Airport Name: Kirksville Regional

Project No.: 20-028A-1

County: Adair

AVIATION PROJECT CONSULTANT SUPPLEMENTAL AGREEMENT NO. 1 CONSTRUCTION SERVICES

THIS SUPPLEMENTAL AGREEMENT NO. 1 for Construction Services is entered into by the City of Kirksville (hereinafter, "Sponsor") and Jviation, A Woolpert Company (hereinafter, "Consultant").

WITNESSETH:

WHEREAS, the Sponsor and the Consultant entered into an Agreement on May 19. 2020, to accomplish a project at the Kirksville Regional Airport, (hereinafter, "Original Agreement"); and

WHEREAS, the Sponsor and the Consultant now desire to enter into Supplemental Agreement No. 1 to otherwise complete, extend or continue the Original Agreement as provided herein.

NOW, THEREFORE, in consideration of the mutual promises, covenants, and representations contained herein the parties agree as follows:

(1) SCOPE OF SERVICES:

(A) The Services to be provided by the Consultant under Supplemental Agreement No. 1 are additional services which are beyond the scope of services provided in the Original Agreement. These additional professional services are generally described and defined in Section (17) of the Original Agreement and Exhibit II - SA1, which is attached hereto and incorporated herein by reference.

(2) <u>FEES AND PAYMENTS</u>:

- (A) The Consultant shall be reimbursed in accordance with Section (9) of the Original Agreement.
- (B) The costs of Supplemental Agreement No. 1 shall be in addition to the cost of the Original Agreement.
- (C) The lump sum fee and maximum amount payable included in Section (9) of the Original Agreement are hereby modified for Supplemental Agreement No. 1 to be cost plus fixed fee not to exceed as follows:

	ORIGINAL AMOUNT	SUPPLEMENTAL AGREEMENT NO. 1	TOTAL
Fixed Fee	\$29,744.06	\$31,729.37	\$61,473.43
Max. Fee Payable	\$252,819.79	\$395,665.75	\$648,485.54

- (D) Estimated costs for the services in Supplemental Agreement No. 1 are defined in Exhibit IV SA1 and Exhibit V SA1, which are attached hereto and incorporated herein by reference.
- (3) <u>PERIOD OF SERVICE:</u> Exhibit VI, Performance Schedule, of the Original Agreement is hereby revised to include time for the performance of these additional services. The projected completion date is revised to March 31, 2022, which includes time for performance of all remaining services in the Original Agreement and the services in Supplemental Agreement No. 1 and submittal of all deliverables.

(4) <u>DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS:</u>

- (A) <u>DBE Goal</u>: The following DBE goal has been established for this Supplemental Agreement No. 1. The dollar value of services and related equipment, supplies, and materials used in furtherance thereof which is credited toward this goal will be based on the amount actually paid to DBE firms. The goal for the percentage of services to be awarded to DBE firms is 5% of the total Supplemental Agreement No. 1 dollar value.
- (B) <u>DBE Participation Obtained by Consultant</u>: The Consultant has obtained DBE participation, and agrees to use DBE firms to complete 5% of the total services to be performed under this Supplemental Agreement No. 1 by dollar value. The DBE firms which the Consultant shall use, and the type and dollar value of the services each DBE will perform, is as follows:

DBE FIRM NAME, STREET AND COMPLETE MAILING ADDDRESS	TYPE OF DBE SERVICE	TOTAL \$ VALUE OF THE DBE SUBCONTRACT	CONTRACT \$ AMOUNT TO APPLY TO TOTAL DBE GOAL	% OF SUBCONTRACT \$ VALUE APPLICABLE TO TOTAL GOAL
TSi	QA Testing	\$27,557.00	100%	\$27,557.00

(5) SUBCONSULTANTS:

(A) The Consultant agrees that except for those firms and for those services listed below, there shall be no transfer of engineering services performed under this Supplemental Agreement No. 1 without the written consent of the Sponsor. Subletting, assignment, or transfer of the services or any part thereof to any other corporation, partnership, or individual is expressly prohibited. Any violation of this clause will be deemed cause for termination of this Supplemental Agreement No. 1.

Exceptions (Subconsultant Information):

FIRM NAME	COMPLETE ADDRESS	NATURE OF SERVICES

(6) <u>ORIGINAL AGREEMENT</u>: Except as otherwise modified, amended, or supplemented by this Supplemental Agreement No. 1, the Original Agreement between the parties shall remain in full force and effect and the terms of the Original Agreement shall extend and apply to this Supplemental Agreement No. 1.

IN WITNESS WHEREOF, the parties have entered into this Supplemental Agreement No. 1 on the date last written below.

	Executed by the Consultant this 28^4	day of April	, 2021.
	Executed by the Sponsor this da	ay of	, 2021.
CONS	ULTANT	SPONSOR	
Ву	fre tallo	Ву	
Title _	/ Office Manager	Title	
ATTES	Λ	ATTEST:	
ву <u>(</u>	indy Kever	Ву	778-million 2004 11 2014 20 million 2004
Title _	Project Condinator	Title	
	θ		

SCOPE OF WORK FOR

KIRKSVILLE REGIONAL AIRPORT

Kirksville, Missouri MoDOT Project No. 20-028A-1

Runway 18/36 and Taxiway B Rehabilitation – Construction Management Services

This agreement is for providing professional services for the Runway 18/36 and Taxiway B Rehabilitation project between the City of Kirksville and Jviation, Inc. For the remainder of this scope the Kirksville Regional Airport is indicated as "Sponsor" and Jviation, Inc. is indicated as "Engineer." The approximate construction cost of this project is \$3,500,000.

