

April 4, 2025

Matt Wegwerth, Public Works Director / City Engineer City of Grand Rapids 420 N. Pokegama Ave.
Grand Rapids, MN 55744

Via Email: mwegwerth@grandrapidsmn.gov

Subject: IFE for Consultant Design Engineering Services

Taxiway A - Phase 2 Reconstruction (North Portion Between Taxiway A1 and A3)

Grand Rapids / Itasca County Airport, Grand Rapids, Minnesota

Dear Mr. Wegwerth:

Thank you for the opportunity to serve the Grand Rapids / Itasca County Airport. Becher Hoppe has completed an Independent Fee Estimate for the subject project per the Agreement dated March 11, 2025. Deliverables include this letter and attachments.

Becher-Hoppe Associates, Inc. was not considered in competition for these Professional Services and has no interest in the design of these facilities. Becher-Hoppe Associates, Inc. has been actively involved in the design and construction of aviation facilities in the State of Wisconsin for over 70 years and is familiar with the processes and requirements of the Federal Aviation Administration regarding grant funding and the associated Sponsor Assurances.

Becher-Hoppe has evaluated the consultant's Scope of Work for the subject project, included as Attachment A. We have estimated the level of effort by employee labor classification for each scope task and estimated a fee range for the project scope based on the estimated regional consultant wage rates, and consultant overhead rate as provided. Those estimates are included on spreadsheet Attachment B.

The estimated range of consultant fees for the subject project is \$165,400 to \$202,200.

If you have any questions, please contact me at your convenience.

Sincerely,

Randy Van Natta, PE, FACEC

Senior Consultant

Attachments: Attachment A – Consultant's Scope of Work

Attachment B – Estimated Effort and Fee Spreadsheet

ATTACHMENT A

Grand Rapids – Itasca County Airport (GPZ) Taxiway A (North) Reconstruction Phase 2– Design Scope of Work

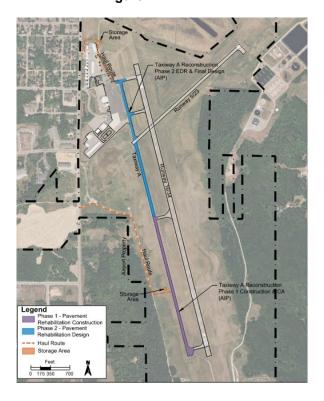
(Engineer's Design Report, Final Design, Plans and Specifications, Bidding, and Closeout)

General – The existing taxiway is at the end of its useful life and the 2025 project will consist of the design for the reconstruction of the north end of the taxiway, with bidding proposed in 2026 and construction proposed to occur in 2027. A planning study was conducted on the north half of the taxiway to evaluate current design standards, specifically direct access from the apron at Taxiway A1 and the intersection of Taxiway A and Runway 5/23, the outcome of this study will be incorporated into the design.

The 2022 PCI for Parallel Taxiway A ranges from 61 to 50. The proposed project would consist of removing the existing bituminous pavement, removing non-suitable aggregate base material, evaluating and repairing subsurface failure, making necessary grade adjustments, and installing new aggregate base and bituminous pavement. The installation of draintile is anticipated along the taxiway edges. New LED taxiway edge lighting, including base cans, conduit, wire, and airfield guidance signs will also be included.

The width of the parallel taxiway is being evaluated by the FAA and eligibility of the pavement will be determined during the design process. It is anticipated that the pavement width will be reduced from 50' wide to 35' wide, with fillets constructed at the intersections.

Proposed project limits are included in Figure 1.



This work scope includes the engineer's design report, final design, plans and specifications development, bidding, contract award, and Federal closeout report. (construction observation and administration, and construction closeout are excluded.)

The project schedule includes designing throughout 2025 and bidding in Spring 2026.

