shown on the attached **Anticipated Exploration Plan**.

In addition, test pits and bulk samples will be collected from depths of about 0 to 5 feet to perform Proctor and laboratory (CBR, lime series, etc.) tests at a total of two locations near B-1 and B-12. Bulk samples will be collected along the edge of the runway to minimize the disturbance to the existing pavements..

Boring Layout and Elevations: We will use handheld GPS equipment to locate borings with an estimated horizontal accuracy of +/-20 feet. Field measurements from existing site features may be utilized. If available, approximate surface elevations will be obtained by interpolation from a site specific, surveyed topographic map. Otherwise, surface elevations will be interpolated from publicly available data (Google Earth, www.dfwmaps.com, etc.). If accurate boring layout and surface elevations are required, a survey of the boring locations should be provided by others.

Subsurface Exploration Procedures: We will advance borings with a truck-mounted drill rig using continuous flight augers (solid stem and/or hollow stem, as necessary, depending on soil conditions) and/or rotary wash boring techniques. Four to five soil samples will be obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. Soil sampling is typically performed using push tube and/or split-barrel sampling procedures. The split-barrel samplers are driven in accordance with the standard penetration test (SPT). The load carrying capacity of bedrock (if encountered) will be evaluated in the field using the Texas Department of Transportation's (TxDOT) cone penetration test.

The samples will be placed in appropriate containers, taken to our soil laboratory for testing, and classified by a Geotechnical Engineer. In addition, we will observe and record groundwater levels during drilling and sampling.

Our exploration team will prepare field boring logs as part of standard drilling operations including sampling depths, penetration distances, and other relevant sampling information. Field logs include visual classifications of materials observed during drilling and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the Geotechnical Engineer's interpretation and include modifications based on observations and laboratory tests.

Pavement Cores: Locations B-1 through B-12 will be cored, measured, and photographed to be included in the final report.

Property Disturbance: Terracon will make reasonable efforts to reduce damage to the property; however, it should be understood that in the normal course of our work some disturbance could occur including rutting of the ground surface and damage to landscaping.

We will backfill borings with auger cuttings upon completion. Pavements will be patched with cold-mix asphaltic concrete and/or bagged portland cement concrete, as appropriate. Our services do not include repair of the site beyond backfilling our boreholes and patching existing pavements. Excess auger cuttings will be dispersed in the general vicinity of the borehole. Because backfill material often settles below the surface after a period, we recommend boreholes to be periodically checked and backfilled, if necessary. We can provide this service or grout the boreholes for additional fees at your request.

Safety

Terracon is not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our Scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. Our Scope of Services does not include environmental site assessment services, but identification of unusual or unnatural materials observed while drilling will be noted on our logs.

Exploration efforts require borings and/or test pit excavations into the subsurface, therefore Terracon will comply with local regulations to request a utility location service through Texas811.

Private utilities should be marked by the owner/client prior to commencement of field exploration. Terracon will not be responsible for damage to private utilities not disclosed

to us. Terracon proposes to subcontract with a private utility locating service. Fees associated with this service are included in our Scope of Services.

The detection of underground utilities is dependent upon the composition and construction of the utility line; some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private utility locate service would not relieve the landowner/client of their responsibilities in identifying private underground utilities.

Site Access: Terracon must be granted access to the site by the property owner. Without information to the contrary, we consider acceptance of this proposal as authorization to access the property for conducting field exploration in accordance with the Scope of Services. Our proposed fees do not include time to negotiate and coordinate access with landowners or tenants. Terracon will conduct field services during normal business hours (Monday through Friday between 7:00am and 5:00pm). If our exploration must take place over a weekend or at night, please contact us so we can adjust our schedule and fee.

Laboratory Testing

The project engineer will review field data and assign laboratory tests to understand the engineering properties of various soil and rock strata. Exact types and number of tests cannot be defined until completion of fieldwork, but we anticipate the following laboratory testing may be performed:

- Water (moisture) content
- Liquid limit, plastic limit, and plasticity index
- Unconfined compressive strength of soil
- Absorption swell tests
- Material finer than 75- μ m (No. 200) sieve
- Soluble sulfates
- Lime series testing
- Moisture density relationship
- California bearing ratio – 2 CBR's are estimated and will be tested on native and treated with lime based on the material properties

Our laboratory testing program often includes examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we will describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

Engineering and Project Delivery

The results of our field and laboratory programs will be evaluated, and a geotechnical engineering report will be prepared under the supervision of a licensed professional engineer. The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil (and rock) classification
- Groundwater levels observed during and after the completion of drilling
- Site Location and Exploration Plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Earthwork recommendations including site/subgrade preparation
- Recommended pavement subgrade recommendations per FAA.

