

TECHNICAL PROPOSAL

AIR MOBILITY AIRCRAFT PLAN

Packet B

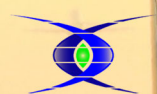


Submitted to:

WASHINGTON STATE DEPARTMENT
OF TRANSPORTATION (WSDOT)

Submitted by:

Cignus Consulting LLC



Cignus



April 2, 2024

Washington State Department of Transportation (WSDOT)
310 Maple Park Avenue SE
P.O. Box 47300
Olympia, WA 98504-7300

RE: Air Mobility Aircraft Plan

Dear WSDOT Selection Committee,

Cignus (MBE/DBE) is very pleased to submit our proposal for the development of the Air Mobility Aircraft Plan for the State of Washington. We have assembled a team of experts for the Washington State Department of Transportation (WSDOT) that includes highly qualified subconsultants with a long history of research and development and planning expertise for Unmanned Aircraft Systems (UASs) as well as Advanced/Urban Air Mobility (AAM/UAM) solutions. Our team includes **Mosaic ATM**, an industry leader in UAS/UAM systems and operational concept integration.

Our subject matter experts have been actively involved with all of the areas that are integral to AAM operations and integration not only into the National Airspace System (NAS) but also at the local and regional planning levels including vertiport design and infrastructure. Our team continues to work on a variety of projects with the Federal Aviation Administration (FAA) and the National Aeronautics and Space Administration (NASA) on the definition and analysis of operational concepts, regulations, and safety risk management guidelines, including public and community outreach efforts.

Our highly qualified team of aviation and airspace analysts, economists, airport and vertiport engineers, environmental planners, transportation solution developers, and airport/airspace modelers are prepared and available to provide the requisite professional consulting services. Dr. Florian Hafner will serve as the team's project manager and client director, acting as the single point of contact for this team agreement. Dr. Hafner brings over 25 years of aviation experience working on some of the most complex transportation planning, modeling & simulation, Air Traffic Management (ATM) research, and project management projects. Dr. Hafner will also ensure that our company's core values are upheld throughout the project.

Innovation and Creativity - Our team will work with WSDOT to evaluate options and alternatives for AAM across the state and as appropriate, bring fresh emerging technology ideas and integration strategies to the project.

Responsiveness & Commitment - Our professional experts are committed to this project and have proven themselves with decades of experience on similar transportation planning projects, most recently working on the Virginia Aviation System Plan, Florida System Aviation Plan, and UAS Integration Into the NAS for the FAA. Our team understands the dynamic environment that surrounds AAM and our PM will ensure that all pertinent resources are available and responsive to WSDOT's needs and goals.

If you have any questions, please contact me at (571) 236-4674 or via email at vkhera@cignus.aero.

Sincerely,



Vinayak 'Vinnie' Khera
President & CEO
Cignus Consulting, LLC

Consultant Information Form

Firm Name: Cignus Consulting, LLC		FYE Date: 12/31	Number of Employees: 18
Address: 44084 Riverside Pkwy., Suite 120			
City: Leesburg	State: VA	Zip Code: 20176	County: Loudoun
Phone: 703-721-8100	Fax: 703-721-8100	Company Web Site: https://cignus.aero	
Remit to Address: 44084 Riverside Pkwy., Suite 120			
City: Leesburg	State: VA	Zip Code: 20176	County: Loudoun
Phone: 703-721-8100		Fax: 703-721-8100	
Statewide Vendor Number (SWV) for Remit to Address:		Federal Tax ID Number or Social Security Number: 26-0372056	
Unified Business Identifier Number (UBI):		Date Universal Numbering System (DUNS) Number: 809695419	
Year Firm Established: 2008	UDBE/SBE/MSVWBE Certification Number: : Federal 8A	NAICS Code & Code Name: 541330 (Eng. Srvcs)	
Proposed Project Manager: Dr. Florian Hafner		Email: fhafner@cignus.aero	
Financial Contact: Vinayak Khera		Email: vkhera@cignus.aero	

