CENTRAL WISCONSIN JOINT AIRPORT BOARD MEETING AGENDA

Conference Room B – East Terminal Upper Level, Mosinee, Wisconsin

January 9, 2024 - 8:00 a.m.

2022-2024 Board Members: Chair Dave Ladick - Portage County, Vice Chair Chris Dickinson - Marathon County, Julie Morrow - Portage County, Becky Buch - Marathon County, Tom Seubert - Marathon County, Lon Krogwold - Portage County, Kurt Kluck - Marathon County.

Mission Statement: *Provide premier access to the world through aviation and be a catalyst for economic growth in our communities.* ***Vision Statement:*** *To be the airport of choice for central and northern Wisconsin.*

The monthly meeting of the Central Wisconsin Joint Airport Board will have the option for members and the public to call-in via telephone conference. Airport Board members and the public may join the meeting by calling 1-469-480-4192 and enter Conference ID 586 086 871#. The conference line will be open to calls five (5) minutes prior to the meeting start time listed above.

1) Call to Order by Chair Ladick at 8:00 a.m.
   a) Pledge of Allegiance

2) Approval of Minutes of the December 12, 2023 Board Meeting

3) Public Comment Period: 15-minute time limit

4) Review and Possible Action on Five Whiskey Papa, LLC Hangar Lease Comments

5) Review and Possible Action on FAA Nav Aid Memorandum of Agreement No. 697DCM-22-L-00058

6) Review and Possible Action on Transient Hangar Project and Design Contract

7) Staff Reports
   a) Director Report
      i) Air Service Update
      ii) Statistical Report
      iii) Flight Schedule
      iv) Legislative Update

   b) Financial Reports
      i) Revenues and Expenses
      ii) Budget Comparison

   c) Operations and Project Reports
      i) Update on Terminal Area Master Plan
      ii) Update on Runway Shift Project
      iii) Update on ATC Tower Project
      iv) Update on Airport Operations

   d) General Aviation Updates – Central Wisconsin Aviation

8) Adjournment

9) Next Scheduled Meeting Date: February 13, 2024 at 8:00 a.m.

Any person planning to attend this meeting who needs some type of special accommodation to participate should call the County Clerk's Office at 715-261-1500 or e-mail countyclerk@co.marathon.wi.us one business day before the meeting.

CENTRAL WISCONSIN JOINT AIRPORT BOARD MEETING MINUTES

CENTRAL WISCONSIN AIRPORT TERMINAL

Conference Room B – East Terminal Upper Level, Mosinee, Wisconsin

December 12, 2023 - 8:00 a.m.

Airport Board:	Dave Ladick, Chair	Chris Dickinson, Vice Chair – via phone
	Lonnie Krogwold	Kurt Kluck
	Becky Buch	Julie Morrow – Excused
	Thomas Seubert – Absent	
Staff:	Brian Grefe, Airport Director	Mark Cihlar, Assistant Airport Director
	Julie Ulrick, Badging Coordinator	Dave Drozd, Finance Director
	James Fredericksen, Ops & Mnt Supervisor	Jeffrey Woodward, OMT
Visitors:	Karl Kemper, Becher Hoppe	Rick Miller, Central Wisconsin Aviation
	Evan Barrett, Mead & Hunt	Colleen Bosold, Mead & Hunt
	Jen Wolchansky, Mead & Hunt – via phone	Stephanie Nikko, Mead & Hunt – via phone
	Joakim Osthus, Mead & Hunt – via phone	
Handouts:	October and November Statistical Reports	

Call to Order: Meeting called to order by Chair Ladick at 8:00 a.m.

Approval of Minutes: ***Motion by Kluck, second by Krogwold to approve the minutes of the November 14, 2023 board meeting. Motion carried unanimously.***

Public Comment Period: None.

Terminal Area Master Plan Presentation by Mead & Hunt – Draft Airport Sustainability Plan:
Mead & Hunt shared one of the final updates to the Terminal Area Master Plan before final board approval. Final drafts of several components of the project have been reviewed by the FAA: Inventory/Facility Requirements; Forecasts; Alternatives Analysis. Drafts that have been delivered for review include: Sustainability Plan Chapter; Implementation Plan Chapter; Airport Layout Plan Drawing Set. Following FAA comment, which is expected around December 22nd, the final Terminal Area Master Plan report and Airport Layout Plan drawing set will be prepared for board adoption.

The preferred near-term concept implementation plan begins with construction of a new transient hangar to accommodate large corporate jets. The addition of a transient hangar would free up space in preparation for upcoming phases. The second phase would be relocating the GA terminal, followed by the third phase of reconstructing the GA apron in concrete to accommodate larger aircraft and create a dedicated deicing location. Phase four includes expanding the outbound baggage handling area to accommodate larger commercial aircraft. Phase five would likely begin in 2026 that would replace and expand the ARFF/SRE storage and maintenance facility. Projects beyond 2026 include expanding the air carrier apron, possible T-hangar rehabilitation or expansion, building executive hangars and other hangar development, beacon replacement, GSE storage facility, self-serve fueling site, and additional GA apron reconstruction (demand driven).

The sustainability plan was reviewed, with focus on airport finance, planning and resilience, and energy. The energy focus includes an electric vehicle planning study and solar feasibility study. A sustainability plan may help with future FAA funding to meet the FAA goal of net zero by 2050.

Staff Reports:

Director Report – Brian Grefe:

Air Service Update – A recent Business Advisory Committee meeting was held where feedback from the group included the possibility of applying for another SCASD grant to reacquire Detroit service and the possible future addition of Dallas/Fort Worth service. In-person airline meetings are planned for no later than February of 2024.

Statistical Report – The November statistical report now includes Avelo Airlines data. Total operations are down 2.1% on the month and ATCT operations are up 22.4% on the month, down 3.6% on the year. Enplanements are up 39.2% for November and up 7.1% on the year. Load factors ranged from 74.9% to 82.0%. Forward-looking bookings with Avelo through end of year are higher than their national average.

Flight Schedule – Flight schedule remains unchanged. Several upcoming charters are scheduled for casino destinations.

Legislative Update – The FAA released $2.89 billion in FY24 allocations for the Airport Infrastructure Grant (AIG) Program, which provides $15 billion for airport infrastructure upgrades over five years. The FY24 allocations represent the amount that each airport is entitled to use for any project that is eligible under the AIP or PFC Program. Airports may also combine their FY22, FY23, and FY24 allocations to fund a single project. The Senate approved a continuing resolution that extends federal funding into early 2024, averting a possible government shutdown.

Financial Reports – Dave Drozd:

Revenues and Expenses – Revenues end the month of November at 45.27% of budget, with expenses ending at 47.31% of budget. Revenue receipting will be cut off December 31, 2023, with expenses cutting off in February. CWA will be scheduled first for the county audit with Baker Tilly, giving time for the county to prepare utilizing the new financial system.

Operations & Project Reports – Mark Cihlar:

Update on Runway Shift Project – Both runways are open and all navaids flight checked and operational. The approach lights that have not been working for over nine years are scheduled for flight check this evening. A few punch list items will be completed in spring, such as repainting runway and taxiway pavements.

Update on ATC Tower Project – Contracts for the ATC tower project have been awarded and staff are working with contractors on phasing. Crews will wait until all equipment is on-hand before starting to avoid material delay risks.

Update on Airport Operations – New OMT Jeff Woodward was introduced and welcomed by all. Jeff was previously employed with the Marathon County Solid Waste department. There have been a few more minor snow events recently and supplies are well stocked for the winter season.

General Aviation Reports – Central Wisconsin Aviation:

Flight training has been doing well with the new flight instructor on board. The search for a mechanic continues, as the previous possible new hire has been experiencing health issues.

Dickinson left the meeting at 9:13 a.m.

ROLL CALL VOTE TO GO INTO CLOSED SESSION pursuant to Wis. Stat. 19.85(1)(c) For the purpose of considering employment, promotion, compensation or performance evaluation data of any public employee over which the governmental body has jurisdiction or exercises responsibility: To wit contract and annual performance appraisal of Airport Director Brian Grefe:

9:14 a.m. Motion by Buch, second by Kluck to move into closed session. Roll call vote: Krogwold, Kluck, Buch, Ladick. All ayes.

MOTION TO RETURN TO OPEN SESSION (No Roll Call vote needed) :

9:33 a.m. Motion by Krogwold, second by Kluck to return to open session. Motion carried unanimously. No announcements.

Adjournment: ***9:33 a.m. Motion by Krogwold, second by Kluck to adjourn. Motion carried unanimously.***

Next Scheduled Meeting Date: January 9, 2024 at 8:00 a.m.

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Julie Ulrick, Recording Secretary

Agenda Item Summary

Airport Board Meeting Date: January 9, 2024

Agenda Item Title: #1) Review and Possible Action on Five Whiskey Papa, LLC Hangar Lease Comments

Public Comment (Actionable): Robert J. Kendall 3 Hibiscus Dr., Punta Gorda, FL 33950.

Background: Through the airport's public Terminal Area Master Planning process, the location of the Five Whiskey Papa hangar was identified as an ideal location for a General Aviation Terminal building. The Lease agreement with Five Whiskey Papa is in "Holding Over" status, meaning that the Lease term has expired, and Five Whiskey Papa's tenancy holds over pursuant to the terms of the Lease. Through the Lease, the parties, Five Whiskey Papa, and the Joint Airport Board agreed that, in the event of that holding over status occurring, Five Whiskey Papa would "remove the Improvements and restore the site to a condition acceptable to the Airport within ninety days following the expiration of this Lease . . .". The hangar is estimated to have been constructed in 1989. Five Whiskey Papa, LLC has leased the land since September 14, 2016.

On November 3, 2023, Marathon County Corporation Counsel Michael Puerner sent a certified letter to Mr. Kendall of Five Whisky Papa asking if Mr. Kendall would prefer to remove the hangar within 90 days or let the improvements (the hangar) remain as is with Mr. Kendall's outstanding account balance of $14,721.94 being forgiven if the hangar remains in place after the 90-day period expired. If Mr. Kendall were to decide to remove the hangar, we would negotiate a reasonable amount of time to have the improvements removed. Airport staff have not billed Mr. Kendall for monthly lease rent since June 2023 as a show of good faith that the hangar location may be repurposed for a GA terminal building.

Upon receiving the letter, Mr. Kendall was reasonably concerned that he would not be able to lease the land into the future. He requested to address the Central Wisconsin Joint Airport Board. Today, Mr. Kendall is requesting:

- To resolve the issues with his hangar
- To have the hangar appraised to determine a replacement value to determine a contribution amount to be used for his tax purposes, and
- To address his use of the hangar until a date which corresponds to actual need for the land by CWA.

Issues with the hangar and lease terms that staff are aware of are:

- The hangar overhead bifold door is not operable and unsafe, and
- The aircraft apron and vehicle parking lot are in disrepair and out of compliance with the terms of the agreement, and
- The hangar is unoccupied, and
- Grass cutting is not being conducted.

Timeline: The timeline for this effort is variable. If grant funds are available in FY2024 through a Bipartisan Infrastructure Law Airport Terminal Program grant, the land could be needed as soon as June 2024. Without that funding in place, the construction of the project would probably fall to the summer of 2025.

Financial Impact: Mr. Kendall's monthly rate for the Five Whiskey Papa lease is $1,134.65. Rates are adjusted annually in March.

Contributions to Airport Goals: This effort is necessary, while unfortunate, to help achieve 2024 Annual Airport Goal #4 of grow aviation, and specifically the subgoal of expand general aviation. Building a new GA terminal building is also a critical part of Goal #3 Maintain Premier Facilities.

Recommended Action: Mr. Kendall's requests are reasonable and none require formal board action. In response to these requests, airport staff request concurrence from the Board to allow Mr. Kendall to resolve the stated issues with his hangar and lease to the satisfaction of the Airport Director. To make the lease payments current - an estimated $10,571.06 plus the $6,420.18 check that is being held for a total of $16,991.24. Allow Mr. Kendall to lease the land monthly at the current rates (as adjusted from time to time) with a 60-day termination for the construction of a General Aviation Terminal building, at which time the hangar and title to be turned over to the Central Wisconsin Joint Airport board. Allow Mr. Kendall to have the hangar appraised at his expense to determine a replacement value for his private uses.

Attachment(s) N/A

Agenda Item Summary

Airport Board Meeting Date: January 9, 2024

Agenda Item Title: **#**5) Review and Possible Action on FAA Nav Aid Memorandum of Agreement No. 697DCM-22-L-00058

Staff Responsible: Brian Grefe, Airport Director

Background: The Federal Aviation Administration needs an updated facility Memorandum of Agreement (MOA) to own, maintain, and operate their navigational aids at the Central Wisconsin Airport. This was presented to airport staff a few years ago. At that time, staff were uncomfortable bringing this to the Joint Airport Board for approval because of the FAA's inability to maintain their medium approach lighting system with sequential flashers (MALSR) system. There was also some concerning language that could have driven up the local share cost of the Runway Shift project.

Now that the runway shift is complete and the MALSR is operational, it makes sense to finalize this required MOA.

It should be noted that the list of facilities is not completely accurate. The Runway 8 PAPI is not currently listed on the MOA. FAA Real Estate Contracting Officer, Amanda Ramos advises that she can update the list of facilities on this MOA when she receives a notification action packet from the project team rather than do it at this time. The Runway 8 PAPI is installed and accepted by the FAA, but not operational because of a faulty electrical component that is on backorder.

This is an FAA boilerplate agreement that is consistent throughout the country.

Timeline: This will be effective once all parties have signed the MOA.

Financial Impact: There is no direct financial impact, but there is an expectation placed on the airport not to negatively impact FAA facilities or there could be financial impact. The benefit is that the FAA will maintain these navigational aids unless they don't have the budget.

Contributions to Airport Goals: This MOA aligns will with the Airport's 2024 Annual Goal #3 Maintain Premier Facilities.

Recommended Action: Airport Staff recommend approval of FAA Nav Aid Memorandum of Agreement No. 697DCM-22-L-00058 and authorize signing the Agreement.

Attachment(s) FAA Nav Aid Memorandum of Agreement No. 697DCM-22-L-00058

ON-AIRPORT MEMORANDUM OF AGREEMENT (MOA)
Between
THE UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
And
CENTRAL WISCONSIN JOINT AIRPORT BOARD

FAA CONTRACT NO: 697DCM-22-L-00058
ATID/FACILITY TYPE: CWA/MOA
LOCATION: Mosinee, WI

1. **Preamble (09/2021) 6.1.1** This Memorandum of Agreement for real property is hereby entered into by and between Central Wisconsin Joint Airport Board, by and through Central Wisconsin Airport, hereinafter referred to as the Airport and the United States of America, acting by and through the Federal Aviation Administration, hereinafter referred to as the FAA.

2. **Definitions (09/2021) 6.1.1-1** For purposes of this document, the following definitions apply;

   Contract- refers to this legal instrument used to acquire an interest in real property for the direct benefit or use by the FAA. As used herein, contract denotes the document (for example- lease, easement, memorandum of agreement, or other legally binding agreement) used to implement an agreement between a customer (buyer) and a seller (supplier).

