

RUNWAY 16-34 EMAS REPLACEMENT

Roanoke-Blacksburg Regional Airport
Roanoke Regional Airport Commission

ADDENDUM NO. 1

November 13, 2023

This Addendum is hereby made a part of the Contract Documents and Specifications of the above referenced project. All other requirements of the original Contract Documents and Specifications shall remain effective in their respective order. **ACKNOWLEDGE RECEIPT OF THIS ADDENDUM (Page A1-1 to A1-5 and attachments) BY INSERTING ITS NUMBER AND DATE ON PAGE 61 OF THE INVITATION TO BID.**

MODIFICATIONS TO BID PROPOSAL

1. REMOVE Invitation to Bid Cover Page (Page 4) and REPLACE with revised Invitation to Bid Cover Page (Page 4). (Bid Due Date typo was corrected for the correct bid date of November 30, 2023).
2. REMOVE Invitation to Bid Page 5 and REPLACE with revised Invitation to Bid Page 5. (Removed DBE participation).
3. REMOVE Specification Page C-105-1 and REPLACE with revised Specification Page C-105-1 (Removed Federal posting requirements).

CONTRACTOR QUESTIONS

1. What is the anchor beam made of?

RESPONSE: The anchor beam is concrete and steel and is 24” deep and 31” wide. Refer to the details on Sheet QS502 in the bid set of plans. The existing anchor beam (to be demolished) is of similar composition as the proposed beam.

2. Who does Runway Safe contract with during construction? Is it Runway Safe or The Airport?

RESPONSE: Runway Safe’s contract with the Airport to produce the EMAS blocks (separate from this installation contract) includes on-site support services. The Contractor will be trained by Runway Safe on the proper handling and placement of the EMAS material and related subjects during the initial phase of the installation. Runway Safe will monitor the progress and quality of the installation work.

3. Who provides the EMAS blocks; how are they procured, and what are the estimated installation rates?

RESPONSE: EMAS blocks are manufactured by Runway Safe and will be delivered by Runway Safe to the site in coordination with the Contractor and Airport. The largest storage of blocks on-site during the project will be on the first day of block installation.

Once the Contractor has learned the process, Runway Safe estimates installation rates are 1 to 1.5 rows of blocks per hour. There are 170 rows of blocks in the replacement bed.

4. How will the EMAS blocks be brought to the site?

RESPONSE: Runway Safe will ship the EMAS blocks to the site for storage on Taxiway A. Blocks will be delivered a few days prior to the start of the installation, therefore coordination of schedules will be necessary.

5. How will the EMAS blocks installation be funded?

RESPONSE: The EMAS block installation contract will not be supported by Federal funds. Only the EMAS block manufacturing contract is being funded federally and is contracted separately (between Runway Safe and the Airport).

6. How will the contractor access the site and, does every worker need to be badged?

RESPONSE: Contractors must be badged to access the airfield and site during construction per Section 18, Page 51 of the project manual. Specific badging instructions/procedures will be provided upon project award.

7. Is there a DBE goal for this contract?

RESPONSE: Because the installation contract is not federally funded, the DBE goal for this project is not applicable. The DBE percentage goal has been revised to 0% on Page 5 of the Invitation to Bid documents.

8. Davis Bacon DBE is currently in the contract; is this required since the EMAS installation is not federally funded?

RESPONSE: Because the installation contract is not federally funded, Davis Bacon wage rates do not apply. Specification C-105 has been revised to remove Davis-Bacon language.

9. How long will it take to seal the EMAS blocks?

RESPONSE: Sealing of joints between the EMAS blocks may begin after 5 to 6 rows of blocks have been installed. Joint sealant between the blocks does not affect the bed performance (arresting of an aircraft) therefore the joint sealing may continue past the 35-calendar day full runway closure into the 30-calendar day night closures. All joints must be sealed and complete by the conclusion of the night closure phase of the construction.

10. Are the retroreflective markers around the bed being put back into place?

RESPONSE: Yes, new reflector markers will be installed per FAA guidance (refer to Sheet CM301 in the bid set of plans).

11. Who will be responsible for inspecting the EMAS block installation?

RESPONSE: A RS&H RPR will be on-site to review completion of the site work and for general coordination of the work. Runway Safe will provide on-site support for the installation of the EMAS system.