Firm Type:

- Sole Proprietor
 Partnership
 C – Corp.
 Limited Partnership
 Subchapter S Corp.
 Limited Liability Company

Annual Gross Receipt:

- \$0 to \$1 Million
 \$1 Million to \$5 Million
 \$5 Million to \$10 Million
 \$10 Million to \$15 Million
 Over \$15 Million

Note:

Firm Name: Please *do not* use: dba's – doing business as; combination names when two firms are working together, unless the combination name is the formation of a legally registered new company such as a joint venture; derivatives of your legal name; acronyms; etc. The firm name shown must be your firm's legal name.

Federal Tax ID Number: Your Federal Tax ID number must be that number registered to your legal firm name. If you do not have a Federal Tax ID number, please use your social security number.

Unified Business Identifier (UBI) Number: Your firm will be **REQUIRED** to acquire a UBI Number prior to execution of an agreement and/or being approved as a Sub-consultant to an existing agreement. This is a Washington State Business license and can be acquired by contacting the Washington State Department of Revenue web site at www.dor.wa.gov

Statewide Vendor (SWV) Number: The Statewide Vendor (SWV) Number is **REQUIRED** for vendors to receive payments. If your firm doesn't already have an SWV number, your firm will be required to acquire a SWV number prior to execution of an agreement. For additional information, please visit the Office of Financial Management (OFM) at <https://www.ofm.wa.gov/it-systems/accounting-systems/statewide-vendorpayee-services>

FYE Date: Your firm's fiscal year end date.

UDBE/SBE/MSVWBE Certification: If your firm is certified as a UDBE/SBE/MSVWBE enter your firm's certification number. Federal Certifications: Underutilized Disadvantaged Business Enterprise (UDBE), Small Business Enterprise (SBE). State Certifications: Minority, Small, Veteran, Women Business Enterprise. For additional information go to the Washington State Office of Minority & Women's Business Enterprises web site at www.omwbe.wa.gov

It is critical that your firm name is your legal firm name and that it is the same name assigned to your Federal Tax ID number and is the same name utilized for your SWV number.

CONTRACTOR CERTIFICATION
EXECUTIVE ORDER 18-03 – WORKERS’ RIGHTS
WASHINGTON STATE GOODS & SERVICES CONTRACTS

Pursuant to the Washington State Governor’s Executive Order 18-03 (dated June 12, 2018), the Washington State Department of Transportaion is seeking to contract with qualified entities and business owners who certify that their employees are not, as a condition of employment, subject to mandatory individual arbitration clauses and class or collective action waivers.

Solicitation Title: 2024 Air Mobility Aircraft Plan

I hereby certify, on behalf of the firm identified below, as follows (check one):

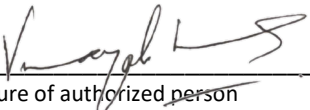
NO MANDATORY INDIVIDUAL ARBITRATION CLAUSES AND CLASS OR COLLECTIVE ACTION WAIVERS FOR EMPLOYEES. This firm does NOT require its employees, as a condition of employment, to sign or agree to mandatory individual arbitration clauses or class or collective action waivers.

OR

MANDATORY INDIVIDUAL ARBITRATION CLAUSES AND CLASS OR COLLECTIVE ACTION WAIVERS FOR EMPLOYEES. This firm requires its employees, as a condition of employment, to sign or agree to mandatory individual arbitration clauses or class or collective action waivers.

I hereby certify, under penalty of perjury under the laws of the State of Washington, that the certifications herein are true and correct and that I am authorized to make these certifications on behalf of the firm listed herein.