In addition to an emailed report, your project will also be delivered using our **Compass** website. Upon initiation, we provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. We welcome the opportunity to have project kickoff conversations with the team to discuss key elements of the project and demonstrate features of the portal. The typical delivery process includes the following:

- Project Planning – Proposal information, schedule and anticipated exploration plan
- Site Characterization – Findings of the site exploration and laboratory results
- Geotechnical Engineering Report

When services are complete, we upload a printable version of our completed Geotechnical Engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration, and the report are maintained in our system. This allows future reference and integration into subsequent aspects of our services as the project goes through final design and construction.

Additional Services

In addition to the previously noted services, the following are often associated with geotechnical engineering services. Fees for services previously noted do not include the following:

Perform Environmental Assessments: Our Scope for this project does not include, either specifically or by implication, an environmental assessment of the site intended to identify or quantify potential site contaminants. If the client/owner is concerned about the potential for such conditions, an environmental site assessment should be conducted. We can provide a proposal for an environmental assessment, if desired.

Review of Plans and Specifications: Our geotechnical report and associated verbal and written communications will be used by others in the design team to develop plans and specifications for construction. Review of project plans and specifications is a vital part of our geotechnical engineering services. This consists of review of project plans and specifications related to site preparation, foundation, and pavement construction. Our review will include a written statement conveying our opinions relating to the plans and specifications' consistency with our geotechnical engineering recommendations.

Observation and Testing of Pertinent Construction Materials: Development of our geotechnical engineering recommendations and report relies on an interpretation of soil conditions. Our assessment is based on widely spaced exploration locations and the assumption that construction methods will be performed in a manner sufficient to meet our expectations and consistent with recommendations made at the time the geotechnical engineering report is issued. We should be retained to conduct construction observations, and perform/document associated materials testing, for site preparation, foundation, and pavement construction. These services allow a more comprehensive understanding of subsurface conditions and necessary documentation of construction to confirm and/or modify (when necessary) the assumptions and recommendations made by our engineers.

Exhibit C - Compensation and Project Schedule

Compensation

Based upon our understanding of the site, the project as summarized in Exhibit A, and our planned Scope of Services outlined in Exhibit B, our base fee is shown in the following table:

Task	Lump Sum Fee ^{1, 2}
Subsurface Exploration, Laboratory Testing, Geotechnical Consulting and Reporting	\$35,000
Private Utility Clearance Service (At Boring Locations Only)	\$1,500
Total	\$36,500

1. Proposed fees are effective for 90 days from the date of the proposal.
2. Additional fees will be required if work is to be performed outside normal business hours.

Additional services that are not part of the base fee include the following:

Task	Fee	Initial for Authorization
Perform Environmental Assessments	TBD	
Review of Plans and Specifications	In accordance with applicable unit fees	
Observation and Testing of Pertinent Construction Materials	TBD	

Our Scope of Services does not include services associated with site clearing, wet ground conditions, tree or shrub clearing, or repair of/damage to existing landscape. If such services are desired by the owner/client, we should be notified so we can adjust our Scope of Services.

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this proposal. If conditions are encountered that require Scope of Services revisions and/or result in higher fees, we will contact you for approval, prior to initiating services. A supplemental proposal stating the modified Scope of Services as well as its effect on our fee will be prepared. We will not proceed without your authorization.

Project Schedule

We developed a schedule to complete the Scope of Services based upon our existing availability and understanding of your project schedule; however, our schedule does not account for delays in field exploration beyond our control, such as weather conditions, delays resulting from utility clearance, permit delays, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

Delivery on Compass	Completion Schedule ^{1, 2}
Field Exploration	10 to 20 days after notice to proceed
Laboratory Testing	25 to 35 days after notice to proceed
Geotechnical Engineering Report	30 to 40 days after notice to proceed

1. Upon receipt of your notice to proceed we will activate the schedule component on **Compass** with specific, anticipated dates for the delivery points noted as well as other pertinent events.
2. Standard workdays are Monday through Friday and exclude holidays. We will maintain an activities calendar within on **Compass**. The schedule will be updated to maintain a current awareness of our plans for delivery.



Proposal for Geotechnical Engineering Services

TKI Taxiway A Phase 2 | McKinney, TX

May 22, 2025 | Terracon Proposal No. P94255322



Exhibit E – Anticipated Exploration Plan