   Contractor- refers to the party(ies) receiving a direct procurement contract from the FAA and who is(are) responsible for performance of contract requirements. For purposes of this document, the contractor may also be called the Lessor, Permittor, Licensor, Grantor, Airport, or Offeror depending on the type of contract or the provision within the contract.

   Government- refers to the United States of America acting by and through the Federal Aviation Administration (FAA). For purposes of this document, Government and FAA are interchangeable.

   Real Estate Contracting Officer (RECO) - is a trained and warranted official who contracts for real property on behalf of the FAA. For purposes of this agreement, RECO is interchangeable with Contracting Officer (CO).

3. **Succeeding Contract (09/2021) 6.1.2** This contract succeeds DTFAGL-08-L-00130 and all other previous agreements between the parties for the property described in this document.

4. **Witnesseth (MOA) (09/2021) 6.1.3-1** Whereas, the parties listed above have entered into an Airport Improvement Grant Agreement; and

   Whereas, the parties listed above have entered into an agreement providing for the construction, operation, and maintenance of FAA owned navigation, communication and weather aids for the support of Air Traffic Operations; and

   Whereas, both parties agree the establishment, operation, and maintenance of systems for air traffic control, navigation, communication, and weather reporting is in the primary interest of safety and

direct support of the ongoing operation of the Central Wisconsin Airport; and

Whereas, the parties consider it desirable to work in cooperation with each other in the technical installation and operation of air navigational aids.

Now, therefore, the parties mutually agree as follows:

5. **Purpose (09/2021) 6.1.5** It is understood and agreed that the use of the herein described premises shall be related to FAA's activities in support of the National Airspace System (NAS).

6. **Legal Authority (09/2021) 6.2.1** This contract is entered into under the authority of 49 U.S.C. 106(l)(6) and (n), which authorizes the Administrator of the FAA to enter into contracts, acquisitions of interests in real property, agreements, and other transactions on such terms and conditions as the Administrator determines necessary.

7. **On-Airport Land/MOA Term (09/2021) 6.2.3-1** To have and to hold, for the term commencing on October 1, 2018 and continuing to September 30, 2038 inclusive.

8. **Consideration (No Cost) (09/2021) 6.2.4-4** The Government shall pay the contractor no monetary consideration. It is mutually agreed that the rights extended to the Government herein are in consideration of the obligations assumed by the Government in its establishment, operation and maintenance of facilities upon the premises.

9. **Termination (09/2021) 6.2.5** The Government may terminate this contract at any time, in whole or in part, if the Real Estate Contracting Officer (RECO) determines that a termination is in the best interest of the Government. The RECO shall terminate this contract by delivering a written notice specifying the effective date of the termination. The termination notice shall be delivered at least 30 days before the effective termination date. No costs shall accrue as of the effective date of termination.

10. **Binding Effect (09/2021) 6.2.6** The provisions of this contract and the conditions herein shall be binding upon, and for the benefit of, the parties and their successors and assigns. In the event of any sale or transfer of ownership of the property or any portion thereof, the Government will be deemed to have attorned to any purchaser, successor, assign, or transferee. The succeeding owner will be deemed to have assumed all rights and obligations of the contractor under this contract establishing direct privity of estate and contract between the Government and said succeeding owner, with the same force, effect, and relative priority in time and right as if the contract had initially been entered into between such succeeding owner and the Government.

11. **FAA Facilities for MOA (09/2021) 6.2.7** The Airport will allow the FAA to construct, operate, and maintain FAA owned navigation, communication and weather aid facilities in areas on the Airport that have been mutually determined and agreed upon. The FAA facilities covered by this agreement are identified on the most current approved Airport Layout Plan (ALP) and/or other pertinent drawings that are made part of this Agreement by reference and shown on the attached FAA "List of Facilities."

    A. Together with a right-of-way for ingress to and egress from the premises; a right-of-way for establishing and maintaining pole lines or underground lines for extending electrical power and/or

telecommunications lines to the premises; including a right-of-way for subsurface power, communication and/or water lines to the premises; all rights-of-way to be over the area referred to as Central Wisconsin Airport, to be routed reasonably determined to be the most convenient to the FAA and as not to interfere with Airport operations. The Airport shall have the right to review and comment on plans covering access and utility rights-of-way under this paragraph.

B. This contract includes the right to grading, conditioning, and installing drainage facilities, seeding the soil of the premises, and removing all obstructions from the premises that may constitute a hindrance to the establishment and maintenance of navigational aid systems. The Airport shall have the right to review and comment on plans covering work permitted under this paragraph.

C. The Government shall have the rights to make alterations, attach fixtures, and erect additions, structures or signs, in direct support of the Airport. The Airport shall have the right to review and comment on plans covering work permitted under this paragraph.

D. The Government shall also have the right to park, without cost, all official and privately owned vehicles used for the maintenance and operation of the air navigational facilities. Parking shall be provided adjacent to the navigational aid facility or as near as possible without interfering with the operation of the Airport.

12. **RE Clauses Incorporated by Reference (09/2021) 6.3.0** This solicitation or contract, as applicable, incorporates by reference the provisions or clauses listed below with the same force and effect as if they were given in full text. Upon request, the RECO will make the full text available, or the full text may be obtained via internet at https://fast.faa.gov/RPF_Real_Property_Clauses.cfm.

    A. **Officials Not To Benefit (09/2021) 6.3.0-2**
    B. **Contracting Officer's Representative (09/2021) 6.3.0-4**
    C. **Contingent Fees (09/2021) 6.3.0-5**
    D. **Anti-Kickback Procedures (09/2021) 6.3.0-6**

13. **Title to Improvements (09/2021) 6.3.5** Title to the improvements constructed for use by the Government during the life of this Agreement shall be in the name of the Government.

14. **Funding Responsibility for FAA Facilities (09/2021) 6.3.6** The Contractor agrees that all Contractor requested relocation(s), replacement(s), or modification(s) of any existing or future FAA navigational aid or communication system(s) necessitated by Contractor improvements or changes will be at the expense of the Contractor. In the event that the Contractor requested changes or improvements interferes with the technical and/or operational characteristics of the FAA's facility, the Contractor will immediately correct the interference issues at the Contractor's expense. Any FAA requested relocation, replacement, or modifications shall be at the FAA's expense. In the event such relocations, replacements, or modifications are necessary due to causes not attributable to either the Contractor or the FAA, funding responsibility shall be determined by mutual agreement between the parties, and memorialized in a Supplemental Agreement.

15. **No Waiver (09/2021) 6.3.17** No failure by the Government to insist upon strict performance of any provision of this Contract or failure to exercise any right, or remedy consequent to a breach thereof, will constitute a waiver of any such breach in the future.

16. **Changes, Modifications (01/2022) 6.3.8-1** The RECO may at any time, by written order via Supplemental Agreement, make changes to this contract. The modification shall cite the subject contract, and shall state the exact nature of the modification. No oral statement by any person shall be interpreted as modifying or otherwise affecting the terms of this contract.

17. **Non-Restoration (09/2021) 6.3.18** It is hereby agreed between the parties that, upon termination of its occupancy, including any holdover period, the Government shall have no obligation to restore and/or rehabilitate, either wholly or partially, the property that is the subject of this contract. It is further agreed that the Government may abandon in place any or all of the structures and equipment installed in or located upon said property by the Government during its tenure. Such abandoned equipment shall become the property of the contractor.

18. **Quiet Enjoyment (09/2021) 6.3.25** The Contractor warrants that they have good and valid title to the premises, and rights of ingress and egress, and warrants and covenants to defend the Government's use and enjoyment of said premises against third party claims.

19. **Damage by Fire or Other Casualty or Environmental Hazards (09/2021) 6.3.26-1** If the premises is partially or totally destroyed or damaged by fire or other casualty or if environmentally hazardous conditions are found to exist so that the premises is untenantable as determined by the Government, the Government may agree to allow restoration/reconstruction, or may elect to terminate the contract, in whole or in part, immediately by giving written notice to the contractor.

20. **Interference with FAA Operations (09/2021) 6.3.28-2** The Airport agrees not to erect or allow to be erected any structure or obstruction of any kind or to allow any natural growth that the Government determines would interfere with the proper operations of Government facilities. The Airport agrees to keep areas around the Government's navigational aids mowed at all times to a height so that weeds and vegetation will not be an obstruction to such operation or maintenance of these facilities.

21. **Hold Harmless (09/2021) 6.3.30** In accordance with and subject to the conditions, limitations and exceptions set forth in the Federal Tort Claims Act, 28 U.S.C. Ch. 17, the Government will be liable to persons damaged by any personal injury, death or injury to or loss of property, which is caused by a negligent or wrongful act or omission of an employee of the Government while acting within the scope of his office or employment under circumstances where a private person would be liable in accordance with the law of the place where the act or omission occurred. The foregoing shall not be deemed to extend the Government's liability beyond that existing under the Act at the time of such act or omission or to preclude the Government from using any defense available in law or equity.

22. **Compliance with Applicable Laws (01/2022) 6.3.31-1** This Contract shall be governed by federal law. The Contractor shall comply with all applicable federal, state, and local laws. The Government will comply with all federal, state, and local laws applicable to and enforceable against it, provided that nothing in this lease shall be construed as a waiver of the sovereign immunity of the Government.

23. **Notification of Change in Ownership or Control of Land (09/2021) 6.3.34** If the Contractor sells, dies or becomes incapacitated, or otherwise conveys to another party or parties any interest in the aforesaid land, rights of way thereto, and any areas affecting the premises, the Government shall be

notified in writing, of any such transfer or conveyance within 30 calendar days after completion of the change in property rights. Concurrent with the written notification, the Contractor or Contractor's heirs, representatives, assignees, or trustees shall provide the Government copies of the associated legal document(s) (acceptable to local authorities) for transferring and/or conveying the property rights.

24. **Integrated Agreement (09/2021) 6.3.36** This Contract, upon execution, contains the entire agreement of the parties, and no prior written or oral agreement, express or implied shall be admissible to contradict the provisions of this Contract.

25. **Unauthorized Negotiating (09/2021) 6.3.37** In no event shall the Contractor enter into negotiations concerning the premises with anyone other than the RECO or his/her designee.

26. **Disputes (01/2022) 6.3.39-1** Where possible, disputes will be resolved by informal discussion between the parties. In the event the parties are unable to resolve any disagreement through good faith negotiations, the dispute will be resolved upon joint agreement of management representatives from both parties. The decision is final unless it is timely appealed to the FAA Administrator, whose decision is not subject to further administrative review and, to the extent permitted by law, is final and binding.

27. **Hazardous Substance Contamination (09/2021) 6.8.1** The FAA agrees to remediate, at its sole cost, all hazardous substance contamination on the FAA facility premises that is found to have occurred as a direct result of the installation, operation, relocation and/or maintenance of the FAA's facilities covered by this contract. The Contractor agrees to remediate at its sole cost, all other hazardous substance contamination found on the FAA facility premises. The Contractor also agrees to hold the FAA harmless for all costs, liabilities and/or claims by third parties that arise out of hazardous contamination found on the FAA facility premises that are not directly attributable to the installation, operation and/or maintenance of the facilities.

28. **Notices (09/2021) 6.10.1** All notices/correspondence must be in writing, reference the Contract number, and be addressed as follows:

TO THE CONTRACTOR:
Central Wisconsin Joint Airport Board
100 CWA Drive, Suite 227
Mosinee, Wisconsin 54455

TO THE GOVERNMENT:
Federal Aviation Administration
Real Estate Branch, AAQ-920
10101 Hillwood Parkway
Fort Worth, TX 76177

29. **Signature Block (09/2021) 6.10.3** This Contract shall become binding when it is fully executed by both parties. In witness whereof, the parties hereto have subscribed their names as of the date shown below.

CENTRAL WISCONSIN JOINT AIRPORT BOARD	UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION
By_____	By:_____
Print Name:_____	Amanda J. Ramos
Title:_____	Real Estate Contracting Officer
Date:_____	Date:_____

Dated March 1, 2022

List of Facilities

MEMORANDUM OF AGREEMENT

697DCM-22-L-00058

CENTRAL WISCONSIN AIRPORT

Number	Facility	R/W (ATID) Number	GSA Control Number	Comments
1	MALSR	RWY 8 (CWA)	55110	Facility Site, Equipment Shelter, Restricted Critical Area, Access Road
2	LOC/DME	RWY 8 (CWA)	55111	Antenna Site, Equipment Shelter, Restricted Critical Area, Access Road
3	GS	RWY 8 (CWA)	55060	Facility Site, Equipment Shelter, Restricted Critical Area
4	REIL	RWY 26 (CWA)	55155	Facility Site
5	PAPI	RWY 26 (CWA)	55154	Facility Site
6	REIL	RWY 17 (CWAA)	51556	Facility Site
7	PAPI	RWY 17 (PHSA)	55154	Facility Site
8	MALSR	RWY 35 (PHS)	55110	Facility Site, Equipment Shelter, Restricted Critical Area, Access Road
9	LOC/DME	RWY 35 (PHS)	55111	Antenna Site, Equipment Shelter, Restricted Critical Area, Access Road
10	GS	RWY 35 (PHS)	55060	Facility Site, Equipment Shelter, Restricted Critical Area
11	PAPI	RWY 35 (PHS)	55154	Facility Site
12	RCAG/RCO	(CWA)	55061	Facility Site, Access Road

fly CWA

CENTRAL WISCONSIN AIRPORT

Agenda Item Summary

Airport Board Meeting Date: January 9, 2024

Agenda Item Title: #6) Review and Possible Action on Transient Hangar Project and Design Contract

Staff Responsible: Mark Cihlar, Assistant Airport Director

Background: The 2023 Terminal Area Master Plan (TAMP) has identified several architectural projects needed at CWA, including the need for a large hangar for transient GA aircraft. The Bipartisan Infrastructure Law (BIL) has provided a unique opportunity for airports to receive federal funding for revenue generating facilities, including transient hangars, that are not eligible for traditional AIP funding. As of 2024, CWA has been allocated $4,776,756 through BIL Airport Infrastructure Grant (AIG) program. The 2023 TAMP has identified the large transient hangar as the best first use of CWA's allocated AIG funding.

In November 2023, the Joint Airport Board approved the selection of Jviation, a Woolpert Company, for architectural services, in accordance with *FAA Advisory Circular 150/5100-14E – Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects.* The design of a transient hangar was specifically included in the scope of that selection.

CWA staff started working with Jviaiton in November to develop a detailed scope of work for this design effort. The hangar is intended to be a pre-engineered building with estimated dimensions of 120'W x 120'D with a 28'H x 110'W hangar door, to accommodate the largest corporate aircraft expected to fly into CWA. The design effort includes the preparation of Construction Plans, Contract Documents, Technical Specifications, Surveying, Environmental documentation, a Design Report, and supporting the Wisconsin DOT Bureau of Aeronautics (BOA) on bidding the project and preparing a grant application. The full design scope of work is included as an attachment to this AIS.

The final design contract with be between Jviation and the BOA, acting as the airport's sponsor.