FIRM NAME: Cignus Consulting, LLC
Name of Contractor/Bidder – Print full legal entity name of firm

By: 
Signature of authorized person

Vinayak Kherra
Print Name of person making certifications for firm

Title: President & CEO
Title of person signing certificate

Place: Leesburg, VA
Print city and state where signed

Date: 4/2/2024

**CONTRACTOR CERTIFICATION
WAGE LAW COMPLIANCE – RESPONSIBILITY CRITERIA
WASHINGTON STATE GOODS & SERVICES CONTRACTS**

Prior to awarding contracts, agencies are required to determine that bidder is 'responsible bidder.' See RCW 39.26.160(2) & (4). Pursuant to legislative enactment in 2017, the responsible bidder criteria include contractor certification that the contractor has not willfully violated Washington's wage laws. See Chapter 258, 2017 Laws (enacting SSB 5301).

Solicitation or Agreement Title: 2024 Air Mobility Aircraft Plan

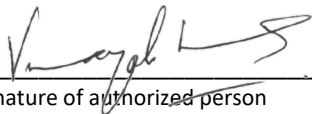
Solicitation Posting Date or Agreement Start Date: February 15, 2024

I hereby certify, under penalty of perjury under the laws of the State of Washington, that the below certification is true and correct and that I am authorized to make the following certification on behalf of the firm listed herein.

CERTIFICATION:

This firm has **NOT** been determined by a final and binding citation and notice of assessment issued by the Washington Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in [RCW 49.48.082](#), any provision of RCW chapters [49.46](#), [49.48](#), or [49.52](#) within three (3) years prior to the date of the above-stated date.

FIRM NAME: Cignus Consulting, LLC
Name of Consultant/Contractor – Print full legal entity name of firm

By: 
Signature of authorized person

Vinayak Kherra
Print Name of person making certifications for firm

Title: President & CEO
Title of person signing certificate

Place: Leesburg, VA
Print city and state where signed

Date: 4/2/2024

Submittal Instructions:

- If submitting a proposal in response to a solicitation, a signed Certification Document for the Prime and all Subs must also be included in your proposal Packet B (see advertisement for additional requirements).
- If requesting to add a Sub to an existing agreement, submit the signed Certification Document to: ConsultantRates@wsdot.wa.gov.

Consultant Information Form

Firm Name: Mosaic ATM, Inc.		FYE Date: 12/31	Number of Employees: 86
Address: 540 Fort Evans Road NE, Suite 300			
City: Leesburg	State: Virginia	Zip Code: 20176	County: Loudoun
Phone: (800) 405-8576	Fax: (703) 777-6820	Company Web Site: mosaicatm.com	
Remit to Address: 540 Fort Evans Road NE, Suite 300			
City: Leesburg	State: Virginia	Zip Code: 20176	County: Loudoun
Phone: (800) 405-8576		Fax: (703) 777-6820	
Statewide Vendor Number (SWV) for Remit to Address:		Federal Tax ID Number or Social Security Number: 201480428	
Unified Business Identifier Number (UBI): 602552619		Date Universal Numbering System (DUNS) Number: 164558376	
Year Firm Established: 2004	UDBE/SBE/MSVWBE Certification Number::	NAICS Code & Code Name:	
Proposed Project Manager: Richard Harper		Email: rharper@mosaicatm.com	
Financial Contact: Brian Scott		Email: bscott@mosaicatm.com	

Firm Type:

- Sole Proprietor
 Partnership
 C – Corp.
 Limited Partnership
 Subchapter S Corp.
 Limited Liability Company

Annual Gross Receipt:

- \$0 to \$1 Million
 \$1 Million to \$5 Million
 \$5 Million to \$10 Million
 \$10 Million to \$15 Million
 Over \$15 Million

Note:

Firm Name: Please *do not* use: dba's – doing business as; combination names when two firms are working together, unless the combination name is the formation of a legally registered new company such as a joint venture; derivatives of your legal name; acronyms; etc. The firm name shown must be your firm's legal name.

Federal Tax ID Number: Your Federal Tax ID number must be that number registered to your legal firm name. If you do not have a Federal Tax ID number, please use your social security number.