12. Will the project aggregate be VDOT standard?

RESPONSE: Aggregate specification P-209 has been revised to reflect VDOT 21A requirements. Asphalt specification P-403 has been revised to reflect VDOT IM-19.0 requirements.

13. What will need to be completed or in place at the end of the 35-day runway closure?

RESPONSE: At the end of the 35-day runway closure, the EMAS blocks shall be in place (sealing of joints can continue into the nighttime closures). The EMAS block storage area on Taxiway A will also need to be restored to its original condition before Runway 16-34 re-opens. All debris/FOD will need to be cleared from the Runway Safety Area.

14. What time are the nightly closures?

RESPONSE: Nightly closures will be from 11:00 PM until 7:00 AM.

15. What are logistics of contractor's crews having access on and off site; bathrooms, which gates to access, and where do the EMAS blocks access the site?

RESPONSE: Gate 50 is for contractor access; Gate 51 is for Runway Safe EMAS block deliveries. Port-a-johns are allowed on site in a small staging area to the northeast of the site as shown on the plans.

16. Do contractor's site vehicles need to be identifiable?

RESPONSE: Yes, all vehicles onsite shall meet requirements in the Invitation to Bid Section 9, Page 47.

17. Will navigational aids be disabled during construction?

RESPONSE: Yes, the Localizer at the 16-End of the Runway will be shut off by FAA. The Contractor is advised to maintain caution while around the Localizer antenna.

18. Will the EMAS material on-site storage located on Taxiway A encroach on any of the Runway 6-24 operations?

RESPONSE: The EMAS block storage area was sized to ensure that truck height does not impact the safe operations on Runway 6-24 (which will remain open to air traffic).

Once Runway 16-34 is closed, height requirements within the project work area and contractor staging area are not enforced.

19. Where will the contractor's employees park?

RESPONSE: Proposed employee parking area is shown in the sketch below.



20. What materials do Runway Safe provide beyond the blocks?

RESPONSE: Refer to the P-555 specification, specifically P-555-5.7.

CLARIFICATIONS AND ATTACHMENTS

1. A conformed set of construction plans (full size) and contract documents which include all addenda shall be provided to the successful bidder.
2. Record of Clarifications attached.
3. Revised Bid Proposal pages attached.
4. Pre-bid meeting minutes and Link to recording of meeting.

INVITATION FOR BIDS
Bid No. 24-007

The Roanoke Regional Airport Commission will accept sealed bids for furnishing all labor, materials, and equipment and performing all work for:

RUNWAY 16-34 EMAS REPLACEMENT
AT
ROANOKE BLACKSBURG REGIONAL AIRPORT

The work involves the replacement of the existing EMAS bed on the Runway 16 Departure End (north end of the runway). Bids shall be received until 3:00 P.M. local time on November 30, 2023 in the Office of Roanoke Regional Airport Commission, 5202 Aviation Drive, Roanoke, Virginia 24012. Bids will be publicly opened and read aloud at that time in Conference Room A on the Second Floor of the Airport Terminal Building.

Contract Documents will be will be posted on eVA, Virginia Department of General Services' central electronic procurement website, at <https://eva.virginia.gov>, and on the Roanoke Blacksburg Regional Airport Current Bids and Proposals website, at <https://www.flyroa.com/current-bids-and-proposals>. Electronic copies of the Contract Documents can also be obtained by emailing Troy Philpott, Procurement and Contracts Manager, Roanoke Regional Airport, at Troy.Philpott@flyroa.com.

Bidders are invited to submit bids for this work on the bid forms provided in the package; other bid forms will not be accepted. The successful bidder shall be required to have and maintain a Class "A" Virginia Contractor's License and not less than \$5,000,000 in general liability, \$5,000,000.00 in motor vehicle insurance, and \$5,000,000.00 umbrella insurance. Contractor, its employees and any subcontractors' employees will be required to submit to federal security threat assessments, may be subject to fingerprint-based criminal records checks, and must be and remain approved by the Commission for access to airport secure areas.

Each bid must be accompanied by a bid security in a form acceptable to the Commission in an amount equal to at least five percent (5%) of the amount of the bid by the Contractor, payable to the Roanoke Regional Airport Commission, as a guaranty that if the bid is accepted, the bidder will execute the Contract and file required Performance and Payment Bonds within the time provided in the Instructions to Bidders.

Minority business enterprises will be afforded full opportunity to submit bids in response to this Invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

A Pre-bid Meeting will be held on-site and on Teams at 10:00 A.M. on November 1, 2023. No other escorted reviews of the site will be provided.