Timeline: Airport staff are still working through final negotiations of the Fee for this contract, in accordance with FAA Advisory Circular 150/5100-14E, and will present the negotiated fee at the January 9th Joint Airport Board meeting.

Airport staff are working to get this project bid out by early summer 2024 so construction can start during the 2024 construction season. To accomplish this, the design effort needs to start as soon as possible. Before the airport finalizes this design contract, airport staff are seeking a meeting with the FAA Airport's District Office (ADO) to review the project for compliance with BIL-AIG program requirements. This meeting will hopefully take place in early January, and may have a minor impact on the final scope and fee presented at the board meeting.

Financial Impact: The cost of this contract will be presented at the January 9th Joint Airport Board meeting. Total project cost for the hangar, including design and construction costs, is estimated to be around $4,000,000. 90% of the total

project cost will be eligible for BIL-AIG funding. After this project is bid out, CWA will submit a grant application for BIL-AIG funding.

As the airport has successfully done on past projects, airport staff are recommending the airport fund the design in full as a "sponsor only" contract until the grant is received from the FAA. The total design cost is expected to be well below the 10% local match of the total project cost. $400,000 is included and approved in the 2024 CWA Annual Operating Budget for this project.

This project is not eligible for State funding.

Contributions to Airport Goals: This project supports the 2024 Annual Goal to Grow and Expand General Aviation at CWA and Maintain Premier Airport Facilities.

Recommended Action: Airport Staff recommend approval of the Transient Hangar Project, contingent on federal funding, and approval of the use of airport funds for the full Design Contract with Jviation, as presented at the January 9th board meeting, with authorization given to the Airport Director to approve minor changes to the scope and fee if necessary, before approving the contract through the BOA.

SCOPE OF WORK
FOR
CENTRAL WISCONSIN AIRPORT
Mosinee, WI
BOA Project No. CWA10## (BIL-##)
Transient Hangar Design and Bidding

This is an Appendix attached to, made a part of and incorporated by reference with the Professional Services Agreement dated November 27, 2023, between Central Wisconsin Joint Airport Board (CWA) and Woolpert, Inc., / Jviation, a Woolpert Company, for providing professional services. For the remainder of this scope the Central Wisconsin Joint Airport Board is indicated as "Sponsor" and Jviation, a Woolpert Company is indicated as "Project Manager." The construction budget for this project is approximately $4,000,000 This construction budget does not include administrative, legal, or professional fees.

PROJECT DESCRIPTION
This project shall consist of preparing Construction Plans, Contract Documents, Technical Specifications, survey, environmental, BOA grant support and Design Report, along with Bidding for the project. This scope of work is for the consulting services provided by the PM/Project Manager to the Sponsor. See Exhibit No. 1 below for the project location.

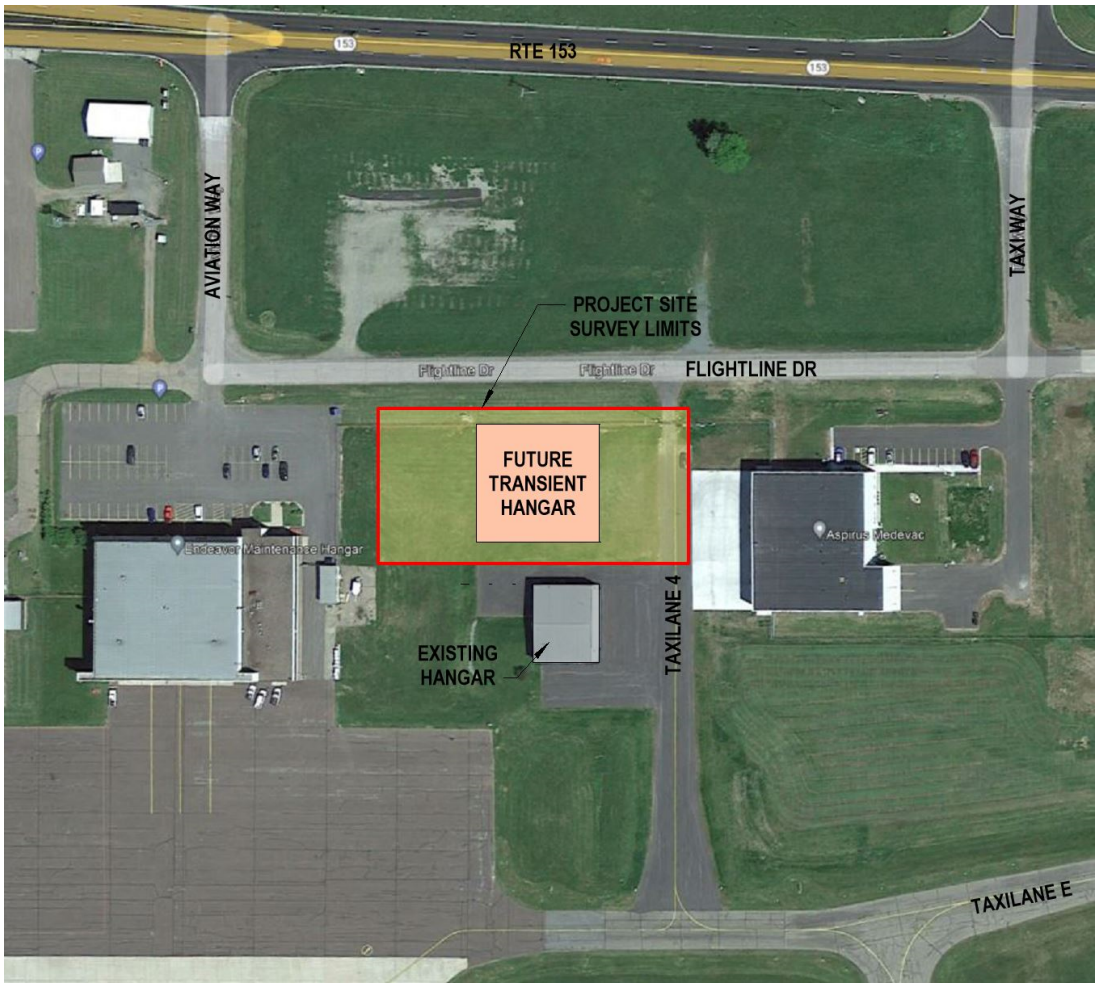


EXHIBIT NO. 1

The new hangar will be designed to house largest group 3 corporate (non-airline) aircraft including, but not limited to Gulfstream Global 7500, Global Express, and Falcon 2000. The hangar will designed with a minimum

clear space for wingspans of Global 7500's 111'L x 104' Wingtip x 27' Tail. The exterior dimensions are estimated to be 120'W x 120'D with a 28'H x 110'W Hangar door.

The structure either be designed as a Pre-Engineered Metal Building or a Pre-Engineered membrane style structure such as manufactured by RUBB (Rubb USA | Fabric tension buildings & tension membrane structures). The Project Manager will provide information on the advantages and disadvantages of both options. Woolpert will also provide advantages and disadvantages of the type of Hangar doors, based on the type of structure selected by CWA.

The Hangar will be designed to include an overhead door and paving on the west side of the building to allow tug access and circulation. An access-controlled man door may be included to allow pedestrian access to the south of the building. An aircraft apron will be designed to connect the Hangar building to the existing CWA Taxilane 4.

The project will include the relocation of the AOA gate controller currently installed on the exterior fence. The Hangar will be designed to include a wall rack to house the relocated electrical and communications equipment, including automated access control in proximity to the previous location. Electrical power outlets will be designed on the exterior of the Hangar to power the meter base for the AOA gate.

DESIGN SERVICES

The Project Manager is to prepare and deliver a full set of design documents (drawings and specifications) for construction companies to obtain permits, construct the project and provide estimating services. Coordination of the design team efforts shall be managed by the Project Manager ensuring the team remains focused and on schedule for design deliverables. Internal quality control reviews shall be done with team members throughout the duration of the project design.

The Project Manager will provide the following design services and construction drawings/specifications for each related discipline based on each of the defined phases. Civil drawings will be prepared in AutoCAD 3D software. Other Design drawings will be prepared in Autodesk Revit and hosted in a BIM360 session to allow for real-time collaboration. Deliverables will be PDF electronic files.

The drawings and specifications will be converted to PDF files for submission to the client and other parties for review. If desired by the client, Woolpert can setup a Bluebeam design review session to share review comments that can be easily shared.

The design fees for this project will be broken into three parts as listed below.

Part A-Basic Design Services includes;

1) Preliminary Design Phase (30% completion)
2) Design Phases (90% - 100% completion)
3) Bidding Phase

Part A-Basic Design Services - Subconsultants

4) Design Subconsultants

Additional design services that will be completed by subconsultants to Woolpert, including the proposed Civil, Structural, MEP design, Survey, and Geotech will be included under Part A -Subconsultants Section. Parts A and B and the three phases are described in more detail below. The civil engineering services scope of services provided by Subconsultant can be found in **ATTACHMENT A**.

PART A - BASIC DESIGN SERVICES – The Part A Basic Design Services will include the following. These are further defined throughout this document.

Part A Services include but are not limited to the following:

Project Management	Civil Design (Subconsultant)
Aviation Airspace Assessment	FAA/BOA Coordination
Architecture	Mechanical Design (Subconsultant)
Electrical Design (Subconsultant)	Communications Technology Design (Subconsultant)
Plumbing Design (Subconsultant)	Fire Protection (Subconsultant)
Structural Design (Subconsultant)	Interior Design
Surveying (Subconsultant)	Quality Control Reviews
Front-end Specifications w/ (Subconsultant)	Technical Specifications
Building Permit Submission w/ (Subconsultant)	Grant Administration
Bid Review, Check References, and Recommendation Letter (Subconsultant)	

SPONSOR MEETINGS

A variety of meetings, both in person and virtual, with the Sponsor will be scheduled to determine the following during the design cycle.

- Critical project dates and establish the proposed schedule
- Kickoff meeting
- Design review sessions

DELIVERABLES - Based on the project Schedule for deliverables, Woolpert will submit Construction Documents (CD) to The Sponsor for review at the 30%, and 90%-100%. Each submittal package will be submitted a minimum of (4) business days prior to the scheduled team meeting to review documents.

Specific other deliverables are listed below under each design phase. Deliverables are defined further below.

DESIGN SCHEDULE

A proposed design schedule will be developed when the contract is awarded. This schedule is subject to review and discussion but must be agreed to (in the present or modified form) before a formal notice to proceed is issued. The schedule will be based on an estimated 3.5-month design schedule to provide documents ready for permitting and bidding. Final Plans and Specifications for Construction are subject to approval by local reviewing agencies.

NOTE: The schedule will depend on the ability to have the geotechnical report, airspace review, and the environmental reports completed in a timely manner.

Deviations from the schedule outside of the control of The Project Manager (Sponsor Design changes, scope alterations, etc.) could impact the final deliverable date.

PHASE	ALLOCATED TIME
Due Diligence/Concept Verification	2 Weeks
30% Design Phase	4 weeks
90% Design Phase	6 weeks
100% Design Phase	2 weeks
TOTAL	**14 Weeks**

PART A – BASIC SERVICES

1.0 Preliminary Design Phase

The Design Phase for the 30% Deliverable of the Construction Documents will identify key project elements and resolve the critical path work items to begin full design of the project. This includes evaluating and specifying the structural building and its interior and exterior features and site layout.

1.01 Coordinate and Attend Meetings with the Sponsor and BOA and ADO. Meetings with the Sponsor and the BOA and ADO will take place to determine critical project dates, establish the proposed design schedule and AIP development schedule, review environmental component(s), determine the feasibility of the proposed project and to establish the need for topographical surveying, pavement investigation and/or geotechnical testing. Various meetings during the design phase will also be conducted to review the progress of the design, discuss construction details and proposed time frame of construction and identify any special requirements for the project. It is anticipated that there will be up to five meetings with the Sponsor and/or the BOA/ADO throughout the course of the design.

1.02 Prepare Project Scope of Work and Contract. This task includes establishing the scope of work through meetings outlined above. Fees will 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 Project Manager for the Sponsor once negotiations are complete.

1.03 Prepare Preliminary Cost Estimating. This task includes creating a preliminary construction rough order of magnitude (ROM) cost estimate, a preliminary working days estimate, a preliminary overall project schedule, and a preliminary overall project budget. The preliminary construction ROM cost estimate will be based upon the most current information available at the time of preparation. Work to refine these estimates will be ongoing through the project. A subconsultant will be contracted to provide professional estimating for the project at the defined project intervals defined further in each design phase.
Provide cost of RUBB type building vs PEMB building

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

- Time the Project Manager spends planning, organizing, securing and scheduling resources, and providing instruction to staff to meet project objectives as defined in the approved scope of work.
- The Project Manager will analyze the budget semi-monthly to ensure budget and staffing needs are on track to meet design schedules within budget.
- 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.
- Validating project criteria requirements
- Site investigation
- Project coordination
- Bi-Weekly Coordination Meetings with Stakeholders
- Design analysis
- Coordinate Construction Drawing setup, organization and progress
- Conduct coordination with Civil, Architecture, Interior Design, MEP, Fire Protection and Structural design to confirm location and space requirements for chases, columns, equipment sizes, equipment clearances, etc. and all other design elements for the project.
- Coordination with Fire Protection Engineer on special requirements for specialized fire suppression systems and design requirements for specialized systems. **NOTE: This design element is essential to be reviewed and evaluated for options in the very initial client meeting for all hangar projects.**

- Schedule analysis
- Miscellaneous correspondence to third parties (FAA; BOA; Building Departments; Airport Authority; etc.)
- Manage Sponsor's design expectations throughout the project.
- The Project Manager will prepare and submit monthly invoicing.
- The Project Manager and design team shall thoroughly review requirements of governmental Authorities Having Jurisdiction (AHJ) over the Project and Sponsor requirements for incorporation into the construction documents.

The Project Manager will complete the following tasks:

- Provide the Sponsor with a monthly Project Status Report (PSR), in writing, reporting on Project Manager'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.
- Submit for acceptance and maintain, a design schedule detailing the scheduled performance of the work.
- Create and maintain a Quality Control Checklist (QCC) for the project. The QCC shall include personnel, project milestone checking and peer review procedures at each phase of the project.
- Develop and maintain a question/answer log for design staff and client input.
- Obtain specific design requirements of the Sponsor, the Airport Board, and any local design requirements.

1.05 Prepare Design Alternatives. This task includes conducting a virtual workshop with the Sponsor to develop the design alternatives which will be analyzed further for viability and cost. It is assumed three alternatives will be chosen during the workshop. This task includes the preparation of alternative based on building shape, size, location, and interior/program options for the construction of the Hangar. A pros and cons list will be prepared for each design alternative. Rough order of magnitude (ROM) cost estimates will be completed for each design alternative along with pros and cons. The Project Manager will work with the Sponsor to select a preferred design alternative and present the preferred design alternative to the Sponsor representatives for final approval prior to moving forward to the design phase.

