RS&H Project No. 1010.1976.003 Short Title: APN Runway 1-19 ANG TDZ & BAK-12 CA Services

Work Order No. 3

WORK ORDER

	Date:	
RS&H MICHIGAN, INC., a Michigan corporated work (hereinafter "Work") for the Couterms and conditions of the Agreement for Profess terms and conditions are incorporated herein by re	sional Services dated September 12, 2022, all of w	h the
Project Location: Alpena County Regional Airpor	t, Alpena, Michigan	
Project Description/Scope of Services: Provide C Representative Services for the Runway 1-19 TD2 of work is included. See Exhibit "A" APN Rung Services Scope of Work.	Z & BAK-12 Reconstruction project. A detailed s	scope
Fee: Lump Sum fee in the amount of \$1,134,000 and zero cents)	(One million one hundred thirty-four thousand do	ollars
Schedule: As defined in Exhibit "A" Section V –	Project Schedule	
Deliverables: As defined in Exhibit "A" Section I	V - Deliverables	
Other Considerations: None		
RS&H:	CLIENT:	
RS&H Michigan, Inc.	County of Alpena	
By: Print Name: Patrick T. Frame	By:Print Name:	

Title: President

Title:

Exhibit A APN Runway 1/19 ANG TDZ & BAK-12 Design (Type C Services) Construction Phase Services Scope of Work

Version 1.1 April 24, 2023 County of Alpena Alpena, Michigan

RS&H Project No.: 1010-1976-003

Prepared by RS&H Michigan, Inc. at the direction of Alpena County Regional Airport



I PROJECT DESCRIPTION

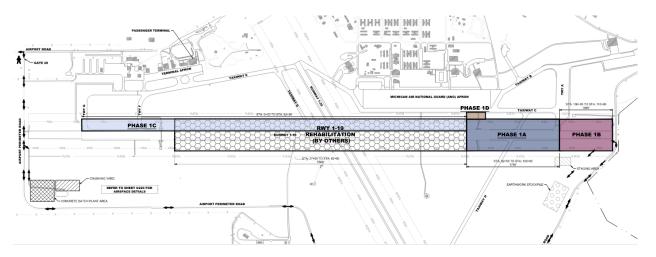
The County of Alpena owns and operates Alpena County Regional Airport (APN). The County of Alpena has selected RS&H Michigan Inc. to provide design and bidding services for the Runway 1/19 ANG TDZ & BAK-12 project, on behalf of the Alpena Combat Readiness and Training Center (CRTC) and the National Guard Bureau (NGB), in support of their training missions at the airfield. The proposed project will reconstruct the first 1,750 feet of Runway 19 (touchdown zone), paved overrun and replace the existing aircraft arresting system to meet FAA / Air National Guard (ANG) requirements. The overall project limits are shown in Figure 1, below.

This project has been designed and bid under a separate scope of work and this scope is only for the construction administration and resident project representative services.

Specific work elements include the following:

- » Rehabilitation of Existing Bituminous Blast Pads / Paved Overruns
- » Reconstruction of Existing Concrete Runway (Last 1,750' of each end)
- » Runway Grade Corrections (Remove Vertical Curves in last ¼ of each RW end)
- » Reconstruction of Existing Bituminous Runway Shoulders
- » Replacement of Existing Aircraft Arresting Systems
- » Replace Existing RW Edge Lighting
- » Modify T/W Connector Tie-ins
- » Safety and Phasing
- » Compliance with ANGETLs (Air National Guard Technical Letters)
- » Compliance with UFCs (Unified Facilities Criteria) where applicable

FIGURE 1:
OVERALL PROJECT LIMITS



II PROJECT TASKS

TASK 1 CONSTRUCTION ADMINISTRATION SERVICES

Task 1.1 Pre-Construction Services & Conference

RS&H will complete services in preparation for the actual commencement of construction. This includes preparation of the Construction Management Plan (CMP) and submittal of the CMP for approval and review of early submittals prior to actual on-site construction observation. (Plan which summarizes all the material testing) RS&H will also attend and facilitate a pre-construction conference at the Airport. RS&H will prepare and distribute an agenda and meeting minutes of the preconstruction conference.