This project shall consist of Construction Administration, Post Construction, On-Site Construction Coordination, and On-Site Construction Survey for the Runway 18/36 and Taxiway B Rehabilitation Project. This scope of work is for the consulting services provided by the Engineer for the Sponsor. See Exhibit No. 1 below for the project location.

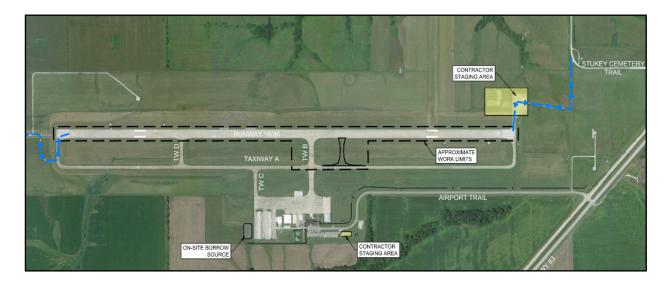


EXHIBIT NO. 1

DESCRIPTION

This project shall consist of the rehabilitation of Runway 18/36 and the relocation of the midfield taxiway connector, Taxiway B, designed under the previous scope of work for MoDOT Project No. 20-028A-1 as shown above in Exhibit No. 1.

During construction, there will be multiple phases where Runway 18/36 will require a displaced threshold to allow the contractor to complete the rehabilitation of Runway 18/36 and aircraft to utilize the displaced runway at the same time.

The engineering fees for this project will consist of **Part B-Special Services**, which includes; 5) Construction Administration Phase, 6) Post Construction Phase, 7) On-Site Construction Coordination Phase or Field Engineering Phase, 8) On-Site Construction Survey Phase, and Reimbursable Costs During Survey and

Page 1 of 9 REV 2021.01

Construction. Additional services that will be completed by subconsultants to the Engineer include quality assurance testing during construction. Part B and the four phases are described in more detail below.

PART B - SPECIAL SERVICES consists of the construction administration phase, post-construction coordination phase (invoiced on a lump sum basis), on-site construction coordination phase (invoiced on a cost plus fixed fee basis) and on-site construction survey phase (invoiced on a lump sum basis). Also included are direct subcontract costs for quality assurance testing verification during construction.

5.0 Construction Administration Phase

5.01 Prepare Project Scope of Work and Contract. This task includes establishing the scope of work. Fees shall be negotiated with the Sponsor and may be subject to an independent fee estimate conducted by a third party hired by the Sponsor. This task also includes drafting the contract for the work to be completed by the Engineer for the Sponsor once negotiations are complete.

5.02 Prepare Construction Contract and Documents. In agreement with the FAA, the Engineer shall prepare the Notice of Award, Notice to Proceed and Contract Agreements, including bonds and insurance documents, which will be updated to include all addenda items issued during bidding, for the Sponsor's approval and signatures. Approximately five copies will be submitted to the successful Contractor for their signatures.

The Engineer will ensure the construction contracts are in order, the bonds have been completed, and the Contractor has been provided with adequate copies of the Construction Plans, Specifications and Contract Documents, which will be updated to include all addenda items issued during bidding.

5.03 Provide Project Coordination. The Engineer shall provide project management and coordination services to ensure the completion of the design. These duties include:

- → Time the Engineer spends planning, organizing, securing and scheduling resources, and providing instruction to staff to meet project objectives as defined in the approved scope of work.
- Additional items to be accomplished include compiling and sending additional information requested from the office to related parties, maintaining project files as necessary and other items necessary in day to day project coordination.
- The Project Manager will review progress reports weekly and monthly.
- Assist with change orders and supplemental agreements as necessary. All change orders and supplemental agreements will be coordinated with the Sponsor and FAA staff prior to execution. All change orders and supplemental agreements will be prepared in accordance with the FAA Standard Operating Procedure (SOP) 7.0, Airport Improvement Program Construction Project Change Orders.
- → Clerical staff shall prepare the quantity sheets, testing sheets, construction report format, etc.
- Office engineering staff, CAD personnel and clerical staff shall be required to assist the Field Personnel as necessary during construction. Specific tasks to be accomplished include providing secondary engineering opinions on issues arising during construction, maintaining project files as necessary and various other tasks necessary in the day-to-day operations.
- The Engineer will prepare and submit monthly invoicing.