SITE, CIVIL, and ENVIRONMENTAL (Provided by Subconsultant where indicated)

1.06 Review Existing Documents. The Project Manager and Civil Engineer Subconsultant will gather and review existing available documentation that may be relevant to the project, including, but not limited to, record drawings (as-builts), design reports, final reports, utility reports/maps and previous surveys. The Project Manager may use relevant information from this review to coordinate the design and topographical survey for the project.

1.07 Coordinate Topographical Surveys (Provided by Subconsultant). This task includes preparing the requirements, establishing the limits of the survey area and scheduling time for the survey to be completed. Negotiating with the Survey firm for a cost to perform the work is also included in this task. See Attachment A. for reference.

1.08 Coordinate Geotechnical Investigation (Provided by Subconsultant). This task includes preparing the requirements for soils testing, establishing the limits of work, and scheduling a time for testing to be completed. The requirements of the geotechnical investigation shall be established in accordance with FAA AC 150/5320-6 (current edition), *Airport Pavement Design and Evaluation*. Negotiating with the geotechnical engineering firm for a cost to perform the work. See Attachment A. for reference.

1.09 Coordinate Utility Locating (Provided by Subconsultant). This task includes coordinating with a utility locating company to locate utilities that might impact this project. Negotiating with the utility locating firm for a cost to perform the work and providing an on-site representative of the Project Manager during the locates is also included in this task.

1.10 Coordinate Structural Design. This task includes preparing the requirements for the structural design elements of the project, including structural design requirements of the building and coordination with the RUBB manufacturer. Negotiating with the structural Project Managing firm for a cost to perform the work is also included in this task.

1.11 Coordinate Utility Service (Installation and/or Relocation) with Local Utility Companies (Provided by Subconsultant). This task includes meeting and coordinating with local utility agencies who are anticipated to be affected by the project. The Project Manager will furnish plans to the agencies at the 30% and 100% review stages of the design, or as requested, to enable the agencies to coordinate efforts for the installation or relocation of any utilities, as necessary. See Attachment A. for reference.

1.12 Prepare Federal Grant Application. This task consists of preparing the federal grant application. The application will be submitted during the initial portion of the project. Preparation of the application includes the following:

- Prepare Federal 424 form.
- Prepare Federal Form 5100 – II thru IV.
- Prepare project funding summary.
- Prepare program narrative, discussing the purpose and need of the work and the method of accomplishment.
- Project sketch (8.5” x 11”).
- Include preliminary cost estimate.
- Include the existing Exhibit “A” Property Map (See Task 1.11 above).
- Include the Sponsor’s certifications.
- Attach the current grant assurances.
- Include DOT Title VI assurances.
- Include certification for contract, grants and cooperative agreements.
- Include Title VI pre-award checklist.
- Include current FAA advisory circulars required for use in AIP funded projects.

The Project Manager shall submit the grant application to the Sponsor for approval and signatures. After obtaining the necessary signatures, the Sponsor or Project Manager shall forward a copy of the signed application to the FAA for further processing.

1.13 ARCHITECTURAL

Prepare Architectural Design based on:

- 30% Design Interior elements
  - Provide a code review of building and local code requirements.
  - Miscellaneous details as needed
  - Floor Plan
  - Elevations
  - Building Sections
  - Door and Window Schedules, as required
  - Facility floor design in regard to slope and floor finish specification
- Coordination with Other Design Disciplines
  - Conduct Supplemental coordination with MEP and Structural design to confirm location and space requirements for chases, columns, equipment sizes, equipment clearances, etc. Coordination with Fire Protection Project Manager on Hangar allowable design not requiring the use a foam suppression system.

1.14 STRUCTURAL (Provided by Subconsultant).

Structural Design assumptions:

- Hangar floor slab design will consider slope for movement of aircraft.
- Hangar door will be 28'Hx100'W
- Interior hangar loads may include HVAC equipment and large circulation fans.
- Facility does not include cranes and/or fall protection.
- Hangar floor design for aircraft floor point loads
- Building, including hangar, framing will be a pre-engineered RUBB membrane structure.
- Foundation system will be conventional shallow reinforced concrete footings.
- Design will be in accordance with applicable Building Codes, NFPA, and local codes.

Structural Design services will include:

30% Design Phase

- Provide a code review of building and local code requirements.
- Provide recommendations related to site and building/floor plan layout.
- Provide preliminary design of structural framing for roof, columns, and walls for Building Code prescribed loading.
- Provide recommended foundation system based on Geotechnical report provided by Others.
- Prepare preliminary structural drawings to include general notes, special inspection requirements, foundation plans, roof framing plans, structural schedules, sections, and details.
- Provide coordination with the PEMB or RUBB manufacturer via virtual meetings or conference.
- Participate in virtual internal design team meetings, QC, and discipline coordination as required.

1.15 PLUMBING (Provided by Subconsultant).

Plumbing Design assumptions:

- Plumbing design will include natural gas distribution.
- Trench drains will be provided for the hangar floor and will connect to an oil/water separator.
- Interior and Exterior Hose bibs will be provided.
- Compressed air system is not required.
- Utility and Mop sinks are not required.
- Design will be in accordance with applicable Building Codes, NFPA, and local codes.
- Client is responsible for verifying adequate power, water, natural gas, and communications service (telephone, fiber, cable, etc.) is available at the site.

Plumbing Design services will include:

30% Design Phase

- Provide a code review of building and local code requirements.
- Provide recommendations related to site and building/floor plan layout.
- Provide preliminary design of sanitary sewer, vent systems, oil/water separator, trench drains in hangar, and natural gas distribution system.
- Prepare preliminary plumbing drawings to include general notes, water distribution, sanitary and vent plans, natural gas distribution plans, schedules, and details.
- Participate in virtual internal design team meetings, QC, and discipline coordination as required.

1.16 MECHANICAL (Provided by Subconsultant).

Mechanical Design assumptions:

- Hangar will not be provided with air conditioning (heat only).

- Infrared Tube heaters will be provided.
- Circulation Fans will be provided.
- Design will be in accordance with applicable Building Codes, NFPA, and local codes.
- Client is responsible for verifying adequate power, water, natural gas, and communications service (telephone, fiber, cable, etc.) is available at the site.

Mechanical Design services will include:

30% Design Phase

- Provide a code review of building and local code requirements.
- Provide recommendations related to site and building/floor plan layout.
- Provide preliminary design of heating systems and HVAC systems.
- Perform preliminary HVAC load and ventilation calculations.
- Prepare preliminary mechanical drawings to include general notes, heating plans, HVAC plans, schedules, and details.
- Participate in virtual internal design team meetings, QC, and discipline coordination as required.

1.17 ELECTRICAL AND COMMUNICATIONS (Provided by Subconsultant).

Electrical and Communications Design assumptions:

- New electrical service is anticipated for this project.
- Interior and Exterior Security Cameras will be provided.
- Client to provide all power requirements for specialty equipment.
- 480V power will be provided to charge aircraft.
- Relocation of the AOA gate controller.
- Electrical power outlets will be provided on the exterior to power the meter base.
- Exterior site lights will be provided with 5000K for ramp lighting.
- Electric vehicle (EV) charging stations are not included in this project.
- Communications design will be performance-based with detailed design being delegated to the Contractor. The Contractor will be responsible for preparing shop drawings and calculations as required.
- Design will be in accordance with applicable Building Codes, NFPA, and local codes.
- Client is responsible for verifying adequate power, water, natural gas, and communications service (telephone, fiber, cable, etc.) are available at the site.

Electrical and Communications Design services will include:

30% Design Phase

- Provide a code review of building and local code requirements.
- Provide recommendations related to site and building/floor plan layout.
- Provide preliminary design for electrical distribution system based on equipment layouts. The drawings will indicate circuit numbers. The routing of branch circuits may not be shown.
- Provide preliminary light fixture selections, locations for switches and other lighting controls.
- Provide preliminary design for site lighting and electrical site plan.
- Prepare preliminary electrical drawings to include general notes, power plans, lighting plans, schedules, and details.
- Provide preliminary performance-based design for the following communications and security systems: horizontal cabling distribution, Voice Over Internet Protocol (VOIP), access control, security cameras and communications room layout. Design for additional communications or security systems can be provided as an Additional Service.

- Communications drawings will show design criteria, locations of major equipment, and general notes for project specific requirements. This will be delegated design to the Contractor who will perform final detailed design and submit shop drawings.
- Participate in virtual internal design team meetings, QC, and discipline coordination as required.

1.18 FIRE PROTECTION and LIFE SAFETY (Provided by Subconsultant).

Fire Protection and Life Safety Design assumptions:

- Fire suppression system will be wet pipe sprinkler only. No foam system provided.
- The electric fire pump and system risers will be provided in a dedicated fire suppression room near the hangar bay.
- Fire alarm and fire suppression design will be performance-based with detailed design being delegated to the Contractor. The Contractor will be responsible for preparing shop drawings and calculations as required.
- Design will be in accordance with applicable Building Codes, NFPA, and local codes.
- Client is responsible for verifying adequate power, water, natural gas, and communications service (telephone, fiber, cable, etc.) is available at the site.
-

Fire Protection and Life Safety Design services will include:

30% Design Phase

- Provide a code review of building and local code requirements.
- Provide recommendations related to site and building/floor plan layout.
- Provide preliminary code summary and life safety plans.
- Provide preliminary performance-based design of fire alarm, fire suppression, and fire pump systems.
- Perform preliminary fire suppression system calculations.
- Prepare preliminary fire protection drawings to include general notes, fire alarm plans, fire suppression plans, schedules, and details. Drawings will show design criteria, locations of major equipment, and general notes for project specific requirements. This will be delegated design to the Contractor who will perform final detailed design, hydraulic calculations, and submit shop drawings.
- Participate in virtual internal design team meetings, QC, and discipline coordination as required.

The following table provides a check list of project deliverable items to be provided under the Phase 1 – 30% Preliminary Design:

PHASE 1 – PRELIMINARY DESIGN – 30% DELIVERABLE	TO FAA and BOA	TO AIRPORT
1.01 Meeting Agendas and Meeting Minutes from Pre-Design Meeting	✓	✓
1.02 Scope of Work and Draft Contract for the Sponsor		✓
1.03 Preliminary Cost Estimate	✓	✓
1.04 Design Schedule, PSR, Monthly Invoicing, and other PM design coordination elements		✓
1.12 Federal Grant Application	✓	✓

MEETINGS. Three meetings are anticipated for his phase of work. The PM has defined the specifics of the meeting; who will attend; location; and anticipated travel requirements for each meeting.
MEETING 1: The PM, Architect, and Practice Leader personnel shall meet with the Sponsor, BOA, and ADO to have an initial project review meetings to be sure the PM fully comprehends the Sponsors vision and requirements for the project. (3 Total).
MEETING 2: The PM and Architect shall attend Bi-weekly review meetings with the client will be scheduled during the design phase (4 Total).

MEETING 3: Additionally, a review of the 30% review set via teleconference with the PM and Architect. Acceptance sign off with approved notations, on the design documents at this phase (plans, elevations, etc.) of the 30% is required by the Sponsor within 5 working days of the review meeting for the team to move forward as per the attached schedule developing the more detailed construction documents.

MEETING	# OF MEETINGS	PEOPLE	LOCATION	LENGTH	HOTEL	PER DIEM	FLIGHT	CAR RENTAL
Sponsor Initial Kickoff Review	**3**	**3**	**Virtual**	**1 hr.**				
Bi-Weekly Reviews	**4**	**2**	**Virtual**	**1 hr.**				
Sponsor 30% Review	**1**	**2**	**Virtual**	**1 hr.**				

PART A – BASIC SERVICES/PHASE 2 – DESIGN PHASE – 90% TO 100% DELIVERABLE

The drawings and specifications shall progress to a higher, more refined level of detail identifying and resolving any conflicts among the building systems. Higher level of system design and load calculations will progress during this phase of work. Draft specification document requirements shall also be reviewed during the 90% review by the Sponsor. The PM and key design team personnel [architectural lead, civil lead, and MEP Project Manager shall meet with the Sponsor to review the 90% review set [in-person subconsultant and via teleconference]. Acceptance sign off with approved notations on the design documents at this 90% phase (including further developed plans, elevations, reflected ceiling plans, building and wall sections, etc.) is required for the team to move forward developing the more detailed construction documents within 5 working days of the team face-to-face meeting. Owner requested design changes following the 90% review and signoff shall require discussion on fee modification and impact to schedule.

The Client comments shall be provided in a meeting report within two days of the meeting. The 100% design drawings and specifications will then be provided within 10 business days of the meeting to the client. Any client requested significant design changes or value Project Managing at the 100% phase shall result in a fee modification and may have an impact to the schedule. Any final review comments from the client will be incorporated into the plans prior to the final plan submission for construction and permitting.

A complete set of construction documents will be delivered to the client for bidding the project at the completion of this phase of work.

2.0 CIVIL/SITE (Provided by Subconsultant)

2.0 Design Phase

2.01 Analyze Topographic Survey Data (Provided by Subconsultant). See Attachment A. for reference. This task includes analyzing the topographical survey data and preparing the data for use with computer modeling. This will include the following tasks:

- Input raw survey data into Autodesk Civil 3D to sort data into the Engineer's standard layers for efficient analysis.
- Verify surveyor horizontal and vertical control.

- Verify survey data from as-built conditions.
- Sort all data points by layers and descriptions for computer modeling.
- Prepare triangulated irregular network (TIN surface model) of existing ground contours, pavement edges, roadways, electrical equipment, drainage features, buildings, fences, and other miscellaneous entities.
- Generate three-dimensional contour model from TIN surface model.
- Prepare and process data for spot elevations, grading and/or paving cross sections.
- Conduct safety area topographical survey and object inventory.
- Prepare exhibit(s) (plan view of safety area with spot elevations/longitudinal and transverse gradients/dimensions, location/description of objects; etc.) and associated narrative with analysis (compliance with current standards vs. non-compliance with current standard(s).
- If a non-standard determination is made by the FAA, assist Sponsor with alternative analysis preparation and presentation per the referenced FAA guidance above.

2.02 Analyze Geotechnical Investigation Data (Provided by Subconsultant). See Attachment A. for reference. This task includes analyzing the geotechnical investigation. This will include the following tasks: Review Geotechnical Engineer recommendations.

- Determine on-site sources and quantities of suitable material for embankment.
- Determine appropriate data for benching design.
- Determine appropriate data for the pavement design form(s).
- Input data for computer modeling with topographical survey data.
- Prepare soil information for incorporation on the construction plans.
- Coordinate with Structural Engineer on geotechnical findings.

2.03 Prepare Pavement Design (Provided by Subconsultant). See Attachment A. for reference. After receiving the geotechnical investigation data, the Engineer will analyze the data and prepare a proposed pavement section using current FAA design software (FAARFIELD). The Engineer will submit the FAARFIELD computer printouts with a narrative to the FAA. The following tasks will be completed:

- Determine appropriate data for pavement design.
- Input data for computer modeling with topographical survey data.
- Prepare an exhibit showing the existing pavement and base course thickness.
- Determine areas of existing pavement to be removed and replaced.
- Prepare pavement and soils information for incorporation on the construction drawings.
- Verify elevation of water table.
- Compile the current airport fleet mix.
- Input data into FAARFIELD.
- Analyze output from FAARFIELD.
- Select preferred pavement section.
- Compare pavement section to FAA Advisory Circular (AC) 150/5320-6 (Current Edition), *Airport Pavement Design and Evaluation.*
- Verify frost design method.
- Verify over excavation requirements (if needed).
- Verify optimum moisture content for subgrade preparation.