Task 1.2 Contractor Submittal Review

RS&H will review contractors' submittals required by the construction documents, including, but not limited to: shop drawings, test data, samples, materials, equipment, etc. and approve, reject, or otherwise advise on the conformance of such submittals to the requirements of the construction documents. RS&H will maintain a log of all contractor submittals which will include the submittal date, the action taken, and the date returned. It is anticipated that a maximum of 40 submittals (including resubmittals) will be received, reviewed, and responded to.

Task 1.3 Technical Plan Interpretations

RS&H will provide the Airport and the contractor with technical interpretations of the construction documents or any other Requests for Information (RFI) submitted by the contractors. It is anticipated that a maximum of 40 RFI's may be received and responded to.

Task 1.4 Change Orders

RS&H will review and concur with change order scope, costs, and any modifications to the construction schedule. All actions will be coordinated and collaborated with the Airport prior to contractor notification; CRCT will be kept informed regarding any potential change order. RS&H will execute and coordinate all contract change orders through the Airport and ANG for final approval.

Task 1.5 Substitution Review

RS&H will review and recommend for Airport acceptance or rejection any changes, modifications or substitutions proposed by the contractor. Written justification must accompany any recommendation or rejection. ANG will be informed of substitution requests that may have an impact on the airfield and/or military training mission.

Task 1.6 Contractor Pay Requests

RS&H will review contractor applications for payment and supporting data, review the amount owed to the contractor and recommend/approve in writing all payments to contractor in accordance with the contract documents.

Task 1.7 Site Inspections

RS&H will provide periodic on-site review/monitoring of construction materials, finishes and workmanship in conformance with the standards established in the construction documents. RS&H will notify the Airport immediately, verbally and in writing, of any and all observed deviations and/or defects in material, finishes, equipment, systems or workmanship.

Task 1.8 Weekly Progress Meetings

RS&H will prepare for and attend weekly construction progress meetings.

Task 1.9 Review Materials Acceptance Test Results

RS&H will compare test results against the specification requirements and notify the Airport of any concerns. RS&H will provide recommendations as needed to address the concerns.

Task 1.10 Substantial Completion Site Visit and Punchlists

RS&H will participate in one substantial completion site visit and prepare a punch list. RS&H will compile a list of deficient items and advise the Airport and contractor of those items and advise of which items must be corrected in order for the airport to take beneficial occupancy of the project area.

Task 1.11 Prepare Record Drawings and Final Contract Report

RS&H will prepare Record Drawings. These documents will include all field changes recorded and incorporated during the project. RS&H will prepare and submit the Final Contract Report, per County and ANG requirements.

Task 1.12 Warranty Inspections

Prior to the expiration of construction or equipment warranties or guarantees, RS&H will coordinate a site walk with the contractor and the Airport providing an inspection of the facility and providing a report of all observed defects in material, equipment and/or workmanship that are covered under the projects' warranties or guarantees.

Task 1.13 Coordination with Owner

RS&H will coordinate with the Airport all contact or direction given to the Contractor by the Engineer.

Task 1.14 Progress Meeting Minutes

RS&H will prepare meeting minutes for all meetings conducted during this phase and provide a copy of all meeting minutes to the Airport.

Task 1.15 Project Management

RS&H will make monthly progress reports to the Airport during the entire duration of the project and coordinate with the ANG as needed. RS&H will manage the project in a professional manner and will assign qualified individuals or subconsultants to the project. The monthly progress reports will include a written description of each task identified within the contracted scope of services as of the date of the progress report. The progress reports will also include a monthly invoice for professional services.

TASK 2 RESIDENT PROJECT REPRESENTATIVE

Task 2.1 Resident Project Representative Services

RS&H will provide resident project representative services for the project. Specific items will include:

- A. <u>Project Startup</u>: The Resident Project Representative (RPR) will prepare the project for construction startup. The RPR will coordinate with the contractor before and after the preconstruction conference to provide access for the contractor to enter the site to perform surveying, mobilization, and other project elements in preparation of construction beginning. The RPR will develop necessary paperwork, forms, reports, etc. in preparation of construction startup. The RPR will coordinate with the Airport manager to ensure all issues are addressed and properly communicated with the contractor, tenants, FAA, ANG etc. prior to construction startup. The RPR will coordinate with the Airport concerning all Airport, ANG, FAA facilities, NAVAIDS, runway and taxiway lighting circuits and communications cables issues to ensure all electrical related issues are covered and procedures in place to prevent circuits being cut, damaged or otherwise affected prior to construction startup. Coordinate repair of facilities as damage occurs.
- B. <u>Schedules:</u> Review the baseline and all subsequent progress schedules, schedule of Shop Drawing submittals, and schedule of values prepared by the Contractor and consult with the Engineer concerning acceptability.
- C. <u>Conferences and Meetings</u>: Attend meetings with the Contractor, Owner and Engineer such as the preconstruction conference, weekly progress meetings, job conferences and other project related meetings, and prepare and circulate copies of minutes thereof.
- D. <u>Liaison:</u> Serve as the Engineer's liaison with the Contractor, working principally through the Contractor's superintendent and/or project manager and assist in understanding the intent of the Contract Documents. Assist the Engineer in serving as the Owner's liaison with the Contractor when the Contractor's operations affect the Owner's on-site operations.

- E. Review of Work, Inspections and Tests: Perform the following:
 - a. Conduct on-site observations of the Work in progress to assist the Engineer in determining if the Work is, in general, proceeding in accordance with the Contract Documents.
 - b. Report to the Engineer whenever the RPR believes that any Work is unsatisfactory, faulty, or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test, or approval required. Advise the Engineer of Work that the RPR believes should be corrected or rejected, or should be uncovered for observation, or requires special testing, inspection, or approval. Coordinate materials acceptance testing failed results and coordinate retesting.
 - c. Verify that tests, equipment, and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that the Contractor maintains adequate records thereof; and observe, record, and report to the Engineer appropriate details relative to the test procedures and startups.
 - d. Monitor the contractor's activities as they relate to the Construction Safety Phasing Plan (CSPP) and the Safety Plan Compliance Document (SPCD). Immediately inform the contractor, Engineer, and the Airport when the contractor is in non-compliance with the standards and procedures contained in these documents, so that appropriate actions can be taken.
 - e. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of those inspections, and provide written reports of said visits to the Engineer.
 - f. Field inspect Change Order work to verify completion in accordance with contract documents.
- F. <u>Interpretation of Contract Documents:</u> Report to the Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to the Contractor clarifications and interpretations as issued by the Engineer.
- G. <u>Contract Modifications:</u> Consider and evaluate the Contractor's suggestions for modifications in Drawings or Specifications and submit a report with the RPR's recommendations to the Engineer. Transmit to the Contractor decisions as approved by the Airport.
- H. Project Records: Perform the following:
 - a. Maintain, at the job site, orderly files for correspondence, reports of job conferences, Shop Drawings, samples, and reproductions of original Contract Documents incorporating Addenda, Change Orders, additional Drawings issued subsequent to the execution of the Contract, the Engineer's clarifications and interpretations of the Contract Documents, progress reports, test reports, and other Project related documents.
 - b. Keep a log-book, recording the Contractor hours on the job site, weather conditions, data relative to questions, Change Orders or changed conditions, list

- of job site visitors, equipment on the site, daily activities, decisions, observations in general, any accident incidents, and specific observations in more detail as in the case of observing test procedures and send copies to the Engineer.
- c. Record names, addresses and telephone numbers of all the contractors, subcontractors and major suppliers of materials and equipment.
- d. Record and monitor installed work for compiling and submitting bimonthly estimates for progress payments to contractors.
- e. Develop and maintain a materials test record book.

I. <u>Project Reports:</u> Perform the following:

- a. Furnish the Airport and Engineer ANG weekly construction progress reports as required of progress of the Work.
- b. Consult with the Airport and Engineer in advance of scheduled major tests, inspections or start of important phases of the Work.
- c. Draft proposed Change Orders, obtaining backup material from the Contractor, and recommend Change Orders to the Airport.
- d. Report immediately to the Airport and Engineer upon the occurrence of any accident.
- J. <u>Certificates, Maintenance and Operation Manuals</u>: During the course of the Work, verify that certificates, maintenance and operation manuals, and other data required to be assembled and furnished by the Contractor, are applicable to the items actually installed and in accordance with the Contract Documents. RPR will have this material delivered to the Engineer for review and forwarding to the Airport prior to final payment for the Work.