Unified Business Identifier (UBI) Number: Your firm will be **REQUIRED** to acquire a UBI Number prior to execution of an agreement and/or being approved as a Sub-consultant to an existing agreement. This is a Washington State Business license and can be acquired by contacting the Washington State Department of Revenue web site at www.dor.wa.gov

Statewide Vendor (SWV) Number: The Statewide Vendor (SWV) Number is **REQUIRED** for vendors to receive payments. If your firm doesn't already have an SWV number, your firm will be required to acquire a SWV number prior to execution of an agreement. For additional information, please visit the Office of Financial Management (OFM) at <https://www.ofm.wa.gov/it-systems/accounting-systems/statewide-vendorpayee-services>

FYE Date: Your firm's fiscal year end date.

UDBE/SBE/MSVWBE Certification: If your firm is certified as a UDBE/SBE/MSVWBE enter your firm's certification number. Federal Certifications: Underutilized Disadvantaged Business Enterprise (UDBE), Small Business Enterprise (SBE). State Certifications: Minority, Small, Veteran, Women Business Enterprise. For additional information go to the Washington State Office of Minority & Women's Business Enterprises web site at www.omwbe.wa.gov

It is critical that your firm name is your legal firm name and that it is the same name assigned to your Federal Tax ID number and is the same name utilized for your SWV number.

CONTRACTOR CERTIFICATION
EXECUTIVE ORDER 18-03 – WORKERS’ RIGHTS
WASHINGTON STATE GOODS & SERVICES CONTRACTS

Pursuant to the Washington State Governor’s Executive Order 18-03 (dated June 12, 2018), the Washington State Department of Transportaion is seeking to contract with qualified entities and business owners who certify that their employees are not, as a condition of employment, subject to mandatory individual arbitration clauses and class or collective action waivers.

Solicitation Title: 2024 Air Mobility Aircraft Plan

I hereby certify, on behalf of the firm identified below, as follows (check one):

NO MANDATORY INDIVIDUAL ARBITRATION CLAUSES AND CLASS OR COLLECTIVE ACTION WAIVERS FOR EMPLOYEES. This firm does NOT require its employees, as a condition of employment, to sign or agree to mandatory individual arbitration clauses or class or collective action waivers.

OR

MANDATORY INDIVIDUAL ARBITRATION CLAUSES AND CLASS OR COLLECTIVE ACTION WAIVERS FOR EMPLOYEES. This firm requires its employees, as a condition of employment, to sign or agree to mandatory individual arbitration clauses or class or collective action waivers.

I hereby certify, under penalty of perjury under the laws of the State of Washington, that the certifications herein are true and correct and that I am authorized to make these certifications on behalf of the firm listed herein.

FIRM NAME: Mosaic ATM, Inc.
Name of Contractor/Bidder – Print full legal entity name of firm

By: Richard Harper
Signature of authorized person

Richard Harper
Print Name of person making certifications for firm

Title: General Counsel and Director of Contracts
Title of person signing certificate

Place: Leesburg, VA
Print city and state where signed

Date: 2 April 2024

**Washington State
Department of Transportation**

**Performance Evaluation
Completed by Reference**

Consultant Name: Cignus Consulting, LLC
Consultant's Project Manager: Vinayak 'Vinnie' Khera
Project Name to be Evaluated on: (Work must have been completed within the last 3 years or is currently being performed.) UAS Integration Into The National Airspace System

Type of Work:

Roadway Design
 Plans Specs & Estimates
 Transportation Study
 Right-of-Way
 Other

Contract Information: (Work must have been completed within the last 3 years or is currently being performed.)