2.04 Develop On-Site Grading Plans (Provided by Subconsultant). This task includes developing potential on-site borrow area grading plans to remove material from potential area(s) for use as embankment on the project site. It is anticipated that two to three different grading options will be developed during this task. Aerial photography will be used to develop the grading plans and associated quantities for all potential borrow sources

This task includes developing potential on-site grading plans to place excavated material and/or to re-contour borrow sites. It is anticipated two to three different on-site grading options will be developed during this task. Aerial photography will be used to develop the grading plans and associated quantities for all potential embankment and excavation area(s

2.05 Prepare Existing Utility Inventory (Provided by Subconsultant). This task includes reviewing record drawings and consulting with the Sponsor and local utility companies to identify all utilities within the project site. The Construction Plans will include, to the maximum extent possible, the surveyed locations of observable utility features and the locations identified by utility locates.

2.06 Prepare Preliminary Contract Documents. (Provided with Subconsultant) This task includes preparing the Preliminary Contract Documents, including Contract Proposal, Bid Bond, Contractor Information Sheet, Subcontractor/Material Supplier List, Disadvantaged Business Utilization Commitment, DBE Participation Form, Certification of Non-Segregated Facilities, Equal Employment Opportunity Report Statement, Buy America Certification, Buy America Waiver Request, Buy America Conformance Listing, Certification Statement Regarding Undocumented Individuals, Bid Proposal, Contract, Payment Bond, Performance Bond, Notice of Award, Notice to Proceed, Notice of Contractor's Settlement, General Provisions, FAA AC 150/5370-2 (Current Edition), *Operational Safety on Airports During Construction,* and Wage Rates. The wage rates will be updated at the time of advertisement to reflect the most current wage rates available. Preparation will include establishing the location for the bid opening, dates for advertisement and description of the work schedule. Also included in the Preliminary Contract Documents, and covered under separate tasks below, are the Construction Safety and Phasing Plan, Technical Specifications, and Special Provisions. Preliminary Contract Documents will be prepared as early as possible during the design phase and submitted to the Sponsor for review.

2.07 Prepare Construction Safety and Phasing Plan (CSPP) (Provided by Subconsultant). See Attachment A. for reference**.** This task includes meeting with the Sponsor to discuss the current operations of the airport to assist in determining how the proposed construction phasing of the project will affect these operations. From these meetings, a complete Construction Safety and Phasing Plan (CSPP) will be developed to ensure safety compliance when coordinating construction activities and airport operations. The CSPP will be developed in accordance with the requirements of FAA AC 150/5370-2 (Current Edition), *Operational Safety on Airports During Construction.* A construction phasing plan that meets the requirements of the AC and operational needs of the airport will be developed and included in the Contract Documents. This plan will also identify any nighttime work, continuous working times, or other unusual conditions that could affect the Contractor's normal progress on the project. The draft CSPP will be submitted at 30% complete and at 90% complete for ADO review. Upon preliminary approval from the ADO, the CSPP will be submitted to BOA for OE/AAA coordination.

2.08 Prepare Construction Plans (Provided by Subconsultant). See Attachment A. for reference**.** This task includes preparing all construction plans for the project. A complete listing of these is provided in the following table:

The following tables provide an estimate of design drawings that will be provided per design discipline for the completed bid drawing package. Note: this is an estimate and may fluctuate higher or lower depending on the specific needs of the design team.

SITE/CIVIL - Plan Name/Description	Number of Sheets
Index of Drawings, Summary of Approximate Quantities and General Notes	1
Survey Control Plan	1
Geotechnical Investigation Plan	2
Safety Plan	1
Construction Layout Plan	1
Construction Phasing Plan	2
Environmental Requirements and Details	1

Geometric Layout Plan	4
Overall Grading and Drainage Plan	1
Grading and Drainage Plan	4
Extended Safety Area Plan and Profile	1
Pavement Marking Plan	1
Pavement Marking Details	1
Drainage Details	2
Seeding and Erosion Control Plan	1
Seeding and Erosion Control Details	1
Fencing Details	1
CIVIL - Estimated Total Sheet Count	**26**

2.09 Prepare Preliminary Technical Specifications (Provided by Subconsultant). See Attachment A. for reference**.** This task includes assembling the technical specifications necessary for the project. Standard FAA specifications will be utilized where possible, with the guidance from FAA AC 150/5370-10 (Current Edition)*, Standard Specifications for Construction of Airports*. Additional specifications will be prepared to address work items for materials that are not covered by the standard FAA specifications. The standard specifications to be utilized, but are not limited to are provided in **APPENDIX A**.

2.10 Prepare Preliminary Special Provisions. (Provided with Subconsultant) This task includes preparing the preliminary Special Provisions to address, or expound on, site conditions that require additional clarification. These include, but are not limited to: Haul Roads, Airport Security, Radio Communications, Badging Process, Temporary Fencing, Work Schedule, Contractor's Quality Control Program, Sequencing of the Work, Closure of Air Operations Areas, Accident Prevention, Underground Cables/Utilities, Insurance, Indemnification, Permits and Compliance with Laws, Executed Contracts, Subletting or Assigning of Contracts, and Liquidated Damages.

2.11 Prepare Drainage Analysis and Storm Drainage Design (Provided by Subconsultant). This task includes verifying the existing storm drainage and/or subsurface drainage systems. Surface drainage will be evaluated and designed to ensure accordance with standard engineering practices, local requirements and FAA AC 150/5320-5 (Current Edition)*, Airport Drainage Design.*

2.12 Compile/Submit Permits. This task includes identifying potential federal, state and local permits needed for the project. Permits are anticipated to be required for, but are not limited to, demolition activities, air quality, grading, Right-of-Way (ROW) access, hauling, batch plants, wetland disturbance, open burning, fencing, various building systems, construction dewatering, permanent dewatering, fueling systems and stormwater management construction plans and associated permits (SWMP). When applicable, the Engineer will assist the Sponsor to compile information and submit permits that are required to be obtained by the Sponsor.

2.13 Compile/Submit FAA Form 7460. This task includes preparing and submitting the required FAA Form 7460-1, "Notice of Proposed Construction or Alteration," via the FAA's online Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) system on the Sponsor's behalf. The Engineer will coordinate with the FAA Project Manager and/or Airspace Specialist to determine the locations of required airspace case studies to be submitted. Generally, such cases are required for any restrictive/critical points where construction operations or proposed alterations may affect navigable airspace. Typically, these locations include (but are not limited to): limits of construction, construction phasing limits, haul routes for construction traffic, asphalt and/or concrete batch plants, and key points of any permanent, above-ground alterations. The Engineer will prepare an exhibit depicting the locations and other information pertinent to the cases' impact on the airspace to include with the submission. The Engineer will submit FAA Form 7460-1 and the associated documentation to the FAA via the OE/AAA system for approval a minimum of 45 days prior to the start of construction.

2.14 Calculate Estimated Quantities. **(Provided with Subconsultant)** This task includes calculating all necessary quantities for the various work items. Quantities must be consistent with the specifications and acceptable quantity calculation practices. Separate schedules will be provided upon request from Sponsor.

2.15 Prepare Estimate of Probable Construction Cost. Using the final quantities calculated following the completion of the construction plans and specifications, the Engineer will prepare the construction cost estimate. The estimate will be based on information obtained from previous projects, contractors, material suppliers and other available databases.

2.16 Prepare Engineer's Design Report and Modification of Standards (Provided by Subconsultant). See Attachment A. for reference**.** This task includes preparation of the Engineer's Design Report in accordance with current FAA Great Lakes Region Engineer's Design Report guidelines. The Engineer's Design Report will include a detailed summary of the project, photographs and descriptions of existing site conditions, pavement life cycle cost analysis, recycling and material availability analysis, estimate of project costs, and a schedule for the completion of the design, bidding, and construction. Modifications of the FAA standards, as necessary, for the project will be prepared for preliminary review. The Engineer's Design Report will also contain any alternative design concepts that were investigated and evaluated.

2.17 Prepare and Submit Modification of Standards on MOS Website. This task includes Modifications of Standards (MOS) website access coordination with the Sponsor and BOA. Modifications of the BOA standards, as necessary, for the project must be compiled and submitted to the MOS website for approval. Revisions will be completed as needed.

2.18 Review Plans at 90% Complete. During various stages of completion of the design, the Engineer and Subconsultants will submit a set of Construction Plans, Specifications, and Contract Documents to the Sponsor for their review. Meetings will be scheduled for periodic reviews, including an in-person 90% plans-in-hand review. The project will be reviewed with the Wisconsin BOA and FAA to obtain their concurrence with the design.

2.19 Provide In-House Quality Control. The Engineer has an established quality control program that will provide both experienced and thorough reviews of all project submittals and will also provide engineering guidance to the design team throughout design development from an experienced, senior-level Professional Engineer.

Prior to each review set of Construction Plans, Specifications, Contract Documents, and Engineer's Design Report being submitted to the Sponsor and Wisconsin BOA, a thorough, in-house quality control review of the documents will be conducted. This process will include an independent review of the Construction Plans, Specifications, Contract Documents, and Engineer's Design Report being submitted by a licensed Professional Engineer other than the Engineer who performed the design of the project. Comments will be offered by the Engineer that performed the review, and revisions to the Construction Plans, Specifications, Contract Documents, and Engineer's Design Report will be made accordingly.

In addition to the 90% and 100% reviews, the Engineer's in-house quality control program also provides engineering guidance to the design team throughout the project design in an attempt to steer the project in a manner that provides the best engineering judgment.

2.20 Prepare and Submit Construction Plans, Specifications, Contract Documents, and Engineer's Design Report (Provided by Subconsultant). See Attachment A. for reference**.** A final set of Construction Plans (11" x 17"), Specifications, Contract Documents, and the Engineer's Design Report will be prepared and submitted to the Sponsor, Wisconsin BOA. These documents will incorporate all revisions, modifications, and corrections identified during the final review. Paper and electronic copies will be provided.

2.21 ARCHITECTURAL

Prepare Architectural Design based on:

- Provide final code summary and life safety plans.
- Design Interior elements
  - Miscellaneous details as needed
  - Window Elevations
  - Room, Floor, Wall, Door, Window Finish Schedules, as required
  - Hangar floor design in regard to slope and floor finish specification
- Prepare Construction Contract Technical Specifications
  - To be provided as a separate booklet. Technical Specifications – Architectural Divisions 2 thru 14 (90% Review as Draft and 100% Final)
- Coordination with Other Design Disciplines
  - Conduct Supplemental coordination with MEP and Structural design to confirm location and space requirements for chases, columns, equipment sizes, equipment clearances, etc. Coordination with Fire Protection Project Manager on Hangar allowable design not requiring the use a foam suppression system

ARCHITECTURE - Plan Name/Description	Number of Sheets
Title Sheet and Index of Drawings	1
Partition Type Details	1
Life Safety – Code Summary	1
Life Safety Plan	1
Code Summary	1
Abbreviations And Reference Plan	1
Overall Floor Plans (With Enlarged Plans as Needed, E.G., Equipment Rooms)	2
Roof Plan review, With Details as Needed, Including Roof Drainage	2
Exterior Elevations, With Details as Needed	4
Building And Wall Sections, With Details as Needed	4
ARCHITECTURAL - Estimated Total Sheet Count	**18**

2.22 STRUCTURAL

Structural Design services will include:

90% Design Phases

- Design ground floor slab and foundations to support the building.
- Prepare structural drawings to include general notes, special inspection requirements, foundation plans, structural schedules, sections, and details.
- Specifications will be provided in manual format and coordinated with Architecture.
- Provide written response to Client review comments (if required).
- Participate in virtual internal design team meetings, QC, and discipline coordination as required.

100% Design Phase (Stamped/Signed)

- Finalize design of structural foundations for pre-engineered columns, and walls for Building Code prescribed loading.
- Finalize design of ground floor slab and foundations.
- Prepare final structural drawings to include general notes, special inspection requirements, foundation plans, roof framing plans, structural schedules, sections, and details.
- Specifications will be provided in manual format and coordinated with Architecture.
- Incorporate changes (if required) based on permit review comments in the Permit Response drawings. Changes will be indicated with clouds. Up to two rounds of permit review comments are included in the base services.

STRUCTURAL - Plan Name/Description	Number of Sheets
Structural General Notes	1
Special Inspections	1
Foundation Plans	1
Foundation Details	2
STRUCTURAL TOTAL– Estimated Total Sheet Count	**5**

2.23 PLUMBING

Plumbing Design services will include:

90% Design Phases

- Design interior plumbing systems, sanitary sewer, vent systems, trench drains in hangar, oil/water separator, and natural gas distribution system.
- Prepare plumbing drawings to include general notes, water distribution, sanitary and vent plans, natural gas distribution plans, schedules, isometric risers, and details.
- Final Interior and Exterior Hose bibs locations and details.
- Specifications will be provided in manual format and coordinated with Architecture.
- Provide written response to Client review comments (if required).
- Participate in virtual internal design team meetings, QC, and discipline coordination as required.

100% Design Phase (Stamped/Signed)

- Finalize design of plumbing systems, sanitary sewer, vent systems, trench drains in hangar, oil/water separator, and natural gas distribution system.
- Prepare final plumbing drawings to include general notes, water distribution, sanitary and vent plans, natural gas distribution plans, schedules, isometric risers, and details.
- Specifications will be provided in manual format and coordinated with Architecture.
- Incorporate changes (if required) based on permit review comments in the Permit Response drawings. Changes will be indicated with clouds. Up to two rounds of permit review comments are included in the base services.

PLUMBING - Plan Name/Description	Number of Sheets
Plumbing Notes and Legends	1
First Floor Sanitary, Waste and Vent Plan	1
Domestic Water and Gas Plan	1
Plumbing Details	1
Plumbing Schedules	1
Waste And Vent Riser Diagrams	1
Domestic Water and Gas Riser Diagrams	1
PLUMBING TOTAL (estimated)	**7**

2.24 MECHANICAL

Mechanical Design assumptions:

90% Design Phases

- Design heating systems and HVAC systems. Coordinate air distribution systems with design team for ceiling and lighting layouts.
- Design of Gas Infrared Tube Heaters and calculations.
- Overhead Fan final location(s) and specifications.
- Perform HVAC load and ventilation calculations.
- Prepare mechanical drawings to include general notes, heating plans, HVAC plans, schedules, and details.

- Prepare basic Sequence of Operation for HVAC equipment. Detailed control diagrams are not included.
- Specifications will be provided in manual format and coordinated with Architecture.
- Provide written response to Client review comments (if required).
- Participate in virtual internal design team meetings, QC, and discipline coordination as required.