Project Deliverables – The project deliverables of this scope include the following:

- 1. Project formulation
- 2. Engineer's Design Report for North Taxiway A Reconstruction and environmental review
- 3. Plan drawings for Taxiway A North Reconstruction
- 4. Construction bidding documents for Taxiway A North Reconstruction
- 5. FAA construction plans and specifications review
- 6. Bidding and Contract Award for Taxiway A North Reconstruction
- 7. Project management
- **8.** Federal project closeout.

This work scope includes:

Work Element 1: Project Formulation

- Task 1.1 Scoping, Review, and Coordination Short Elliott Hendrickson (SEH and/or Consultant) will coordinate with the City of Grand Rapids and the Grand Rapids-Itasca County Airport (GPZ) (sponsor) to develop the appropriate scope of work. Additional coordination will include task definition and establishment of project goals and objectives. The scoping effort includes five (5) meetings and meeting preparation effort to determine approved FAA alignment. Each meeting will anticipate 4 hours for the meeting and meeting prep and attended by a Principal, Project Manager, and Project Engineer or Planner. The scope of work will be presented to FAA and MnDOT Office of Aeronautics for review and will be updated based on input received.
- **Task 1.2 Project Formulation –** SEH will complete the project and grant pre-application documentation, environmental review submittals, cost breakdowns and eligibility determinations for the approved scope of work.

Work Element 2: Engineer's Design Report

- **Task 2.1 General Scope of Work** SEH will develop a brief narrative of the work scope, delineation of eligible/ineligible work items, any unique or unusual situations, project justification, and historical background on the proposed project.
- **Task 2.2 Photographs** SEH will coordinate with GPZ staff to capture photographs of representative areas of existing site conditions of the pavement. The photographs will be included within the report.
- **Task 2.3 Applicable AIP Standards** All applicable AIP standards will be referenced in the report by FAA Advisory Circulars. Specific values for design standards as required for Taxiway A will be displayed in table format for airplane design group, approach category, runway and taxiway safety area and object free area dimensions, geometric values and surface gradients.
- **Task 2.4 Airport Operational Safety Considerations –** SEH will develop a preliminary Construction Safety and Phasing Plan (CSPP) to evaluate proposed phasing and sequencing, construction limits, haul routes, contractor staging areas, and anticipated

- impacts to airport users. All airport facilities, including approach procedures and navigational aids, will be evaluated for potential impacts due to construction.
- **Task 2.5 Pavement Design –** SEH will utilize the geotechnical evaluation and report, including pavement cores and soil borings to evaluate the current pavement condition and underlying soils. The resulting pavement evaluation and identification of soil characteristics will be used with the fleet mix to develop a proposed pavement design thickness and alternatives.
 - In addition, the master plan identified the design aircraft for pavement design. GPZ will provide operations data for historical operations and will facilitate discussions with airport tenants and users pertaining to projected future operations.
- **Task 2.6 Drainage Design –** SEH will evaluate the existing drainage and subsurface drainage systems. Exploration of the drainage area and stormwater runoff calculations will be determined to confirm current drainage and stormwater treatment features. Design of pavement edge drains will be included.
- **Task 2.7 Airfield Lighting and Signage –** Design of Airfield lighting will be included in the report. Lighting to be included is LED taxiway edge lighting and airfield signage.
- Task 2.8 Navigational Aids NAVAIDs will not be included in the taxiway project.
- **Task 2.9 Pavement Marking –** SEH will develop a preliminary pavement marking plan and details to be included as part of the report.
- Task 2.10 Environmental Considerations SEH will complete a request for environmental Categorical Exclusion (CATEX) for the Taxiway A project. It is assumed a documented CATEX will be required. SEH will also identify necessary permits, including but not limited to NPDES and developing a Stormwater Pollution Prevention Plan (SWPPP) in concert with preliminary erosion control plans. No field work will be completed with this portion of the project.
- **Task 2.11 Existing Utilities –** SEH will develop a drawing that identifies and delineates existing underground utilities in and adjacent to the area of Taxiway A.
- **Task 2.12 Miscellaneous Work Items –** SEH will provide a narrative to address other work components of the project, such as turf establishment, site access, and other related work items.
- **Task 2.13 Life Cycle Cost Analysis –** A Life Cycle Cost Analysis will not be included with this project.
- **Task 2.14 Modification to AIP Design Standards –** No modifications to design standards are anticipated, but this task will explore all preliminary design to confirm that no modifications to design standards will be requested.
- **Task 2.15 AIP Non-eligible Work Items –** Any potential non-eligible work items will be identified. If non-eligible work items are identified, the process for separating these work components from eligible components will be addressed.
- **Task 2.16 Disadvantaged Business Enterprise (DBE) –** The current status of the Sponsor's DBE program will be established, together with project goals for the Taxiway A Reconstruction project.
- **Task 2.17 Project Schedule –** SEH will develop a schedule and associated chart to identify the project schedule specific to the Taxiway A Reconstruction, and milestones during the design and bidding process.