K. <u>Project Closeout:</u> Perform the following:

- a. Before the Airport issues a Certificate of Substantial Completion, conduct a prefinal inspection and submit to the Contractor and Airport a punch list of observed items requiring completion or correction.
- b. Conduct a final inspection in the company of the Engineer, the Airport and the Contractor and prepare a final punch list of items to be completed or corrected.
- c. Observe that all items on the final punch list have been completed or corrected and make recommendations to the Engineer concerning acceptance.

TASK 3 MATERIALS ACCEPTANCE TESTING

RS&H will provide materials acceptance testing for the project. Specific items will include:

- » Bituminous surface and base course testing
- » Concrete Testing
- » Structural concrete testing
- » Aggregate Testing
- » Density Testing

III MEETINGS AND PRESENTATIONS

RS&H will prepare for and attend the following meetings:

- » Pre-Construction Meeting
- » Construction Progress Meetings (25)
- » Substantial Completion Site Visit

IV DELIVERABLES

RS&H will provide the following deliverables:

- » Record Drawings
- » Final Contract Report

V PROJECT SCHEDULE

RS&H will provide the above referenced services within the following schedule (or as mutually agreed upon by the Airport and RS&H).

- Task 1 Construction Administration within 175 Calendar Days of Construction NTP, then as required to complete closeout activities. Should the Construction Duration exceed 175 Calendar Days, additional services may be required to continue providing such services outlined under Task 1.
- Task 2 Resident Project Representative Services within 175 Calendar Days of Construction NTP. Should the Construction Duration exceed 175 Calendar Days, additional services may be required to continue providing such services outlined under Task 2.

VI ASSUMPTIONS AND EXCLUSIONS

The following items are excluded from this Scope of Work:

» RS&H will only perform services/work related in any way to PFAS chemicals or substances possibly containing PFAS chemicals (including but not limited to sampling, handling, and remediating) to the extent the County of Alpena specifically directs, in writing, to RS&H to perform such services/work. RS&H shall not be liable for the nonperformance of such services/work.

VII PROFESSIONAL SERVICES FEE AND FEE TYPE

RS&H will provide the above referenced services for a Fixed Lump Sum Fee of \$1,134,000. See Exhibit B for a breakdown of costs.