<input type="checkbox"/> Prime	Start Date 2/22/2021	End Date 2/9/2026	Dollar Amount of Services 1800000
<input type="checkbox"/> Sub			

Performance Evaluation	
Rating Criteria	Score
Please rate each criteria on a scale of 1 to 10. 1 being low and 10 being high.	1 - Low to 10 - High
1. Was the firm cooperative and responsive during any negotiations whether they were budget related or work element related?	10
2. Did the firm complete the project within the total budgeted amount?	10
3. Did the firm complete the project within the contract schedule(s)?	10
4. Did the firm meet all of your technical standards and quality expectations?	10
5. Was the firm's communication, both oral and written, clear and concise?	10
6. Was the firm's project management system effective?	10
Total Score (Total the score by adding the scores for criterias 1 through 6.)	060
Average Score (Average the score by dividing the total score by the total number of criteria that was rated.)	10

Evaluator Information:		
Firm/Company Name: Crown Consulting Inc.		
Evaluator's Name: Christopher Blum	Evaluator's Title: Program Manager UAS	
Firm/Company Address: 1400 Key Blvd, Suite 1100, Arlington, VA 22209		
Phone: 913-940-3850	Fax:	Date: 4/1/24

Distribution: Original: Return to Consultant being evaluated; and
 Copy: Fax to WSDOT at 360-705-6838 or email to wsdotcso@wsdot.wa.gov

Washington State Department of Transportation

Performance Evaluation Completed by Reference

Consultant Name: Cignus Consulting, LLC
Consultant's Project Manager: Florian Hafner
Project Name to be Evaluated on: (Work must have been completed within the last 3 years or is currently being performed.) Virginia Air Transportation System Plan Update 2020

Type of Work:

Roadway Design
 Plans Specs & Estimates
 Transportation Study
 Right-of-Way
 Other

Contract Information: (Work must have been completed within the last 3 years or is currently being performed.)

<input type="checkbox"/> Prime <input type="checkbox"/> Sub	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th style="padding: 2px;">Start Date</th></tr> <tr><td style="text-align: center; padding: 2px;">03/01/21</td></tr> </table>	Start Date	03/01/21	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th style="padding: 2px;">End Date</th></tr> <tr><td style="text-align: center; padding: 2px;">10/31/22</td></tr> </table>	End Date	10/31/22	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th style="padding: 2px;">Dollar Amount of Services</th></tr> <tr><td style="text-align: center; padding: 2px;">160,000.00</td></tr> </table>	Dollar Amount of Services	160,000.00
Start Date									
03/01/21									
End Date									
10/31/22									
Dollar Amount of Services									
160,000.00									

Performance Evaluation	
Rating Criteria <small>Please rate each criteria on a scale of 1 to 10. 1 being low and 10 being high.</small>	Score <small>1 - Low to 10 - High</small>
1. Was the firm cooperative and responsive during any negotiations whether they were budget related or work element related?	10.00
2. Did the firm complete the project within the total budgeted amount?	10.00
3. Did the firm complete the project within the contract schedule(s)?	10.00
4. Did the firm meet all of your technical standards and quality expectations?	10.00
5. Was the firm's communication, both oral and written, clear and concise?	10.00
6. Was the firm's project management system effective?	10.00
Total Score <small>(Total the score by adding the scores for criterias 1 through 6.)</small>	60.00
Average Score <small>(Average the score by dividing the total score by the total number of criteria that was rated.)</small>	10.00

Evaluator Information:		
Firm/Company Name: Mead & Hunt		
Evaluator's Name: Stephanie Ward	Evaluator's Title: Manager, Aviation Planning	
Firm/Company Address: 2605 Port Lansing Road Lansing, MI 48097		
Phone: (517) 908-2131	Fax:	Date: 03/28/24

Distribution: Original: Return to Consultant being evaluated; and
 Copy: Fax to WSDOT at 360-705-6838 or email to wsdotcso@wsdot.wa.gov

**Washington State
Department of Transportation**

**Performance Evaluation
Completed by Reference**

Consultant Name: Cignus Consulting, LLC
Consultant's Project Manager: Vinayak 'Vinnie' Khera
Project Name to be Evaluated on: (Work must have been completed within the last 3 years or is currently being performed.) Newark Liberty International Airport Vision Plan

Type of Work:

Roadway Design
 Plans Specs & Estimates
 Transportation Study
 Right-of-Way
 Other

Contract Information: (Work must have been completed within the last 3 years or is currently being performed.)