- **Task 2.18 Engineer's Estimate of Probable Cost –** SEH to provide an itemized summary of the engineer's estimate of probable construction costs. Any ineligible work components will be called out separately.
- **Task 2.19 Preliminary Project Budget –** SEH will develop a preliminary project budget that will include anticipated engineering costs, construction costs, and administrative costs. Potential funding sources and prorations will also be included.

Work Element 3: Plan Drawings for Taxiway A North Reconstruction

Final design and plan drawings for Taxiway A (North), will be prepared in accordance with federal and state guidelines. FAA Advisory Circular (AC) 150/5300-13B, *Airport Design*, will be utilized in the development of the plan set. Other applicable ACs, FAA Orders, Regulations and Policy Memorandums will be used as needed. Specific tasks included with this work element include:

- Task 3.1 Environmental Coordination and Permits SEH will refine the draft
 Stormwater Pollution Prevention Plan (SWPPP) and erosion control plans completed as
 part of the Engineer's Design Report. Additionally, the scope of work includes completion
 and/or coordination of the following permits:
 - MPCA NPDES permit application

Task 3.2 - Survey

- **Task 3.2.1 Topographic Survey -** SEH completed a comprehensive field survey of topography for the full length of Taxiway A as well as tie-in information for the adjacent taxiway connectors and ditch networks during the Phase 1 design. Additional survey efforts are anticipated for Phase 2 to obtain more information, one day of surveying is expected for the additional data collection.
- Task 3.3 Construction Safety and Phasing Plan Development SEH will refine and update the preliminary Construction Safety and Phasing Plan (CSPP) that was developed as part of the Engineer's Design Report. SEH will meet with GPZ staff, airfield tenants and users to evaluate potential risks and determine appropriate mitigation tactics. The preliminary CSPP will be enhanced to determine final phasing and sequencing, construction limits, haul routes, contractor staging areas, and anticipated impacts to airport users and airfield facilities. A final CSPP will be uploaded to OE/AAA for FAA airspace review.
- **Task 3.4 Detailed Final Design –** Detailed final design to include establishment of final plan/profile, grading analysis, final pavement design, electrical design, surface and subsurface drainage design, including draintile and other related project elements.
- **Task 3.5 Construction Plan Sheets –** Specific plan sheets to be developed and included in the plan set are as follows:
 - Title Sheet
 - Construction Safety Plan
 - Construction Phasing Plan
 - Statement of Estimated Quantities
 - Details and Construction Notes
 - Utility Locations Plan
 - Typical Section(s)
 - Removal Plan
 - Erosion Control Plan and Details

- Topography and Draintile Design
- Alignment Plan
- · Pavement Marking Plan and Details
- Standard Plates
- Electrical Layout and Details, including taxiway edge lighting and signage
- **Task 3.6 Quality Control Site Visit –** SEH will conduct a quality control site visit during final design to verify base maps, utility locations, light locations, grades, and other relevant site features to ensure conformance to bidding documents.