Alpena County Regional Airport

Exhibit B

Runway 1-19 Rehabilitation (ANG) - Construction Phase Services

				1	1	1		
COORE / TACK TITLE	PROJECT	PROJECT	PROJECT	STAFF		ELECTRICAL	SUPPORT	TOTAL
SCOPE / TASK TITLE BASIC SERVICES (LUMP SUM)	OFFICER	MANAGER	ENGINEER	ENGINEER	REP	ENGINEER	STAFF	TOTAL
Construction Phase Services								
Task 1.1 Pre-Construction Conference		16	36	16	20	16	2	106
Task 1.2 Contractor Submittal Review		80	80	80		32		272
Task 1.3 Technical Plan Interpretations		20	30	30		32		112
Task 1.4 Change Orders		30	40	30			10	110
Task 1.5 Substitution Review		10	20	20		10	10	70
Task 1.6 Contractor Pay Requests		20	40	20				80
Task 1.7 Site Inspections (1 per week for 26 weeks)		375	375			32		782
Task 1.8 Weekly Progress Meetings		60	80					140
Task 1.9 Review Materials Acceptance Test Results		40	80	40				160
Task 1.10 Substantial Completion Site Visit and Punchlists		16	20	15		16		67
Task 1.11 Prepare Record Drawings and Final Contract Report		10	80	80				170
Task 1.12 Warranty Inspections		16	16	16				48
Task 1.13 Coordination with Owner	10	80	40	40				170
Task 1.14 Progress Meeting Minutes		10		20			10	40
Task 1.15 Project Management	50	100	20				20	190
Task 2.1 Resident Project Representative Services (25 weeks (1500					1500
Task 2.1 Resident Project Representative Services (8 weeks @	60 hrs/weel	()			480			480
TOTAL HOURS	60	883	2457	407	500	138	52	4,497
RATE	\$110.00	\$75.00	\$60.00	\$34.00	\$38.00	\$92.00	\$34.00	
TOTAL DIRECT LABOR \$	\$6,600	\$66,225	\$147,420	\$13,838	\$19,000	\$12,696	\$1,768	\$267,547
OVERHEAD @	176.95%							\$473,424
PROFIT @	11%							\$81,507
TOTAL BURDENED LABOR @	3.07							\$822,478
OTHER DIRECT NON-SALARY COSTS								, , ,
OTHER BIREOT NON-DALART GOOTS								
SPECIALTY SUBCONSULTANTS								
Task 2 - Resident Project Representative	Huron Engi	neering (12	hours/day 6	days/week	25 weeks)			\$171,000
Task 3 - Material Acceptance Testing	Huron Engineering (12 hours/day 6 days/week 25 weeks) Huron Engineering					\$65,000		
TOTAL SPECIALTY SUBCONSULTANTS	Haron Engineening						\$236,000	
TOTAL SPECIALTY SUBCONSULTANTS								\$230,000
					Mahiala			
RESIDENT PROJECT REPRESENTATIVE				Airfora @	Vehicle	Dor Diam C	Lodging @	
NESIDENT PROJECT REPRESENTATIVE	# Davis	#\\\ :-	# Months	Airfare @ \$800	Rental @ \$1,200	Per Diem @	Lodging @ \$2,940	
On a two offices Webish	# Days	# Weeks	# Months			\$59		# 0.000
Construction Vehicle	0	0	8			\$0	\$0	\$9,600
Lodging	0 255	0	8			\$0	\$23,520	\$23,520
Meals	255	0	0	\$0	\$0	\$15,045	\$0	\$15,045
TOTAL RESIDENT PROJECT REPRESENTATIVE								\$48,165
TRAVEL				Airfare @	Car @	Per Diem @		
	# People	# Days		\$800	\$65	\$59.00	\$98	
Pre-Construction Meeting	4	2		\$2,400		\$472	\$392	\$3,784
Construction Site Visits	2	26		\$4,800		\$3,068	\$5,096	\$16,344
Final Inspection	4	2		\$2,400		\$472	\$392	\$3,784
Warranty Inspection	2	2		\$2,400	\$260	\$236	\$196	\$3,092
								\$27,004
TOTAL ODC's								\$311,169
Total Proposed Fee for: Construction Phase Services \$1,1							\$1,134,000	
								, , , , -,



Alpena, MI 49707 Ph: 989-356-6375

3205 US-23 South

Fax: 989-354-8286

March 10, 2023

Mr. David Joye, P.E., Aviation Engineer RS&H G-3101 W. Bristol Road, Suite 300 Flint, MI 48507

Re: Runway 1-19 Rehabilitation Alpena County Regional Airport Inspection and Testing Services

Dear David,

Huron Engineering and Surveying, Inc. (Huron) is pleased to offer this response to your request for an anticipated fee for an inspector and a material testing technician for Phase IA & IB.

After our discussions at the pre-bid meeting in Alpena we understand that you anticipate needing an inspector on site for this project for roughly 175 calendar days to assist and help oversee the project. In addition, when concrete paving begins there is most likely a need for an additional testing technician to ensure that all required testing is completed.

This proposal is based on the following assumptions:

- 1. An on-site inspector for 72 hours per week for 25 weeks, 175 calendar days, we understand that this may fluctuate. This inspector will have construction, inspection, and testing experience.
- 2. An additional testing technician will be provided on-site as needed to keep up with concrete testing needs during paving operations. We anticipated this technician to be on-site 10 hours per day for an assumed 60 days. Per the specifications, concrete testing will be completed every 400 to 600 cyd of placement.
- 3. Huron is an AASHTO accredited lab for the testing services required by this project.
- 4. A senior technician will be provided for HMA plant testing for an estimated 5 days of paving at 14 hours per day.

Based on the above assumptions, the estimated fees for this project are as follows:

Person	Hours	Billing Rate	Cost
On-Site Inspector	1800	\$95.00	\$171,000
Testing Technician	600	\$80.00	\$48,000
Plant Testing Technician	70	\$80.00	\$5,600
Beam Flexural Testing	190 Beams	\$60.00 Each	\$11,400
	Total Estimated	\$236,000	

We appreciate the opportunity to submit this proposal for testing services. We look forward to working with you on this project and are available to provide Civil Engineering and Environmental Services should the need arise. If you have any questions, please feel free to contact me.

Sincerely,

Huron Engineering and Surveying, Inc.

Mark V. Herman, P.S.

President

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