100% Design Phase (Stamped/Signed)

- Finalize design of heating systems and HVAC systems.
- Update HVAC load and ventilation calculations (if required).
- Finalize basic Sequence of Operation for HVAC equipment. Detailed control diagrams are not included.
- Update mechanical COMCheck (if required).
- Provide final mechanical drawings to include general notes, heating plans, HVAC plans, schedules, and details.
- Specifications will be provided in manual format and coordinated with Architecture.
- Incorporate changes (if required) based on permit review comments in the Permit Response drawings. Changes will be indicated with clouds. Up to two rounds of permit review comments are included in the base services.

MECHANICAL - Plan Name/Description	Number of Sheets
Mechanical Notes and Legends	1
Mechanical HVAC Plans	1
Mechanical Piping Plans	1
Mechanical Details	1
Mechanical Schedules	1
MECHANICAL - Estimated Total Sheet Count	**5**

2.25 ELECTRICAL AND COMMUNICATIONS

Electrical and Communications Design services will include:

90% Design Phases

- Design exterior and interior electrical systems, power and data outlets, low-voltage power, electrical panels and one-line diagrams.
- Power to be provided with 480V service for aircraft GPU's.
- Select lighting fixtures in coordination with the Architect and provide fixture schedule. Outdoor lighting to be 5000K color temperature.
- Final Power Plans and Details need for AOA Gate Controller Relocation and meter base.
- Prepare electrical, communication, and security drawings to include general notes, schedules, and details.
- Final Access Control locations and details
- Final Security Camera locations and specifications.
- Final Technology Specifications to continue the existing Fiber Optic service at the Hangar and beyond.
- Specifications will be provided in manual format and coordinated with Architecture.
- Provide written response to Client review comments (if required).
- Participate in virtual internal design team meetings, QC, and discipline coordination as required.

100% Design Phase (Stamped/Signed)

- Finalize design of electrical and communication systems.
- Update electrical calculations (if required).
- Update electrical COMCheck (if required).
- Provide final electrical drawings to include general notes, power plans, lighting plans, one-line diagram, schedules, and details.

- Finalize performance-based based for communications and security systems.
- Specifications will be provided in manual format and coordinated with Architecture.
- Incorporate changes (if required) based on permit review comments in the Permit Response drawings. Changes will be indicated with clouds. Up to two rounds of permit review comments are included in the base services.

ELECTRICAL AND COMMUNICATIONS TECHNOLOGY - Plan Name/Description	Number of Sheets
Electrical Notes and Legends	1
Lighting Plan	1
Power Plan	1
Electrical Details	1
Electrical One-Line Diagram And Details	1
Electrical Schedules	1
Electrical Site Power and Lighting Plan	1
Electrical Site Details	1
Communications Plan	1
Communications/Security Details	1
ELECTRICAL and COMMUNICATIONS TECHNOLOGY - Estimated Total Sheet Count	**10**

2.26 FIRE PROTECTION

Fire Protection and Life Safety Design services will include:.

90% Design Phases

- Design wet pipe fire protection system including fire pump, valving, standpipes, vertical risers, and alarming to be addressed by performance specification and standard details.
- Prepare fire alarm drawings to include general notes, fire alarm plans, and schedules.
- Specifications to indicate the zones and densities for the distribution portions of the sprinkler system.
- Prepare fire sprinkler system to be submitted as a “Deferred Approval” per industry standard.
- Specifications will be provided in manual format and coordinated with Architecture.
- Provide written response to Client review comments (if required).
- Participate in virtual internal design team meetings, QC, and discipline coordination as required.

100% Design Phase (Stamped/Signed)

- Update fire suppression system calculations (if required).
- Provide final fire protection performance-based drawings to include general notes, fire alarm plans, fire suppression plans, riser diagrams, operational matrix, schedules, and details.
- Specifications will be provided in manual format and coordinated with Architecture.
- Incorporate changes (if required) based on permit review comments in the Permit Response drawings. Changes will be indicated with clouds. Up to two rounds of permit review comments are included in the base services.

FIRE SUPPRESSION	Number of Sheets
Fire Alarm Notes and Legend	1
Fire Alarm Plan	1
Fire alarm Riser Diagram, Operational Matrix, and Details	1
Fire Suppression Notes and Legend	1
Fire Suppression Plan	1
Fire Suppression and Fire Pump Details	1
FIRE SUPPRESSION- Estimated Total Sheet Count	**6**

TOTAL DRAWINGS FOR PROJECT (ESTIMATE)	63

DELIVERABLES: The following table provides a check list of project deliverable items to be provided under the Phase 2 – 90% - 100% Design:

TASK 2 DELIVERABLES	TO FAA/BOA	TO AIRPORT
2.03 Proposed Pavement Design	✓	✓
2.06 Preliminary Contract Documents for Sponsor's Review		✓
2.07 CSPP at 90% Complete	✓	✓
2.13 FAA Form 7460	✓	✓
2.18 90-100 % Construction Plans, Specifications, Contract Documents, and Engineer's Design Report	✓	✓
2.20 Final Construction Plans, Specifications and Contract Documents, and Engineer's Design Report	✓	✓

MEETINGS. One meeting is anticipated for this phase of work. The PM has defined the specifics of the meeting; number of attendees; location; and anticipated travel requirements for each meeting.
MEETING 1: The PM and Architect will meet with the sponsor to review the 90% set via teleconference. Acceptance sign off with approved notations, on the design documents at this phase (plans, elevations, etc.) of the 90% is required by the Sponsor within 5 working days of the review meeting for the team to move forward as per the attached schedule developing the more detailed construction documents. The Architect will travel to Airport to meet with Sponsor.

MEETING	# OF MEETINGS	PEOPLE	LOCATION	LENGTH	HOTEL	PER DIEM	FLIGHT	CAR RENTAL
90% Plan Review	**1**	**2**	**In Person/ Virtual**	**2 hr.**	**2**	**2**	**2**	**2**

PART A – BASIC SERVICES/PHASE 3 – BIDDING (Provided w/ Subconsultant)

See Attachment A. for reference**.**

3.01 Provide Bid Assistance. The Engineer will assist the Sponsor, as needed, with the preparation of any required bidding documents. Included as part of this task, the Engineer will prepare a legal advertisement and provide it to the Sponsor for submission into the newspapers. Additionally, the Engineer will provide bidding documents to the Bureau of Aeronautics (BOA) for electronic bidding, which is to be administered by BOA on Bidexpress.com, and directly notify potential contractors and plan rooms in order to maximize project exposure and generate interest in the project. The Engineer will coordinate payment for the project advertisement(s) and request reimbursement from the Sponsor as a pass-through cost during invoicing.

3.02 Prepare/Conduct Pre-Bid Meeting. The Design representative will conduct the pre-bid meeting and pre-bid site visit in sequence with the Sponsor and contract document requirements. As a part of this meeting, the Design representative will also discuss the environmental plan sheet, surveyed areas, and environmental commitments. The Design representative will prepare an agenda for the meeting and secure sign-in sheets of all attendants. The Design representative will scribe meeting minutes and distribute to the Sponsor with the sign-in sheets.

3.03 Prepare Addenda. Any necessary addenda will be issued to clarify and modify the project, as required, and based on questions or comments that may arise from potential contractors during the bidding process. Any necessary addenda will be reviewed with the Sponsor prior to being issued. The addenda will meet all design and construction standards, as required.

3.04 Address RFIs from Prospective Bidders. During the bidding process, the PM and the design team shall be available to clarify bidding issues as submitted in writing from contractors and/or suppliers and for consultation with the sponsor building departments associated with the project.

3.05 Review Bid Proposals. Upon the opening of submitted bid proposals by the Sponsor, the PM shall review all the bid proposals submitted. A cost analysis of the bid prices will be completed and tabulated for civil quantities; the contractor's qualifications to perform the work will be evaluated; review of suspension and debarment rules on the www.Sam.gov website; verification of proposed DBE subcontractors; Buy American compliance analysis/review, and project funding review. Inclusion of bid guarantee, acknowledgment of addenda, and in-state licensure verification shall be completed. **CHECK REFERENCES AND DOCUMENT COMPLIANCE AND DBE LICENSE STATUS WITH STATE.**

DELIVERABLES: The following table provides a check list of project deliverable items to be provided under the Phase 3 - Bidding Phase:

PHASE 3 – BIDDING PHASE DOCUMENTS	TO FAA/BOA	TO AIRPORT
3.01 Required Bidding Documents	✓	✓
3.02 Pre-Bid Meeting Agenda and Pre-Bid Meeting Minutes	✓	✓
3.03 Addenda	✓	✓
3.04 Address RFI's	✓	✓
3.05 Bid Tabulations	✓	✓

MEETINGS. Two meetings are anticipated for this phase of work. The PM has defined the specifics of the meeting; who will attend; location; and anticipated travel requirements for each meeting.
MEETING 1: The PM and Architect shall attend the pre-bid meeting. Questions will be addressed by the prospective bidders and a site visit will be conducted if warranted. The Architect will travel to Airport to meet with prospective bidders and walk the site.
MEETING 2: The PM and Architect will meet with the Sponsor to review the bid results. This meeting may also review any potential discrepancies with the bids and the need to disqualify any of the bidders.
MEETING 3: The Design Representative's Subconsultant will attend the Bid opening if a public Bid opening is requested by Owner.

MEETING	# OF MEETINGS	PEOPLE	LOCATION	LENGTH	HOTEL	PER DIEM	FLIGHT	CAR RENTAL
Pre-Bid Meeting	**1**	**2**	**In Person/ Virtual**	**1 hr.**	**2**	**2**	**2**	**2**
Client Bid Review	**1**	**2**	**Virtual**	**1 hr.**				

Assumptions
The scope of services described previously, and the associated fees, are based on the following rates and assumed responsibilities of the Engineer and Sponsor.

1. For the purposes of estimating the amount of reimbursable expenses which will be incurred by the Engineer, the cost of mileage is calculated in accordance with the current IRS rate and per diem and lodging are calculated in accordance with applicable, current GSA rates. The actual amounts to be invoiced for mileage and per diem will be in accordance with the applicable, published IRS and GSA rates at the time of service and may vary from the rates used in the fee estimate. Lodging will be invoiced as an actual expense incurred.
2. 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. The number of trips, as well as the anticipated lengths and details of the trips, are included at the end of each phase above.

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. While the project may have both eligible and ineligible work, this scope and fee assumes that the project will be designed as one bid package with separate federal and non-federal bid schedules. Splitting the project into two bid packages will result in additional costs.
6. 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 Great Lakes 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.
7. The Engineer will utilize the following plan standards for the project:
   - Plans will be prepared using the Engineer's standards, unless the Sponsor provides its own standards upon Notice to Proceed.
   - Plan elevations will be vertical datum NAVD 88 derived from the existing control network.
   - Plan coordinates will be based on horizontal datum NAD 83/2011 State Plane Coordinates derived from the existing control network.
   - All plans will be stamped and signed by a state-licensed Professional Engineer, or Professional Land Surveyor, as required.
   - Plans prepared by subconsultants will be prepared using the same base maps, the same coordinate systems and the same plan layout and format as plans prepared by the Engineer.
   - The guidance included in FAA Memorandum, *FAA Review of Construction Plans and Specifications for AIP Funded Projects*, will be reviewed, incorporated and will supplement the Engineer's standards.
8. The Engineer will utilize the following assumptions when preparing the project manual for bidding and construction of the project:
   - The project manual Contract Documents will be developed jointly by the Sponsor and the Engineer.
   - The Engineer is responsible for developing the contents of the document and including the Front-End documents which will be supplied by the Sponsor.
   - FAA and BOA General Provisions and required contract language will be used.
9. 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.
10. An AC 150/5300-18B (or Current Edition) compliant survey is not required as a part of this project. No data will be submitted to Airports GIS (AGIS) through the Airport Data and Information Portal (ADIP).
11. Approvals from the Client, Utility providers, Authorities having jurisdiction (AHJ), Wisconsin BOA and the FAA could impact the project schedule and final design. Woolpert is not liable for any decisions made by these organizations that could impact the project design or scheduling but will work with each agency to minimize impacts.
12. The Sponsor will provide timely feedback on operational plans and requirements. Woolpert is not responsible for delays by the Sponsor or other Agencies or changes that result after the 35% design phase is completed.
13. All parties must agree in writing with the final plan scope, limits and schedule. Should they be different than agreed to by Woolpert at the time of our fee proposal, the Sponsor will be notified in writing at the earliest possible date of conflicts and remediation options.

14. Redesign as a result of incomplete information or due to changed conditions after previous; alternate direction; or revising previously approved studies, plans, reports, design documents, or drawings; shall be considered additional services. Any major changes after the 60% design documents are completed may require additional fee and would be made by an amendment on an Hourly Not to Exceed basis using the hourly rates of this agreement.
15. Additional design alterations required to the construction documents beyond the 35% review level or additional drawings required for cost estimating by the Sponsor Contractor may require additional fee to cover additional design costs and additional design time extension.
16. Submittals or deliverables in addition to those listed herein.
17. Land acquisition or easement acquisition services are not provided herein.
18. Legal, Surety, or Insurance support, coordination, and representation are not provided herein.
19. Building Permit Submittals as required by City, County, and State will be submitted by Woolpert in expectation the Contractor shall complete the permit as required prior to its issuance. All fees or costs associated with all required permits shall be the responsibility of the Sponsor or the Contractor.
20. FAA Airport Layout Plan Updates if required by are not included.
21. Woolpert shall coordinate with utility provider for new service to the new facility. The Sponsor or contractor shall be responsible for any utility upgrades as required to get new power for the site. Woolpert design does not include service upgrade design required exterior to the Sponsor lease footprint. (This may include items such as directional boring under roadways, setting of new power poles beyond the Sponsor lease line, etc.).
22. Woolpert is not accountable for unknown underground utilities not identified during the site survey or not identified by existing condition drawings from the Airport and discovered during construction. Any costs associated with the discovery and design work required to address the unknown utilities may result in added fee.
23. 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 included at the end of each phase above.
24. The Sponsor will provide existing mapping data including as-builts available for the project areas and other available information in the possession of the Sponsor.
25. Updating the ALP will not be required at the completion of this project.
26. Because the PM has no control over the cost of construction-related labor, materials, or equipment, the PM's opinions of probable construction costs will be made on the basis of experience and qualifications as a practitioner of his/her profession. The PM does not guarantee that proposals for construction, construction bids, or actual project construction costs will not vary from PM's estimates of construction cost.
27. Woolpert will maintain records of design analyses and calculations consistent with typical industry standards, for a period of three years after the project is closed.

Additional Services

The following items are not included under this agreement but will be considered as extra work:

- Redesign for the Sponsor's convenience or due to changed conditions after previous alternate direction and/or approval.
- Submittals or deliverables in addition to those listed herein.
- If a project audit occurs, the Engineer is prepared to assist the Sponsor in gathering and preparing the required materials for the audit.
- Serving as an expert witness for the Owner in any litigation, surety claim, contractor bond activation, or other proceeding involving the project.
- Additional or extended services during construction made necessary by extension of contract time, non-concurrent work, or changes in the work.
- Legal, surety, or insurance support, coordination, and representation.

Extra Work will be as directed by the Sponsor in writing for an additional fee as agreed upon by the Sponsor and the Engineer.