Work Element 4: Construction Bidding Documents for Taxiway A North Reconstruction

Elements of the Construction Bidding Documents will be prepared in accordance with FAA Advisory Circulars (AC) 150/5300-13B, *Airport Design* and other applicable AC's, Orders, Regulations and Policy Memorandums. Specific tasks included with this work element include:

- **Task 4.1 Construction Bidding Documents** A bid proposal project manual will be prepared that will consist of a table of contents, advertisement for bids, proposal documents, schedule of prices, State and Federal requirements, wage rates, technical specifications, and special provisions.
- **Task 4.2 Construction Management Plan** A Construction Management Plan (CMP) and reporting program will be prepared per FAA guidelines and requirements.

Work Element 5: FAA Construction Plans and Specifications Full Review

- **Task 5.1 FAA Coordination** SEH will coordinate with the FAA on submitting a 90% complete set of construction plans and specifications for FAA review.
- **Task 5.2 Completion of Appendix 3, "Full Review Guide"** SEH will complete Appendix 3 "Construction Plans and Specifications "Full Review Guide" and submit the document with the 90% plans and specifications
- **Task 5.3 Review and Address FAA Comments** SEH will review and address all FAA comments on the plans and specifications and develop documentation to track any comments received and how those comments were addressed.

Work Element 6: Bidding and Award

This task includes publishing the bidding documents, obtaining bids, and providing a recommendation for the award of the project.

- **Task 6.1 Bidding** –This task includes responding to questions from perspective bidders and issuing addenda as needed. Assisting the sponsor with obtaining construction bids for the project, including arranging for bid advertisement, attending bid opening and tabulating bid results.
- **Task 6.2 Award** –This task includes providing a recommendation of award of contractor to the Sponsor and assisting with requesting an FAA and State grant for the project.

Work Element 7: Project Management

This task includes the overall project management of Work Elements 1 through 7 noted above. Project Management includes administration of the project, design team meetings, agency and Sponsor meetings, airfield user and tenant outreach meetings, and related project administration tasks.

- **Task 7.1 Design Team Meetings** –This task includes weekly meetings by the design team to discuss project elements, schedule, issues, and provide coordination between team members. It is anticipated to have 8 meetings for one hour each.
- **Task 7.2 Agency Meetings** –This task includes meetings by the design team, MnDOT Office of Aeronautics, FAA ADO, GPZ staff, and other individuals and agencies as needed, to discuss the project design development, schedule, and any other related items. It is anticipated to have 2 meetings for three hours each.
- Task 7.3 Public Involvement Meetings and Notifications This task includes specific meetings with airfield businesses, airfield tenants, terminal tenants, City meetings, and other critical stakeholders to provide updates on the status of the project and address any issues or concerns. This task also includes coordination with MnDOT regarding the project schedule, any impacts to MnDOT owned equipment, and other coordination items. Project mailing and notifications will be sent out to the stakeholders.
- **Task 7.4 Overall Project Management** –This task includes project coordination and administration, including Sponsor and agency communication, internal meetings, subconsultant oversight, progress reports, budget updates and monthly invoices.

Work Element 8: Closeout Report

Task 8.1 – Federal Closeout Report – The Consultant will prepare a "Project Closeout Report" as required by the FAA and using "Sponsors Guide to Quality Project Closeout Report Requirements" (FAA Publication). This effort will be specific for the design portion of the project.

Expenses:

1. <u>BARR Engineering</u> Electrical and circuitry design will be performed by Barr Engineering, of Minneapolis, Minnesota.

ATTACHMENT B ESTIMATED FEES AND EXPENSES TAXIWAY A (NORTH) RECONSTRUCTION PHASE 2 - DESIGN GRAND RAPIDS-ITASCA COUNTY AIRPORT (GPZ) GRAND RAPIDS, MINNESOTA