The Engineer will complete the following tasks:

- Provide the Sponsor with a monthly Project Status Report (PSR), in writing, reporting on Engineer's progress and any problems that may arise while performing the work. The PSR must include an update of the project schedule, as described in this section, when schedule changes are expected.
- → Prepare quarterly performance reports.
- **5.04 Coordinate Quality Assurance Testing.** This task includes preparing the requirements for quality assurance testing. Negotiating with the quality assurance testing firm for a cost to perform the work is also included in this task.
- **5.05 Prepare/Conduct Pre-Construction Meeting.** The Engineer will conduct a pre-construction meeting to review FAA requirements as required per FAA AC 150/5370-12 (Current Edition), *Quality Management for Federally Funded Airport Construction Projects*, prior to the commencement of construction. As a part of this meeting, the Engineer will also discuss the environmental plan sheet, surveyed areas, and environmental commitments. The meeting will be held at the airport and will include the Sponsor, MoDOT (if possible), Contractor, subcontractors and airport tenants affected by the project.
- **5.06** Prepare/Submit Construction Management Plan. This task includes preparing and submitting the Construction Management Plan, which includes resumes of project personnel representing the stakeholders, detailed inspection procedures, required submittal processes, quality control testing methods, quality assurance testing methods, final test result summary forms, and the Contractor's Quality Control Program (CQCP). The Construction Management Plan shall be prepared to follow the requirements of FAA AC 150/5370-12 (Current Edition), *Quality Management for Federally Funded Projects*.
- **5.07 Review Contractor's Safety Plan Compliance Document.** This task includes the review and to comment on the Contractor's Safety Plan Compliance Document (SPCD) as required per FAA AC 150/5370-2 (Current Edition), *Operational Safety on Airports During Construction*. The Engineer shall review to ensure that all applicable construction safety items are addressed and meet the requirements of AC 150/5370-2 (Current Edition) and the Contract's Construction Safety and Phasing Plan (CSPP). The intent of the SPCD is to detail how the Contractor will comply with the CSPP. Following award of the project to the successful Contractor and prior to the issuance of the Notice to Proceed, the Engineer will review the SPCD, provide comments and ultimately approval of the document. It is anticipated that the document will require at least one re-submittal by the Contractor to address any missing information. The SPCD will be submitted to the Engineer for approval at least 14 days prior to the issuance of the Notice to Proceed to the Contractor. An approved copy of the SPCD shall be provided to the FAA.
- **5.08 Prepare Requests for Reimbursement.** This task includes preparing the FAA Standard Form 271 for Sponsor reimbursement of eligible expenses incurred on a monthly basis. The Engineer will submit the completed form along with appropriate supporting documentation to the Sponsor for review and approval. Upon approval, the Engineer or the Sponsor will submit the completed forms and supporting documentation to the FAA for reimbursement. It is estimated there will be seven RFRs for expenses incurred during the construction and closeout phase of the project.
- **5.09 Perform Site Visits During Construction.** The Project Manager shall make on-site visits, as required, throughout the duration of the project. As of now, it is estimated that the Project Manager will be required to make a minimum of eight site visits to the project.

TASK 5 DELIVERABLES	TO FAA/STATE	TO SPONSOR
5.01 Construction SOW and Contract	✓	✓
5.02 Notice of Award, Notice to Proceed, and Contract Agreement		✓
5.02 Issue Construction Plans, Specifications, and Contract		
Documents		•
5.03 Monthly Invoice and Monthly PSR		✓
5.03 Pay Request Review Documentation		✓
5.03 Weekly/Monthly Reports	✓	✓
5.03 Quarterly Performance Reports		✓
5.03 Change Orders/Supplemental Agreements	✓	✓
5.05 Pre-Construction Agenda and Meeting Minutes	✓	✓
5.06 Construction Management Plan	✓	✓
5.07 Review and Approval of SPCD and Final SPCD	√	√
5.08 Request for Reimbursement		✓

TASK 5 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
5.05 Conduct Pre-Construction Meeting	 Kirksville, MO One (1) Project Manager and One (1) Construction Manager Assume full day site visit (1 site visit) Assume travel to/from Denver, CO to Kirksville, MO with one (1) overnight stay for Construction Manager for each site visit
5.09 Perform Site Visits During Construction	 Kirksville, MO One (1) Project Manager Assume full day site visit (8 site visits) Assume travel to/from Kansas City, MO to Kirksville, MO for each site visit

6.0 Post Construction Coordination Phase

6.01 Prepare Final Testing Report. The Engineer will submit the quality assurance testing summary report, which will include narrative of tests taken, verification for minimum number of tests, discussion of problems and tests necessary, and a table (from Construction Management Plan) including the actual number of tests taken for each specification to the FAA for review and approval.

6.02 Coordinate and Perform Final Surveys. The Engineer will perform an as-built survey that includes the following tasks:

- Runway centerline profile at 10-foot stations and 10-foot offset left and right as this airport is a Part 139 airport
- → Runway pavement edge
- > New taxiway connector pavement outline
- Safety area on a 50-foot grid (inclusive of all disturbed areas)
- Airport lighting, signage, NAVAIDS and any other components installed or affected by this project.
- → Runway markings
- Utility structures, markers and horizontal locations

The Engineer will set new Runway End monuments and submit all required as-built data to the FAA Airports Data and Information Portal (ADIP) website in accordance with FAA AC 150/5300-18 (Current Edition), General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards. The Engineer shall create a Project on the ADIP system and upload the necessary files for acceptance in ADIP. This includes preparation of a project Statement of Work, Survey and Quality Control Plan, and Final Project Report that will be in compliance with ADIP submission standards and will be reviewed by the National Geodetic Survey (NGS). It is understood that new airport imagery will not be required for this project. The As-Built Survey shall be completed by, or under the direct supervision of, a Professional Land Surveyor licensed in the State of Missouri.