Design Services and Features NOT included

Extra Work will be as directed by the Sponsor in writing for an additional fee as agreed upon by the Sponsor and the PM. The following items are not included under this agreement and would be considered as extra work:

- Redesign for the Sponsor's convenience or due to changed conditions after previous alternate direction and/or approval.
- Submittals or deliverables in addition to those listed herein.
- If a project audit occurs, the PM is prepared to assist the Sponsor in gathering and preparing the required materials for the audit.
- Serving as an expert witness for the Owner in any litigation, surety claim, contractor bond activation, or other proceeding involving the project.
- Additional or extended services during construction made necessary by extension of contract time, non-concurrent work, or changes in the work.
- Legal, surety, or insurance support, coordination, and representation.
- Furniture Fixtures and Equipment (FFE) Procurement.
- Energy Modeling, Solar Water heating design, or Daylighting calculations.
- LEED certification services.
- Value Engineering studies to reduce project cost.
- Legal Lease Description of the Property.
- Security System Designs with Plans/Details (Woolpert shall provide conduit and fiber as directed by the Sponsor to support systems as specified).
- Interior or Exterior detailed Renderings.
- Construction Administration Services (contract negotiation with contractors; submittal review; construction site visits; and as-built documents). A fee proposal for Construction Administration services shall be submitted to the Sponsor for review prior to awarding.
- Construction Inspection and Testing.
- Commissioning Services.
- Backup generator.
- Air compression distribution.
- Battery storage area; general maintenance storage; oxygen storage.
- Hangar restrooms.
- Hand wash stations.
- Heated pavement, interior or exterior to the pavement.
- Air conditioning for the hangar.
- Jib crane or bridge crane.
- Foam fire suppression system.
- Landscaping design or site irrigation.

APPENDIX A – PROJECT MANUAL

The following list are the anticipated front end documents for bidding and contractual requirements and the technical specification sections that may be included in the Project Manual.

SPECIFICATION DIVISIONS

FRONT END DOCUMENTS

PART 1: GENERAL

- Project Manager's Certifications
- Notice to Bidders
- Instruction to Bidders

PART 2: BIDDING DOCUMENTS

- Bid Proposal Form
- Bid Bond/Security
- Contractor Information
- Qualifications/Prequalification Statement
- List of Subcontractors
- Disadvantaged Business Utilization Commitment
- DBE Participation Form
- Equal Employment Opportunity Report Statement
- Build America, Buy America (BABA) Act
- CertificatION Of Compliance with FAA Buy American Preference – Construction Projects
- Certification of Compliance with FAA Buy American Preference – Equipment/Building Projects
- Buy American Waiver Request forms
- Buy America Conformance Listing
- Certification Regarding Domestic Preferences For Procurements
- Certification Of Offeror/Bidder Regarding Debarment
- Certification Of Lower Tier Contractors Regarding Debarment
- Certification Regarding Lobbying
- Certification Of Offeror/Bidder Regarding Tax Delinquency And Felony Convictions
- Trade Restriction Certification
- Non-Collusion Affidavit
- Bid Proposal Summary

PART 3: CONTRACT DOCUMENTS

- Construction Agreement
- Performance and Payment Bonds
- Performance Bond Form
- Payment Bond Form

PART 4: FAA AC 150/5370-10H: GENERAL PROVISIONS

- Section 10 – Definition of Terms
- Section 20 – Proposal Requirements and Conditions
- Section 30 – Award and Execution of Contract
- Section 40 – Scope of Work
- Section 50 – Control of Work
- Section 60 – Control of Materials
- Section 70 – Legal Regulations and Responsibility to Public
- Section 80 – Execution and Progress
- Section 90 – Measurement and Payment

PART 5: SPECIAL PROVISIONS

- Federal Provisions

Access to Records and Reports
Breach of Contract Terms
General Civil Rights Provisions
Clean Air and Water Pollution Control
Contract Workhours and Safety Standards Act Requirements
Copeland "Anti-Kickback" Act
Davis-Bacon Requirements
Disadvantaged Business Enterprises
Texting When Driving
Prohibition On Certain Telecommunications And Video Surveillance Services Or Equipment
Energy Conservation Requirements
Equal Opportunity Clause
Prohibition of Segregated Facilities
Occupational Safety and Health Act of 1970
Procurement of Recovered Materials
Rights to Inventions
Seismic Safety
Termination for Convenience
Termination for Default
Termination For CAUSE
Veteran's Preference
Federal Equal Employment Opportunity
Construction Contract Specification
EEO Specification
State Provisions
Sales and Use Taxes
Local Provisions
Contractor Payments Process and Timeline
Insurance
Indemnification
Permits and Compliance with Laws
Liquidated Damages
DBE Administration
DBE Award Documentation and Procedure
Qualification of Disadvantaged Business Enterprises
FAA Inspection
FAA Facilities
Accident Prevention

PART 6: WAGE RATES

Davis Bacon Wage Rates (or State)

PART 7: SAFETY DOCUMENTS

Construction Safety and Phasing Plan (CSPP)
Construction Safety and Phasing Compliance Document (CSPCD)

TECHNICAL SPECIFICATIONS

DIVISION 01 - GENERAL REQUIREMENTS
DIVISION 02 - EXISTING CONDITIONS
DIVISION 03 - CONCRETE
DIVISION 04 - MASONRY
DIVISION 05 - METALS

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES
DIVISION 07 - THERMAL AND MOISTURE PROTECTION
DIVISION 08 - OPENINGS
DIVISION 09 - FINISHES
DIVISION 10 – SPECIALTIES
DIVISION 11 – EQUIPMENT
DIVISION 12 - FURNISHINGS
DIVISION 13 - SPECIAL CONSTRUCTION
DIVISION 21 - FIRE SUPPRESSION
DIVISION 22 - PLUMBING
DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)
DIVISION 26 - ELECTRICAL
DIVISION 27 - COMMUNICATIONS
DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

FAA TECHNICAL SPECIFICATIONS ***(CIVIL/SITE EARTHWORK AND EXTERIOR IMPROVEMENTS)***

ITEM C-100 CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)
ITEM C-102 TEMPORARY AIR AND WATER POLLUTIONS, SOIL EROSION, AND SILTATION CONTROL
ITEM C-105 MOBILIZATION
ITEM C-110 PERCENTAGE OF MATERIAL WITHIN SPECIFICATION LIMIT (PWL)
ITEM P-101 SURFACE PREPARATION
ITEM P-151 CLEARING AND GRUBBING
ITEM P-152 EXCAVATION, SUBGRADE, AND EMBANKMENT
ITEM P-153 CONTROLLED LOW-STRENGTH MATERIAL (CLSM)
ITEM P-154 SUBBASE COURSE
ITEM P-155 LIME-TREATED SUBGRADE
ITEM P-156 TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL
ITEM P-157 CEMENT KILN DUST (CKD) TREATED SUBGRADE
ITEM P-158 FLY ASH TREATED SUBGRADE
ITEM P-208 AGGREGATE BASE COURSE
ITEM P-209 CRUSHED AGGREGATE BASE COURSE
ITEM P-210 CALICHE BASE COURSE
ITEM P-211 LIME ROCK BASE COURSE
ITEM P-212 SHELL BASE COURSE
ITEM P-213 SAND-CLAY BASE COURSE
ITEM P-217 AGGREGATE-TURF PAVEMENT
ITEM P-219 RECYCLED CONCRETE AGGREGATE BASE COURSEITEM P-301 SOIL-CEMENT BASE COURSE
ITEM P-304 CEMENT-TREATED BASE COURSE
ITEM P-306 LEAN CONCRETE BASE COURSE
ITEM P-401 HOT MIX ASPHALT (HMA) PAVEMENTS
ITEM P-403 HOT MIX ASPHALT (HMA) PAVEMENTS (Base, Leveling or Surface Course)
ITEM P-501 PORTLAND CEMENT CONCRETE (PCC) PAVEMENT
ITEM P-601 FUEL-RESISTANT HOT MIX ASPHALT (HMA) PAVEMENT
ITEM P-602 BITUMINOUS PRIME COAT
ITEM P-603 BITUMINOUS TACK COAT
ITEM P-604 COMPRESSION JOINT SEALS FOR CONCRETE PAVEMENTS
ITEM P-605 JOINT SEALANTS FOR CONCRETE PAVEMENTS
ITEM P-606 ADHESIVE COMPOUNDS, TWO-COMPONENT FOR SEALING WIRE AND LIGHTS IN PAVEMENT
ITEM P-608 EMULSIFIED ASPHALT SEAL COAT
ITEM P-609 BITUMINOUS SURFACE TREATMENTS

ITEM P-610 STRUCTURAL PORTLAND CEMENT CONCRETE
ITEM P-620 RUNWAY AND TAXIWAY PAINTING
ITEM P-621 SAW-CUT GROOVES
ITEM P-626 EMULSIFIED ASPHALT SLURRY SEAL SURFACE TREATMENT
ITEM P-629 THERMOPLASTIC COAL TAR EMULSION SURFACE TREATMENTS
ITEM P-630 REFINED COAL TAR EMULSION WITHOUT ADDITIVES, SLURRY SEAL SURFACE TREATMENT
ITEM P-631 REFINED COAL TAR EMULSION WITH ADDITIVES, SLURRY SEAL SURFACE TREATMENT
ITEM P-632 BITUMINOUS PAVEMENT REJUVENATION
ITEM F-160 WIRE FENCE WITH WOOD POSTS (Class A and B Fences)
ITEM F-161 WIRE FENCE WITH STEEL POSTS (Class C and D Fences)
ITEM F-162 CHAIN-LINK FENCE
ITEM F-163 WILDLIFE DETERRENT FENCE SKIRT
ITEM F-164 WILDLIFE EXCLUSION FENCE
ITEM D-701 PIPE FOR STORM DRAINS AND CULVERTS
ITEM D-702 SLOTTED DRAINS
ITEM D-705 PIPE UNDERDRAINS FOR AIRPORTS
ITEM D-751 MANHOLES, CATCH BASINS, INLETS AND INSPECTION HOLES
ITEM D-752 CONCRETE CULVERTS, HEADWALLS, AND MISCELLANEOUS DRAINAGE STRUCTURES
ITEM D-754 CONCRETE GUTTERS, DITCHES, AND FLUMES
ITEM T-901 SEEDING
ITEM T-903 SPRIGGING
ITEM T-904 SODDINGITEM T-905 TOPSOILING
ITEM T-908 MULCHING
ITEM L-101 AIRPORT ROTATING BEACONS
ITEM L-103 AIRPORT BEACON TOWERS
ITEM L-107 AIRPORT WIND CONES
ITEM L-108 UNDERGROUND POWER CABLE FOR AIRPORTS
ITEM L-109 AIRPORT TRANSFORMER VAULT AND VAULT EQUIPMENT
ITEM L-110 AIRPORT UNDERGROUND ELECTRICAL DUCT BANKS AND CONDUITS
ITEM L-115 ELECTRICAL MANHOLES AND JUNCTION STRUCTURES
ITEM L-119 AIRPORT OBSTRUCTION LIGHTS

PART 9: SUPPLEMENTAL TECHNICAL SPECIFICATIONS

ITEM P-140 PAVEMENT REMOVAL
ITEM P-159 WATERING
ITEM P-222 SOIL STERILIZATION
ITEM P-310 GEOSYNTHETIC FABRICS
ITEM P-311 PAVING FABRIC
ITEM P-312 NON-WOVEN GEOTEXTILE FABRICS
ITEM P-313 STRUCTURAL GEOGRIDS
ITEM P-314 BOND BREAKER FABRIC
ITEM P-315 ASPHALT REINFORCEMENT GRID TACK FILM MESH
ITEM P-502 CONCRETE PAVEMENT REPAIR
ITEM P-601 CRACK REPAIR WITH MAJOR CRACK REPAIR
ITEM P-619 RUBBER REMOVAL
ITEM P-640 AIRCRAFT TIEDOWN ANCHORS
ITEM P-700 BICYCLE RACKS
ITEM D-710 ROCK RIPRAP
ITEM D-750 TRENCH DRAINS (CAST IN PLACE)
ITEM D-750 TRENCH DRAINS (MODULAR)
ITEM L-125 AIRPORT LIGHTING SYSTEMS
ITEM L-126 RETROREFLECTIVE MARKERS

ITEM L-139 TEMP CONST MARKING LIGHTING
ITEM L-140 INSTALLATION OF PAPI SYSTEM
ITEM V-100 FAA CARRIER VEHICLE BASE SPEC
ITEM C-95 CONSTRUCTION STAKING
ITEM D-753 RIP RAP (NON-FAA)
ITEM D-703 CURED-IN-PLACE PIPE (CIPP)
ITEM L-135 ESTABLISHING PAPI FACILITIES
ITEM M-102 MAINTENANCE OF TRAFFIC
ITEM P-100 BITUMINOUS MILLING AGGREGATE
ITEM U-100 SUBSURFACE UTILITY PROJECT MANAGERING AND LOCATION
ITEM S-100 SUSTAINABILITY
ITEM E-100 INSULATION RESISTANCE TESTING

ATTACHMENT A SCOPE

OF WORK

Civil Design Services
For
Central Wisconsin Airport (CWA)
Mosinee, Wisconsin

Jet Aircraft Hangar

ATTACHMENT A

SCOPE OF WORK

Civil Design Services
For
Central Wisconsin Airport (CWA)
Mosinee, Wisconsin

Jet Aircraft Hangar

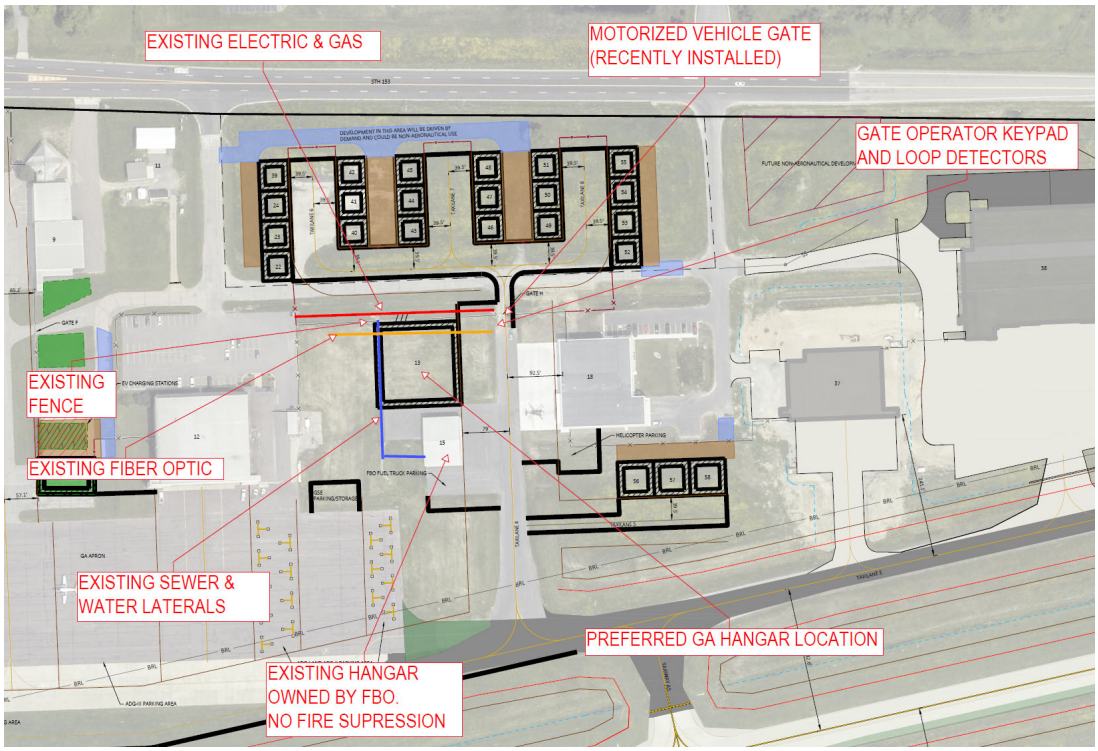
December 28, 2023

Project Understanding

The Central Wisconsin Joint Airport Board (Sponsor/Owner), Mosinee, Wisconsin proposes to design and bid a project for construction of a jet-sized hangar project at CWA. The project will be administered through the Wisconsin Department of Transportation, Bureau of Aeronautics (BOA)

Jviation, Inc., a Woolpert Company (Consultant) is the prime consultant providing project management and architectural design services for the project. Becher-Hoppe Associates, Inc. (Subconsultant/BHA) has provided airport engineering services at CWA for over 55 years, has valuable legacy knowledge of the Airport, and is familiar with requirements for bidding airport projects in Wisconsin. Subconsultant proposes to provide civil engineering and other support services as described in the scope to Jviation.