Task No. Proiec	Task Description	Project Manager	Project Engineer	Aviation Planner	Senior Technician	Survey Crew Chief	Instrument Operator	Environmental Scientist	Admin Technicia
	Scoping, Review, and Coordination	20	20	16	la de la companya de				4
	Project Formulation	8	16	8					2
	eer's Design Report	1							
2.1	General Scope of Work Photographs	1	2						
	Applicable AIP Standards		2						
	Airport Operational Safety Considerations	4	10	4	12				
	Pavement Design	1	8	4	2				
2.6	Drainage Design	1	8		8				
2.7	Airfield Lighting and Signage	1	8		8			-	
2.8 2.9	Navigational Aids Pavement Marking		2		2				
	Environmental Considerations	1			4			24	
	Existing Utilities	•	2		4				
	Miscellaneous Work Items		2						
	Life Cycle Cost Analysis								
	Modification to AIP Design Standards	1	2						
	AIP Non-eligible Work Items		1						
	Disadvantaged Business Enterprise (DBE)	1	4						2
	Project Schedule Engineer's Estimate of Probable Cost	2	8		4				
	Preliminary Project Budget	2	2		4				
	Drawings for Taxiway A South Reconstruction								
	Environmental Coordination and Permits	1	12		4				
	MPCA NPDES/SWPPP Permit				4			10	
3.2	Survey								
	Topographic Survey				4	8	8		
3.3	Construction Safety and Phasing Plan Development	4	24	4	16				
3.4	Detailed Final Design	8	40		16				
3.5	Construction Plan Sheets								
	Title Sheet		1		4 8				
	Construction Safety Plan Construction Phasing Plans		1		8				
	Statement of Estimated Quantities				4				
	Details and Construction Notes	1	8		16				
	Utility Locations Plan		2		12				
	Typical Section(s)		4		16				
	Removal Plan		2		8				
	Erosion Control Plan and Details		2		12				
	Topography and Draintile Drawings		4		16				
	Alignment Plan Pavement Marking Plan and Details		1		4 8				
	Standard Plates		1		4				
	Electrical Layout and Details	2	16		24				
3.6	Quality Control Site Visit	12	12						
	ruction Bidding Documents for Taxiway A South Reconstruction								
4.1	Construction Bidding Documents	12	24						4
	Construction Management Plan (CMP) Construction Plans and Specifications Full Review	2	16						
	FAA Coordination	8	4		4			1	
	Completion of Appendix 3	2	8						
5.3	Review and Address FAA Comments	8	12		12				
ddin	g and Award								
	Bidding	8	16						2
	Award	4	8						2
	t Management		40		0				
7.1 7.2	Design Team Meetings Agency Meetings	8	12 6	8	8			8	
7.3	Public Involvement Meetings and Notifications	12	12	12					4
7.4	Overall Project Management	30	12	12					-
	out Report								
3.1	Federal Closeout Report	2	12						
	Total hours per labor category	175	367	62	256	8	8	42	20
TIM	IATE OF LABOR COSTS:								
	Labor Category			Hours	Rate	Extension			
	Project Manager			175	\$72.00	\$12,600.00			
	Project Engineer			367	\$52.00	\$19,084.00			
	Aviation Planner			62	\$58.00	\$3,596.00			
				256	\$46.00	\$11,776.00			
	Senior Technician			8	\$44.00	\$352.00 \$304.00			
	Senior Technician Survey Crew Chief			^					
	Senior Technician Survey Crew Chief Instrument Operator			8 42	\$38.00 \$48.00				
	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist			42	\$48.00	\$2,016.00			
	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician			42 20		\$2,016.00 \$700.00			
	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs:			42	\$48.00	\$2,016.00 \$700.00 \$50,428.00			
	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs: Direct Salary Costs plus Overhead (191%)			42 20	\$48.00	\$2,016.00 \$700.00 \$50,428.00 \$96,357.82			
	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs:			42 20	\$48.00	\$2,016.00 \$700.00 \$50,428.00			