- **6.03 Prepare Clean-up Item List.** The Engineer will ensure the Contractor has removed all construction equipment and construction debris from the airport, that all access points have been re-secured (fences repaired, gates closed and locked, keys returned, etc.) and the site is clean.
- **6.04 Conduct Final Inspection.** The Engineer, along with the Sponsor and MoDOT (if available), shall conduct the final inspection. The quality assurance testing summary report must be accepted by the MoDOT prior to final inspection.
- **6.05 Prepare Engineering Record Drawings.** The Engineer will prepare the record drawings indicating modifications made during construction. An electronic and paper copy of the record drawings will be sent to the FAA.
- **6.06 Prepare Final Construction Report.** The Engineer will prepare the final construction report to meet the applicable FAA closeout checklist requirements.
- **6.07 Prepare DBE Uniform Report.** The Engineer will prepare the Uniform Report of DBE Awards or Commitments and Payments (DBE Uniform Report) for the Sponsor to submit to the FAA.
- **6.08 Update and Modify Airport Layout Plan (ALP).** The Engineer will review and update the ALP to reflect the work completed for this project. A draft version of each sheet will be submitted to the ADO for review. Upon approval by the FAA, the Engineer shall assist the Sponsor in preparing copies for signature of the revised sheets and submitting to the FAA for final approval.
- **6.09 Summarize Project Costs.** The Engineer will be required to obtain all administrative expenses, engineering fees and costs, testing costs and construction costs associated with the project and assemble a total project summary. The summary will be analyzed with the associated project funding.

TASK 6 DELIVERABLES	TO FAA/STATE	TO SPONSOR
6.01 Final Testing Report	✓	✓
6.02 As-Built Survey		✓
6.02 ADIP Features	✓	✓
6.03 Clean-up List		✓
6.04 Punchlists	✓	✓
6.05 Record Drawings	✓	✓
6.06 Final Construction Report	✓	✓
6.07 DBE Uniform Report	✓	✓
6.08 Updated ALP	✓	✓
6.09 Project Cost Summary	✓	√

TASK 6 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION		
6.02 As-Built Survey	Kirksville, MO One (1) Surveyor Assume full day site visit (2 site visits) Assume travel to/from Kansas City, MO to Kirksville, MO with one (1) overnight stay for Surveyor		
6.04 Conduct Final Inspection	Kirksville, MO One (1) Project Manager and One Construction Manager Assume full day site visit (1 site visit) Assume travel to/from Kansas City, MO to Kirksville, MO for each site visit		

7.0 On-Site Construction Coordination Phase

This phase will consist of providing one full time Construction Manager, supported by one full-time Field Engineer. It shall be the responsibility of the Construction Manager to facilitate sufficient on-site construction coordination to ensure that the project is completed according to good construction practice and the Project Manager's direction. It is estimated that it will take **110 calendar days** to complete construction of the project. Incidental travel costs, including vehicle usage, mileage, lodging, per diem, etc., are in addition to the engineering hours expended.

7.01 Provide Resident Engineering. The Construction Manager will work approximately **12 hours per day** and the one full-time Field Engineer, during Phase 2, will be on-site approximately **12 hours per day**. It is assumed that the Construction Manager and Field Engineer will be able to complete all daily project documentation during their shift and that total inspection on-site time is anticipated to be **110 calendar days**. It is assumed that the Contractor will work **six (6) days** a week during the construction period **resulting in 100 working days**.

In summary, the following personnel is proposed for each individual phase, respectively:

PERSONNEL	CALENDAR DAYS/PHASE				
	Phase 1 Phase 2 Phase 3 Phase 4 TOTAL				TOTAL
Construction Manager	15	60	20	15	110
Field Engineer No. 1	0	60	0	0	60

The following tasks will be performed during the course of a typical day's shift during construction:

→ Per FAA AC 150/5370-10 (Current Edition), Standard Specifications for Construction of Airports, the FAA requires a quality assurance and quality control workshop when paving operations are anticipated to be greater than \$500,000. The Engineer will attend the workshop, which will be conducted by the Contractor, to review project and FAA requirements prior to the commencement of construction. The location of the meeting will be coordinated by the Engineer and Contractor and will include representatives from the Sponsor, Engineer, FAA (if possible), Contractor, subcontractors, quality assurance, quality control and any other necessary parties. Paving operations will not be permitted prior to this meeting's occurrence. Other meetings may be required to resolve specific material quality, production and/or placement issues.

- Review and approve construction submittals, consisting of the plans and material submittal data received from the Contractor.
- Review copies of the survey data and other construction tasks for general compliance with the construction documents.
- → Coordinate, review and provide a response to construction and general project Request for Information (RFIs).
- → Prepare and process change orders.
- → Conduct employee interviews and review Contractor's and subcontractor's weekly payroll records as required by the FAA. As part of this effort, all payrolls must be reviewed and logged when received. A log identifying current status of reviews and any action taken to correct noted discrepancies, will be provided for Sponsor review at time of Request for Reimbursement processing, as appropriate.
- Review and coordinate revisions by the Contractor for quality control and quality assurance testing firm submittals performed as part of the quality assurance testing required by the project specifications.
- → Maintain record of the progress of construction and review the quantity records with the Contractor on a periodic basis.
- → Prepare the periodic cost estimates and review the quantities with the Contractor. The Engineer, Sponsor and Contractor will resolve discrepancies or disagreements with the Contractor's records. The periodic cost estimate will also include all other costs associated with the project (administrative costs, engineering, any miscellaneous costs). After compiling all costs, the Engineer will then submit the periodic cost estimate to the Sponsor for payment.
- Aaintain daily logs of the construction activities for the duration of time on site which includes the Construction Project Daily Inspection Checklist as required by the CSPP and SPCD. Verify that restricted areas, roads, staging areas, stockpiles, borrow/waste areas, etc. are all remaining within the areas cleared under environmental documentation.
- → Prepare a weekly status report using the FAA's standard form. The report will be submitted to the Sponsor, the FAA and the office following the week of actual construction activities performed. Verify each week that restricted areas, roads, staging areas, stockpiles, borrow/waste areas, etc. are all remaining within the areas cleared under environmental documentation.
- Review payments to subcontractors and ensure timely payment of retainage to subcontractors when payment to the Contractor is made as required by the DBE Program.