An excerpt from the draft airport layout plan (ALP) showing the proposed hangar location and notable civil related considerations is below:



Bid opening is planned to occur in July 2024, assuming that all required approvals needed for bidding are received by then.

The tasks included in this scope of work are as follows:

Scope of Services

The term "civil engineering/work/services/design" is used throughout the scope. For the purposes of this scope, this pertains to design of pavement, grading, drainage, erosion control, fencing, and construction safety and phasing plan; all for exterior areas.

1. Phase I – Preliminary Design

a. Design Surveys
Subconsultant will conduct topographic surveys in the proposed project area, which will be used for preliminary and final design tasks. Surveys will collect topographic data including; elevations, pavement edges, utility layout, fencing, and miscellaneous objects that need to be accounted for during design and construction. Potholing for underground utilities to estimate utility depth is not included in this scope.

b. Geotechnical Layout, Investigation and Report
American Engineering Testing (AET) will be a subconsultant to BHA and will perform geotechnical engineering work as described in **Attachment C**.

c. Obstruction Surveys
NOT INCLUDED IN SCOPE.

d. Meetings, Scoping, and Contracting
Subconsultant will coordinate with the Consultant and Sponsor to formulate an initial scope and associated fee proposal for the project. Subconsultant will make modifications to the scope and fee as necessary for these proposal documents to be acceptable to all stakeholders. Subconsultant will perform the tasks necessary to enter into a contract with Consultant, and administration tasks associated with the that contract during the project.

Subconsultant will attend virtual scoping meeting, biweekly virtual design team collaboration meetings, and design review meetings at the Airport at 30% and 90% milestones.

e. Coordination with Utilities
Subconsultant will coordinate with utility companies with facilities within the proposed construction area and invite them to participate in the review of the project concept and provide comments.

f. Preliminary Opinion of Probable Construction Cost (OPC)
Subconsultant will prepare a preliminary OPC for the civil construction work with 30% design documents. The OPC may not be broken down by bid item, and will generally be an order of magnitude estimate.

g. Preliminary Engineer's Report
Subconsultant will submit information relevant to civil engineering design for the preliminary engineer's report to the Consultant prior to the 30% design review meeting.

h. Exhibit "A" Map
NOT INCLUDED IN SCOPE.

i. Pavement Design and FAA Forms/Output

Consultant will perform a pavement design and provide FAA forms/output based on the following input parameters:

- Geotechnical/soil frost group data determined by the geotechnical investigation in Item b above.
- Fleet mix data obtained from operations estimates provided by the Sponsor.

j. Prepare CATEX Request

Subconsultant will complete Documented CATEX form contained in ARP SOP No. 5.1, Appendix A in accordance with Order 1050.1F.

The BOA will complete DNR concurrence requests, streamlined Section 106 submittals, and tribal notifications.

Wetland delineation/determination services are not included in this scope because there are not any mapped wetlands or wetland indicators in the project vicinity on DNR's surface water data viewer system.

Section 106 investigations are not included in this scope because the project area was previously disturbed.

Stormwater treatment design for total suspended solids & post construction flow discharge control, DNR notice of intent (NOI), and associated stormwater permitting are not included in this scope because the ground disturbance area associated with this project is anticipated to be less than 1 acre.

k. ALP Insert Sheet

NOT INCLUDED IN SCOPE.

2. Phase II – Final Design

a. Final Engineer's Report

Subconsultant will submit information relevant to civil engineering design for the Final Engineer's Report in accordance with the FAA's recommended outline for engineer's design report (**Attachment D**).

b. Technical Design and Development of Construction Plans

Subconsultant will complete technical civil design for the proposed improvements. During design, the Subconsultant will prepare and submit 30%, 90%, and draft final plan sets for review and comment by the Consultant, Sponsor, and BOA.

Subconsultant will prepare final civil plans for BOA approval to bid. Plan sheets that will be prepared by Subconsultant are shown on Attachment B, section 2.b. Plan sheets will be B or D size sheets.

After 30% design review comments regarding site layout design have been addressed by Subconsultant, and approved by Sponsor/Consultant, grading design will begin. Any layout or grading design revisions that are necessary after this point due to revisions to building size, building layout, building location, building door locations, building door sizes, site layout, etc. are not accounted for in this proposal, and therefore, an amendment to account for that additional effort would be required.

Subconsultant will prepare the initial airspacing submittal for entry into FAA Obstruction Evaluation/Airport Airspace Analysis system.

c. Bid Proposal Documents and Technical Specifications

Subconsultant will prepare the bid proposal packet in accordance with BOA standards.

The following information will be included in the bid proposal packet:

- Segment I
  - Proposal for airport work
  - Advertisement for bids
  - Advisory notice to bidders
  - Bidder request to bid/current workload form
  - Erosion control implementation plan worksheets
  - Safety plan compliance document worksheets
  - Bid sticker
  - Table of contents
  - Proposal requirements and conditions
  - Bid bond forms
  - Certificate of annual bond form
  - List of subcontractors form
  - Federal tax delinquency certification form.
  - Buy American certification of compliance
  - Federal requirements
  - FAA general contract provisions, as provided by BOA with supplementary information, with notes to specifier/designer choices addressed
- Segment II
  - Project special provisions (supplemented with information provided by Consultant)
  - Civil specifications, unless otherwise described in plans
  - Building specifications (provided by Consultant)
- Segment III
  - Supplemental Specifications – N/A
- Segment IV:
  - Wage rate determination
- Segment V:
  - Schedule of prices

Subconsultant will provide addendum information related to civil work to Consultant.

d. Pre-Bid Meeting

Subconsultant will attend a pre-bid meeting at the Airport and explain Wisconsin/BOA specific project requirements to prospective contractors. Subconsultant will present information and answer questions pertaining to civil work. The meeting will include a tour of the site.

e. Opinions of Probable Construction Cost

Subconsultant will develop and transmit opinions of probable construction cost (OPC) for civil work. The OPCs will be detailed as per the bid items chosen and the associated quantities of work to be accomplished for the project. OPCs will be submitted with 90% and final bid document submittals.

f. Construction Safety and Phasing Plan

Subconsultant will prepare the required Construction Safety and Phasing Plan (CSPP) and CSPP checklist in accordance with FAA ARP SOP 1.00 for review by the Consultant, BOA, and Sponsor. Subconsultant will address comments from these entities, then submit the CSPP to the FAA for airspacing and review. Subconsultant will coordinate with the FAA and address any CSPP review comments by the FAA as necessary.

g. Furnishing of Plans and Specifications
NOT INCLUDED IN SCOPE.

h. Assistance in Securing Bids
Subconsultant will assist in securing responsive bids for the project. This includes responding to bidder questions, notification of the project to prospective bidders, and communication with the bidders prior to the bidding date.

The BOA will utilize their online bidding system to administer bidding of this project. Subconsultant will organize bid documents in the BOA's preferred folder structure for BOA to upload to the bidding website.

A fee for these providing this scope of services is included as **Attachment B**.

Additional Services: Examples of work items that are not included in this scope, but that can be added upon request, are as follows:

- Construction engineering services
- Construction staking
- Revisions to site design as a result of changes to facility layout, FFE elevation, or door locations after the 30% design milestone
- Hangar "stack" evaluation showing aircraft hangar storage options for various aircraft types and hangar sizes
- Architectural design
- Mechanical design
- Electrical design
- Lighting design
- Public utility design: The following are assumptions regarding public utilities:
    - Water and sewer main work will not be needed on this project.
    - Public electric and gas design will be performed by the public utility provider
    - Public communications design will be performed by communications provider
- Private water and sewer utility design: The following are assumptions regarding private utilities:
    - Plumbing designer will design water and sanitary sewer laterals
- Motorized gate and associated features design
- Boundary surveys
- Easement preparation
- Retaining wall design
- Landscaping design
- Irrigation design
- Security equipment design
- Commercial drone photography in accordance with FAA Part 107 regulations
- Additional meetings

END OF PROJECT SCOPE

P:\2023\2023.042 - Jviation - CWA Jet Hangar\Admin\Contracts - Working\Design\CWA Jet Hangar_Attachment A_Scope.docx

6. Drainage Design

- Delineation of drainage area
- Existing drainage area characteristics and structures
- Storm water runoff calculations
- Inlet and storm sewer system design calculations
- Detention pond drainage requirement (empty within 48 hours)

7. Airfield Lighting and Signage

- Description of existing system (age, condition, type
- Layout of airfield lights and signage
- Electrical circuit load calculations and summary table.

8. Navaids

- Provide listing of all Navaids and ownership
- Identify impacts to FAA owned navigation aids
- Provide design calculations for sponsor installed Navaids
- Include obstacle clearance surfaces verification (if applicable)

9. Pavement Marking

- Show layout of markings conforming to AC 150/5340-1
- Address application of temporary marking.
- Sponsor should conduct a life cycle cost analysis when specifying a higher initial cost item that provides longer service life.

10. Environmental Considerations

- Storm water management measures
- Permits

11. Utility Lines in Work Area

- Identify all known existing underground utility lines in and adjacent to work area
- Engineer should strive to identify impacts at the design phase as opposed delegating discover of impacts to the contractor.
- Recommend contacting the appropriate underground cable owner (or service) to physically identify underground utilities during design phase
- Pothole areas on potential conflicts with existing underground utilities.

12. Miscellaneous Work Item

- Address other project related work items such as seeding, fencing, airport drainage, site access and etc.

13. Application of Life Cycle Cost Analysis

- Applicable whenever Sponsor desires a higher initial cost alternative over a lower costs alternative
- Must use constant dollars (no inflation) and 7% discount rate.
- Must be applied as part of bid evaluation

14. Sponsor Requested Modifications to AIP Construction Standards

- Provide listing, description and justification for all sponsor requested modifications to FAA construction standards.

15. Delineation of AIP Non-participating work

- Separately identify all work items that are not eligible for AIP participation.
- Provide justification for why non-participating work should be allowed as part of an AIP funded project
- Establish how non-participating work will be separated from AIP work (schedules, line items)

16. DBE Participation

- State the status of the Sponsor's DBE program
- Identify the current year of the 3 year overall goal. (i.e. Year 2 of overall 3 year goal)
- Establish project specific goal only if overall goal cannot be met by race/gender neutral means.

17. Project Schedule

- Include critical milestone dates as applicable
  - Project initiation
  - Preliminary investigation and design
  - Acquisition and submittal of aeronautical survey data
  - Approach procedure development/amendment
  - Availability of final plans and Specifications
  - Bid Opening
  - Award of contract
  - NTP
  - Completion
  - Closeout

18. Engineers Estimate of Probable Cost

- Provide an itemized summary of the engineer's estimate of probable construction costs.
- Separately identify AIP eligible costs and non-eligible costs

19. Preliminary Project Budget

- Provide a project budget summary that identifies all anticipated project costs (Administrative, preliminary, design, construction and observation/testing services)

20. Pre-design meeting minutes

- Provide a copy of the minutes from the pre-design meeting.

Central Wisconsin Airport – Flight Schedule
January 9, 2024

Arrivals – Delta				Departures – Delta			
4982	16:00	from MSP	CRJ	5384	06:38	to MSP	CRJ
4934	21:06	from MSP	CRJ	4982	16:40	to MSP	CRJ

Arrivals – American				Departures – American			
6059	15:22	from ORD	ERJ	6048	05:45	to ORD	ERJ
6062	19:51	from ORD	ERJ	6059	15:28	to ORD	ERJ

Arrivals – Avelo				Departures – Avelo			
758	10:15	from MCO	737-800	759	09:55	to MCO	737-800

Upcoming Charter Schedule

Jan. 14 – Sun Country to Laughlin
Jan. 26 – Sun Country to Laughlin
Feb. 26 – Sun Country to Reno

MSP = Minneapolis
ORD = Chicago O'Hare
MCO = Orlando

Total CWA Flights Daily = 5

CWA Legislative Update – January 2024

Senate Clears Extension of FAA Programs and Excise Taxes Through March 8, 2024
(Source: Airport Alert, AAAE)
December 20, 2023

On December 19, the Senate cleared H.R. 6503, a bill to extend aviation programs and excise taxes through March 8, 2024. The Senate approved the stop-gap measure by unanimous consent after a debate over Ukraine funding temporarily sidelined the noncontroversial aviation bill.

Unable to pass a multi-year FAA reauthorization bill before the initial September 30 deadline, Congress passed a short-term extension that expires on December 31. With the end of the year quickly approaching Congress needed to clear another stop-gap measure to extend FAA programs and aviation excise taxes.

Coupled with the first short-term extension, H.R. 6503 would provide the FAA with slightly more than five months of authorized funding. That translates into a total of approximately $1.5 billion for AIP and another $244 million for supplemental discretionary grants.

Like the first short-term extension, the latest bill also extends the so-called “high-three” provision that will allow airports to receive favorable AIP entitlements in FY24. Specifically, the language will allow AIP entitlements to be based on enplanements in calendar year 2018, 2019, or 2022 – whichever is higher.

The House-passed version of the comprehensive, five-year FAA reauthorization bill includes a similar AAAE and ACI-NA backed proposal that would keep the high-three provision in place in FY24 and FY25. That language could be particularly helpful to airports that have lost commercial air service since the start of the pandemic.

Since the House approved H.R. 6503 last week, the bill now goes to the President for his signature. The latest stop gap will give lawmakers more time to figure out a path forward in the Senate and hopefully complete action on comprehensive FAA reauthorization bill early next year.