	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs: Direct Salary Costs plus Overhead (191%)			42 20	\$48.00	\$2,016.00 \$700.00 \$50,428.00 \$96,357.82			
>T18*	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs: Direct Salary Costs plus Overhead (191%) Total Labor Costs Fixed Fee on Labor Costs (15%)			42 20	\$48.00	\$2,016.00 \$700.00 \$50,428.00 \$96,357.82 \$146,785.82			
STIM	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs: Direct Salary Costs plus Overhead (191%) Total Labor Costs Fixed Fee on Labor Costs (15%) IATE OF EXPENSES:			42 20 938	\$48.00 \$35.00	\$2,016.00 \$700.00 \$50,428.00 \$96,357.82 \$146,785.82 \$22,017.87			
STIM	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs: Direct Salary Costs plus Overhead (191%) Total Labor Costs Fixed Fee on Labor Costs (15%) IATE OF EXPENSES: Direct Expenses			42 20 938 Quantity	\$48.00 \$35.00 •	\$2,016.00 \$700.00 \$50,428.00 \$96,357.82 \$146,785.82 \$22,017.87			
STIM	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs: Direct Salary Costs plus Overhead (191%) Total Labor Costs Fixed Fee on Labor Costs (15%) ATE OF EXPENSES: Direct Expenses BARR Electrical Enginnering			42 20 938 Quantity	\$48.00 \$35.00 Rate \$6,500.00	\$2,016.00 \$700.00 \$50,428.00 \$96,357.82 \$146,785.82 \$22,017.87 Extension \$6,500.00			
STIM	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs: Direct Salary Costs plus Overhead (191%) Total Labor Costs Fixed Fee on Labor Costs (15%) IATE OF EXPENSES: Direct Spenses BARR Electrical Enginnering Computer Charge Survey Equipment (Total Station)			42 20 938 Quantity 1 938 8	\$48.00 \$35.00 Rate \$6,500.00 \$6.00 \$45.00	\$2,016.00 \$700.00 \$50,428.00 \$96,357.82 \$146,785.82 \$22,017.87 Extension \$6,500.00 \$5,628.00 \$360.00			
STIM	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs: Direct Salary Costs plus Overhead (191%) Total Labor Costs Fixed Fee on Labor Costs (15%) IATE OF EXPENSES: Direct Expenses BARR Electrical Engineering Computer Charge Survey Equipment (Total Station) Survey Equipment (Total Station)			42 20 938 Quantity 1 938 8 8	\$48.00 \$35.00 Rate \$6,500.00 \$6.00 \$45.00 \$45.00	\$2,016.00 \$700.00 \$50,428.00 \$96,357.82 \$146,785.82 \$22,017.87 Extension \$6,500.00 \$5,628.00 \$360.00			
STIM	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs: Direct Salary Costs plus Overhead (191%) Total Labor Costs Fixed Fee on Labor Costs (15%) IATE OF EXPENSES: Direct Expenses BARR Electrical Enginnering Computer Charge Survey Equipment (Total Station) Survey Equipment (GPS) Survey Van			42 20 938 Quantity 1 938 8 8 8	\$48.00 \$35.00 Rate \$6,500.00 \$6.00 \$45.00 \$45.00 \$7.00	\$2,016.00 \$700.00 \$50,428.00 \$96,357.82 \$146,785.82 \$22,017.87 Extension \$6,500.00 \$5,628.00 \$360.00 \$360.00 \$56.00			
STIM	Senior Technician Survey Crew Chief Instrument Operator Environmental Scientist Admin Technician Total Direct Labor Costs: Direct Salary Costs plus Overhead (191%) Total Labor Costs Fixed Fee on Labor Costs (15%) IATE OF EXPENSES: Direct Expenses BARR Electrical Engineering Computer Charge Survey Equipment (Total Station) Survey Equipment (Total Station)			42 20 938 Quantity 1 938 8 8	\$48.00 \$35.00 Rate \$6,500.00 \$6.00 \$45.00 \$45.00	\$2,016.00 \$700.00 \$50,428.00 \$96,357.82 \$146,785.82 \$22,017.87 Extension \$6,500.00 \$5,628.00 \$360.00			

Estimated Fee Range = \$165,400 TO \$202,200

\$183,757.69

\$183,800

Estimated Total

SUMMARY:
Total Labor Costs + Expenses + Fixed Fee