TASK 7 DELIVERABLES	TO FAA/STATE	TO SPONSOR
7.01 Coordinate and Attend Quality Assurance/Quality Control	1	\
Workshop	•	•
7.01 Coordinate Submittal Reviews		✓
7.01 Coordinate RFIs		✓
7.01 Change Orders	✓	✓
7.01 Payroll Reviews		✓
7.01 Quality Assurance/Quality Control Results Compilation		✓
7.01 Periodic Cost Estimates	√	√
7.01 Weekly Reports	√	✓

8.0 On-Site Construction Survey Phase

8.01 Provide Construction Survey Control. Prior to the beginning of construction, the Surveyor will verify existing project control and move/set additional control outside of grading limits to control the project. Project control will be tied to existing airport control points and updated positions will be provided to the Contractor for use during the project. Project control will be verified by the Surveyor at least once every 30 calendar days throughout the course of construction. If additional project control is required, the Surveyor will provide the control. Surveying will be performed under the direct supervision of a Professional Land Surveyor licensed in the State of Missouri.

8.02 Provide Project Reference Staking. Prior to the beginning of construction, the Surveyor will install reference lath every 200 feet along the project corridor. Staking will show project stationing only and shall not be used as vertical control. It is the responsibility of the Contractor to maintain the reference staking throughout the project. Surveying will be performed under the direct supervision of a Professional Land Surveyor licensed in the State of Missouri.

TASK 8 DELIVERABLES		TO FAA/STATE	TO SPONSOR
8.01	Provide Survey Control Report	✓	✓

TASK 8 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
8.01 Provide Survey Control	Kirksville, MO One (1) Surveyor Assume full day site visits (3 site visits) Assume travel to/from Kansas City, MO to Kirksville, MO with one (1) overnight stay for Surveyor for three separate trips to the site
8.02 Provide Project Reference Staking	Kirksville, MO One (1) Surveyor Assume Reference Staking will be completed at the same time as the initial Survey Control site visit

EX Reimbursable Costs During Survey and Construction This section includes reimbursable items such as auto rental, mileage, lodging, per diem, travel, and other miscellaneous costs incurred in order to complete **Part B – Special Services**. Section 4 Reimbursables are invoiced on a not-to-exceed basis, Sections 5 and 6 Reimbursables are invoiced on a lump sum basis, and Sections 7 and 8 Reimbursables are invoiced on a cost plus fixed fee basis.

Special Considerations

The following special considerations are required for this project, but will be completed by subconsultants to the Engineer. The cost for this work will be included in the engineering contract agreement with the Sponsor and the costs are in addition to the engineering fees outlined above.

Quality Assurance Testing: Quality assurance testing will be performed by an independent testing firm under the direct supervision of the Engineer. All quality assurance test summaries must be accepted by the FAA prior to final inspection. Certified materials technicians will perform the necessary material quality assurance testing for the following items, as detailed in the project specifications:

- → Item P-152 Excavation and Embankment
- → Item P-153 Controlled Low-Strength Material (CLSM)
- → Item P-209 Crushed Aggregate Base Course
- → Item P-501 Cement Concrete Pavement
- → Item P-610 Structural Portland Cement Concrete

Assumptions

The scope of services described previously is based on the following assumptions of responsibilities by the Engineer and Sponsor.

- 1. It is anticipated there will be a minimum number of trips and site visits to the airport to facilitate the completion of the various phases listed in this scope. Each trip is anticipated to be a full day trip and the number of trips for each phase are included at the end of each phase above.
- 2. The Sponsor will provide an electronic copy of the current ALP to allow for updating of the plan upon completion of the project.
- 3. The Sponsor will furnish escorts as needed for the Engineer to conduct field work.
- 4. The Sponsor will coordinate with tenants as required to facilitate field evaluations and construction.
- 5. All engineering work will be performed using accepted engineering principles and practices and provide quality products that meet or exceed industry standards. Dimensional criteria will be in accordance with FAA AC 150/5300-13 (Current Edition), Airport Design and related circulars. Construction specifications will be in accordance with FAA AC 150/5370-10 (Current Edition), Standard Specifications for Construction of Airports and the Central Region's Regional Updates for Specifying Construction of Airports and related circulars. Project planning, design and construction will further conform to all applicable standards, including all applicable current FAA Advisory Circulars and Orders required for use in AIP-funded projects and other national, state, or local regulations and standards, as identified and relevant to an airfield design and construction project.
- 6. The Engineer must maintain records of design analyses and calculations consistent with typical industry standards, as required by the FAA, for a period of three years after the project is closed by the FAA.
- 7. Because the Engineer has no control over the cost of construction-related labor, materials, or equipment, the Engineer's opinions of probable construction costs will be made on the basis of experience and qualifications as a practitioner of his/her profession. The Engineer does not guarantee that proposals for construction, construction bids, or actual project construction costs will not vary from Engineer's estimates of construction cost.
- 8. It is assumed that a project audit will not be performed. If a project audit occurs, the Engineer is prepared to assist the Sponsor in gathering and preparing the required materials for the audit. This work will be negotiated with the Sponsor, should the need occur and payment will be on a time and material basis.