<input type="checkbox"/> Prime	Start Date 11/22/22	End Date 01/31/24	Dollar Amount of Services 1,023,713.78
<input type="checkbox"/> Sub			

Performance Evaluation	
Rating Criteria <small>Please rate each criteria on a scale of 1 to 10. 1 being low and 10 being high.</small>	Score <small>1 - Low to 10 - High</small>
1. Was the firm cooperative and responsive during any negotiations whether they were budget related or work element related?	10.00
2. Did the firm complete the project within the total budgeted amount?	10.00
3. Did the firm complete the project within the contract schedule(s)?	10.00
4. Did the firm meet all of your technical standards and quality expectations?	8.50
5. Was the firm's communication, both oral and written, clear and concise?	8.50
6. Was the firm's project management system effective?	10.00
Total Score <small>(Total the score by adding the scores for criterias 1 through 6.)</small>	57.00
Average Score <small>(Average the score by dividing the total score by the total number of criteria that was rated.)</small>	9.50

Evaluator Information:		
Firm/Company Name: Arup		
Evaluator's Name: Jackie Coburn	Evaluator's Title: Associate Principal	
Firm/Company Address: 77 Water Street New York , NY 10005 USA		
Phone: (647) 624-8723	Fax:	Date: 04/01/24

Distribution: Original: Return to Consultant being evaluated; and
 Copy: Fax to WSDOT at 360-705-6838 or email to wsdotcso@wsdot.wa.gov

**Washington State
Department of Transportation**

**Performance Evaluation
Completed by Reference**

Consultant Name: Cignus Consulting, LLC
Consultant's Project Manager: Vinayak 'Vinnie' Khera
Project Name to be Evaluated on: (Work must have been completed within the last 3 years or is currently being performed.) Airspace Technologies Master Plan Project in Mexico

Type of Work:

Roadway Design
 Plans Specs & Estimates
 Transportation Study
 Right-of-Way
 Other

Contract Information: (Work must have been completed within the last 3 years or is currently being performed.)

<input type="checkbox"/> Prime	Start Date 09/22/22	End Date 11/30/24	Dollar Amount of Services 100,000.00
<input type="checkbox"/> Sub			

Performance Evaluation	
Rating Criteria <small>Please rate each criteria on a scale of 1 to 10. 1 being low and 10 being high.</small>	Score <small>1 - Low to 10 - High</small>
1. Was the firm cooperative and responsive during any negotiations whether they were budget related or work element related?	10.00
2. Did the firm complete the project within the total budgeted amount?	10.00
3. Did the firm complete the project within the contract schedule(s)?	10.00
4. Did the firm meet all of your technical standards and quality expectations?	10.00
5. Was the firm's communication, both oral and written, clear and concise?	10.00
6. Was the firm's project management system effective?	10.00
Total Score <small>(Total the score by adding the scores for criterias 1 through 6.)</small>	60.00
Average Score <small>(Average the score by dividing the total score by the total number of criteria that was rated.)</small>	10.00

Evaluator Information:		
Firm/Company Name: Tetra Tech AMT		
Evaluator's Name: Dieter Guenter	Evaluator's Title: SVP Aerospace	
Firm/Company Address: 1515 Wilson Blvd, Arlington, VA 2209		
Phone: (571) 480-2563	Fax:	Date: 04/01/24

Distribution: Original: Return to Consultant being evaluated; and
 Copy: Fax to WSDOT at 360-705-6838 or email to wsdotcso@wsdot.wa.gov



Cignus Consulting LLC
44084 Riverside Pkwy
Suite 120
Leesburg, VA 20176
703.721.8100
www.cignus.aero