EXHIBIT IV - SA1

DERIVATION OF CONSULTANT PROJECT COSTS (CONSTRUCTION)

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EXHIBIT V - SA1

ENGINEERING CONSTRUCTION SERVICES-COST BREAKDOWN

EXHIBIT IV - SA1

DERIVATION OF CONSULTANT PROJECT COSTS (CONSTRUCTION)

KIRKSVILLE REGIONALAIRPORT KIRKSVILLE, MISSOURI

CONSTRUCTION SERVICES LUMP SUM April 26, 2021

1 <u>DIRECT SALARY COSTS</u>:

•	DIRECT SALARY COSTS.					
	TITLE	HOURS	RATE/HOUR	COST (\$)		
	Principal	2	600.00	\$160.00		
	Sr. Project Manager		\$80.00	800.00		
	Survey Manager	10 4	80.00 69.00	276.00		
	Electrical Engineer III	12	67.00	804.00		
	Project Manager III	214	55.00	11,770.00		
	Construction Manager III	92	45.00	4,140.00		
	CADD Tech III	36	33.00	1,188.00		
	Support III	4	32.00	128.00		
	Associate Engineer II	0	30.00	0.00		
	Surveyor	104	30.00	3,120.00		
	Project Coordinator II	48	28.00	1,344.00		
	Support II	18	28.00	504.00		
	GIS Analyst	6	25.00	150.00		
	Total Direct Salary Cos	ts			=	\$24,384.00
2	LABOR AND GENERAL AD	MINISTRATIVE	OVERHEAD:			
	2a Percentage of Direc 2b FCCM Rate (Option		@ <u>198.77</u> % @ <u>0.00</u>		=	\$48,467.50 \$0.00
3	SUBTOTAL:					
	Items 1 and 2				=	\$72,851.50
4	PROFIT:					
	15 % of Item 3 Subtotal				=	\$10,927.72
				Subtotal		\$83,779.22
5	OUT-OF-POCKET EXPENSE	<u>:S</u> :				
	a. Mileage	4600 Miles	@ \$0.560 / Mile	= \$2,576.00		
	b. Meals		@ \$55.00 / Day	= \$990.00		
	c. Lodging (est. ta	8 Nights				
	d. Computer	0 Hours				
	e. Survey Equip. & Sup		•	= \$1,855.00		
	f. Misc. (taxes, fees, sh		etc.)	\$0.00		
	Total Out-of-Pocket Ex		,	=	=	\$6,301.00
6	SUBCONTRACT COSTS:					
	a. N/A		=	-		
					_	¢0.00
7	MAXIMUM TOTAL FEE:				=	\$0.00
	Items 1, 2, 3, 4, 5 and 6	3			=	\$90,080.22 Not to Exceed
	1161115 1, 2, 3, 4, 3 and 6	,			-	ψου,υου.ΖΖ INULIU EXCEEU

Exhibit IV - 1

EXHIBIT IV - SA1

DERIVATION OF CONSULTANT PROJECT COSTS (CONSTRUCTION)

KIRKSVILLE REGIONAL AIRPORT KIRKSVILLE, MISSOURI

CONSTRUCTION SERVICES COST PLUS FIXED FEE April 26, 2021

DIRECT SALARY COSTS:

TITLE	HOURS	RATE/HOUR	COST (\$)			
Principal	0	\$80.00	\$0.00			
Sr. Project Manager	0	80.00	0.00			
Survey Manager	0	69.00	0.00			
Electrical Engineer III	0	67.00	0.00			
Project Manager III	0	55.00	0.00			
Construction Manager III	1,200	45.00	54,000.00			
CADD Tech III	0	33.00	0.00			
Support III	0	32.00	0.00			
Associate Engineer II	560	30.00	16,800.00			
Surveyor	0	30.00	0.00			
Project Coordinator II	0	28.00	0.00			
Support II	0	28.00	0.00			
GIS Analyst	0	25.00	0.00			
Total Direct Salary Cost	S			=	\$70,800.00	
2a Percentage of Direct 2b FCCM Rate (Optional		198.77 %		=	\$140,729.16 \$0.00	
<u>SUBTOTAL:</u> Items 1 and 2				=	\$211,529.16	
PROFIT: 15 % of Item 3 Subtotal				=	\$31,729.37	
OUT-OF-POCKET EXPENSE	<u>S:</u>		Subtotal		\$243,258.53	
a. Mileage	12000 Miles @	\$0.560 / Mile	= \$6,720.00			
b. Meals	170 Days @					
c. Motel	170 Nights @					
 d. Travel/Airfare Costs 	Trips @	\$500.00 / Trip =	= \$0.00			
 e. Materials and Supplie 	es		= \$0.00			
f. Misc. (taxes, fees, sh	ipping/postage, etc.)		\$0.00			
Total Out-of-Pocket Exp	enses		=	=	\$34,770.00	
SUBCONTRACT COSTS:						
a. TSI: Testing		=	\$27,557.00			
b. Name of firm: type of	work	=	\$0.00			
c. Name of firm: type of	work	=	\$0.00		407.557.00	
MAXIMUM TOTAL FEE:				=	\$27,557.00	
					****	_
Items 1, 2, 3, 4, 5 and 6				=	\$305,585.53 Not t	o Exce

Exhibit IV - 1



E BREAKDOWN	LABOR HOUR BREA

												_					
			TASK							LABOR C	ATEGORY						
Labor Category Total Hours				Principal	Senior Project Manager	Project Manager III	Project Coordinator II	Construction Manager III	Electrical Engineer								Phase Item Costs
	Billing Rate	Total Cost															
5.0 Construction Administration Phase (Lump Su			5.0 Construction Administration Phase (Lump Sum)														
	\$ 274.87 /hr = \$		5.01 Prepare Project Scope of Work and Contract	2	2	8											\$ 2,611.24
	\$ 274.87 /hr = \$		5.02 Prepare Construction Contract and Documents			2	4										\$ 762.74
	\$ 188.97 /hr = \$		5.03 Provide Project Coordination		4	24	4		12								\$ 8,781.96
	\$ 96.20 /hr = \$		5.04 Coordinate Quality Assurance Testing			4											\$ 755.88
	\$ 154.61 /hr = \$		5.05 Prepare/Conduct Pre-Construction Meeting			16	4	16									\$ 5,882.08
Electrical Engineer III 12 hrs. x	\$ 230.20 /hr = \$		5.06 Prepare/Submit Construction Management Plan			24											\$ 4,535.28
			5.07 Review Contractor's Safety Plan Compliance Document			2		2									\$ 687.16
			5.08 Prepare Requests for Reimbursement			8	12										\$ 2,666.16
			5.09 Perform Site Visits During Construction			80											\$ 15,117.60
SUBTOTAL 230 hrs.	SUBTOTAL \$	41,800.10															
Reimbursables																	
	\$ 70.00 /Day= \$																
	\$ 0.56 /Mi= \$	1,680.00															
	\$ 110.00 /Day= \$	220.00															
Per Diem 8 Day x	\$ 55.00 /Day= \$	440.00															
	\$ 500.00 /Trip= \$																
,	SUBTOTAL \$	2.340.00															
		-,			1									1		1	
1	SUBTOTAL \$	44,140.10	TOTA	LS 2	6	168	24	18	12	0	0	0 0	0	0	0	0	\$ 41,800.10
L	SOSIOIAL V	.4,140.10	1018	-				10									41,000.10

				TASK							LABOR C	ATEGORY						
Labor Category	Total Hours	Billing Rate	Total Cost		Senior Project Manager	Project Manager III	Project Coordinator II	Construction Manager III	Survey Manager	Surveyor	Support II	CADD Tech III	GIS Analyst	Support III				Phase Item Co
6.0 Post Construction Coordina			TOTAL COST	6.0 Post Construction Coordination Phase (Lump Sum)														
Senior Project Manager		\$ 274.87 /hr = \$	1,099.48	6.01 Prepare Final Testing Report		4	2	10										\$ 2,494
Project Manager III	46 hrs. x	\$ 188.97 /hr = \$	8,692.62	6.02 Coordinate and Perform Final Surveys					2	48	10		6	2				\$ 7,119
Project Coordinator II	24 hrs. x	\$ 96.20 /hr = \$	2,308.80	6.03 Prepare Clean-up Item List		2		8										\$ 1,614
Construction Manager III	74 hrs. x	\$ 154.61 /hr = \$	11,441.14	6.04 Conduct Final Inspection		8		8										\$ 2,748
Survey Manager		\$ 237.07 /hr = \$		6.05 Prepare Engineering Record Drawings		4						24						\$ 3,477
Surveyor	48 hrs. x	\$ 103.08 /hr = \$		6.06 Prepare Final Construction Report	2	20	8	48										\$ 12,520
Support II		\$ 96.20 /hr = \$		6.07 Prepare DBE Uniform Report		2	8											\$ 1,147
CADD Tech III		\$ 113.38 /hr = \$		6.08 Update and Modify Airport Layout Plan (ALP)	2	4						12						\$ 2,666
GIS Analyst		\$ 85.90 /hr = \$		6.09 Summarize Project Costs		2	6											\$ 955
Support III	2 hrs. x	\$ 109.95 /hr = \$	219.90															
SUBTOTAL	252 hrs.	SUBTOTAL \$	34,743.00															
Reimbursables																		
Auto Rental		\$ 70.00 /Day= \$	-															
Mileage		\$ 0.56 /Mi= \$																
Lodging + Tax & Fees		\$ 110.00 /Day= \$	220.00															
Per Diem		\$ 55.00 /Day= \$	110.00															
Travel & Airline Costs		\$ 500.00 /Trip= \$																
Survey Mileage		\$ 0.56 /Mi= \$	224.00															
Survey Lodging +Tax & Fees		\$ 110.00 /Day= \$	110.00															
Survey Per Diem		\$ 55.00 /Day= \$	110.00															
Survey Supplies & Equip.		\$ 424.00 /Trip= \$	424.00													1		
Survey Field Vehicle		\$ - /Day= \$	-		-	1		1		1	1	ļ	ļ	1	1			
Survey Travel & Airline	0 Trip x	\$ 500.00 /Trip= \$																
		SUBTOTAL \$	1,198.00														_	
		SUBTOTAL \$	35,941.00	TOTA	S] 4	46	24	74	2	48	10	36	6	2	. 0	0)	0 \$ 34,743

				TASK						LABOR (CATEGORY							
					Construction	Associate Engineer												
					Manager III	II												Phase Item Costs
Labor Category	Total Hours	Billing Rate	Total Cost			-												
7.0 On-Site Construction Coord				7.0 On-Site Construction Coordination Phase (Cost Plus Fixed Fee)														
Construction Manager III		\$ 45.00 /hr = \$		Estimated Calendar Days from Scope of Work	110	60												
Associate Engineer II	560 hrs. x	\$ 30.00 /hr = \$	16,800.00	Estimated Working Days/Week from Scope of Work	6	6.5												
				Total Days Scoped for Resident Engineering	100	56												
				Estimated Hours/Day from Scope of Work	12	10												
				7.01 Provide Resident Engineering	1,200	560												\$ 70,800.00
SUBTOTAL	1760 hrs.	SUBTOTAL \$	70,800.00															
Direct Labor Cost		= \$																
Overhead (% of Direct Labor Co	ost)	198.77% = \$																
Total Labor Cost		= \$																
Fixed Fee		= \$																
	SU	BTOTAL PHASE COST \$	243,258.53															
Reimbursables Auto Rental																		
Auto Rental	Day x	\$ 70.00 /Day= \$	-															
Mileage Lodging + Tax & Fees		\$ 0.56 /Mi= \$	6,720.00															
		\$ 110.00 /Day= \$	18,700.00															
Per Diem		\$ 55.00 /Day= \$	9,350.00															
Travel & Airline Costs	Trip x	\$ 500.00 /Trip= \$																
		SUBTOTAL \$	34,770.00															
							1											,
		SUBTOTAL \$	278,028.53	TOT	TALS 1,200	560	0 0	0	0	0	0	0	0	0	0	0	0	\$ 70,800.00

Page 1 of 2 REV 2020.03

				TASK						,	LABOR C	ATEGORY	,		,				
					Survey Manager	Surveyor	Support II	Support III											Phase Item Costs
Labor Category	Total Hours	Billing Rate	Total Cost																
8.0 On-Site Construction Survey	y Phase (Lump Sum)			8.0 On-Site Construction Survey Phase (Lump Sum)															
Survey Manager		\$ 237.07 /hr = \$		8.01 Provide Construction Survey Control	2	52	6	1											\$ 6,521.45
Surveyor		\$ 103.08 /hr = \$		8.02 Provide Project Reference Staking		4	2	1											\$ 714.67
Support II		96.20 /hr = \$	769.60																
Support III	2 hrs. x	\$ 109.95 /hr = \$	219.90																
SUBTOTAL	68 hrs.	SUBTOTAL \$	7,236.12																
Reimbursables																			
Auto Rental		\$ 70.00 /Day= \$	-																
Mileage		\$ 0.56 /Mi= \$	672.00																
Lodging + Tax & Fees		\$ 110.00 /Day= \$	330.00																
Per Diem		\$ 55.00 /Day= \$	330.00																
Travel & Airline Costs		\$ 500.00 /Trip= \$	÷																
Survey Supplies & Equip.		\$ 1,431.00 /Trip= \$	1,431.00																
Survey Field Vehicle	0 Day x	\$ - /Day= \$	÷																
		SUBTOTAL \$	2,763.00																
	,	SUBTOTAL \$	9,999.12	TOT	ALS 2	56	8	2	0	0	0	0	0	0	0	0	0	0	\$ 7,236.12

SUBCONSULTANT 1		
TSI Engineering - Quality Assurance Testing		
	SUBTOTAL \$	27,557.00

			Phase Fee	R	eimbursable Costs		Total Cost
PART B - SPECIAL SERVICES (LUMP SUM)							
5.0 Construction Administration Phase (Lump Sum)		\$	41,800.10	\$	2,340.00	\$	44,140.10
8.0 On-Site Construction Survey Phase (Lump Sum)		\$	7,236.12	\$	2,763.00	\$	9,999.1
6.0 Post Construction Coordination Phase (Lump Sum)		\$	34,743.00	\$	1,198.00	\$	35,941.00
	SUBTOTAL	. \$	83,779.22	\$	6,301.00	\$	90,080.22
PART B - SPECIAL SERVICES (COST PLUS FIXED FEE)							
7.0 On-Site Construction Coordination Phase (Cost Plus Fixed Fee)		\$	243,258.53	\$	34,770.00	\$	278,028.5
	SUBTOTAL	\$	243,258.53	\$	34,770.00	\$	278,028.5
PART B - SPECIAL SERVICES							
TSI Engineering - Quality Assurance Testing						\$	27,557.0
	SUBTOTAL					\$	27,557.0
TOTAL		S	327.037.75	S	41.071.00	S	395,665,7

Page 2 of 2