The Roanoke Regional Airport Commission reserves the right to waive any informalities, technicalities, or irregularities in a Bid, or to reject any or all bids, or to re-advertise for bids and to award or refrain from awarding the Contract for the project specified, should any such action be deemed to be in the best interest of the Commission.

If the bid by the lowest responsible bidder exceeds funds allocated for the project, the Commission reserves the right to negotiate with the apparent low bidder pursuant to the terms set out in the

Instructions to Bidders. The Commission additionally reserves the right to reject any and all bids, and to accept any part of or combination of bids, to waive any informalities or irregularities in any bid, and to award the Contract to other than the lowest bidder, should it be deemed to be in the best interest of the Commission. If a contract is awarded to other than the low bidder, it will be awarded to the lowest responsible and responsive bidder.

The Roanoke Regional Airport Commission in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §2000d-2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award. All bidders shall endeavor to afford Disadvantaged Business Enterprises (DBE's) a reasonable opportunity to participate in this project. The Commission's goal for DBE participation is 0%. All bidders wishing to remain in competition for the contract shall submit documentation of their DBE goal accomplishments or good faith efforts in accordance with the bid documents.



Item C-105 Mobilization

105-1 Description. This item of work shall consist of, but is not limited to, work and operations necessary for the movement of personnel, equipment, material and supplies to and from the project site for work on the project except as provided in the contract as separate pay items.

105-2 Mobilization limit. Mobilization shall be limited to 10 percent of the total project cost.

105-3 Posted notices. Prior to commencement of construction activities, the Contractor must post the following documents in a prominent and accessible place where they may be easily viewed by all employees of the prime Contractor and by all employees of subcontractors engaged by the prime Contractor: ~~Equal Employment Opportunity (EEO) Poster "Equal Employment Opportunity is the Law" in accordance with the Office of Federal Contract Compliance Programs Executive Order 11246, as amended; Davis Bacon Wage Poster (WH 1321) - DOL "Notice to All Employees" Poster; and Applicable Davis-Bacon Wage Rate Determination.~~ These notices must remain posted until final acceptance of the work by the Owner. 1

105-4 Engineer/RPR field office. The Contractor shall provide dedicated space for the use of the field RPR and inspectors, as a field office for the duration of the project. This space shall be located conveniently near the construction and shall be separate from any space used by the Contractor. The Contractor shall furnish water, sanitary facilities, heat, air conditioning, and electricity in accordance with local building codes.

METHOD OF MEASUREMENT

105-5 Basis of measurement and payment. Based upon the contract lump sum price for "Mobilization" partial payments will be allowed as follows:

- a. With first pay request, 25%.
- b. When 25% or more of the original contract is earned, an additional 25%.
- c. When 50% or more of the original contract is earned, an additional 40%.
- d. After Final Inspection, Staging area clean-up and delivery of all Project Closeout materials as required by Section 90, paragraph 90-11, ~~Contractor Final Project Documentation~~, the final 10%.

BASIS OF PAYMENT

105-6 Payment will be made under:

Item C-105-6.1 Mobilization – per lump sum

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Office of Federal Contract Compliance Programs (OFCCP)

Executive Order 11246, as amended

EEOC-P/E-1 – Equal Employment Opportunity is the Law Poster

**PRE-BID MEETING AGENDA
RUNWAY 16-34 EMAS REPLACEMENT
ROANOKE-BLACKSBURG REGIONAL AIRPORT**

**ROA Bid Number: 24-007
City of Roanoke Plan Number: CP23-0025
RS&H Project Number: 1022-0071-003**

**November 1, 2023
10:00 AM**

1. Owner

- Roanoke Regional Airport Commission (RRAC)

2. Engineers

- RS&H
- ADCI

3. Introduction of Project Staff

- David Tickner, RRAC
- Troy Philpott, RRAC
- Jay Ball, RRAC
- Kyle Kotchou, RRAC
- BJ Nipper, Operations, RRAC
- Sue Winslow, RRAC
- Chad Ackley, RS&H, Project Manager/Engineer of Record
- Ray Yankey, RS&H
- Grace Harr, RS&H
- Laura Bravo, RS&H
- Keith Fritz, ADCI

4. Project Scope of Work / Project Phasing

a) The scope consists of:

- Removal and disposal of existing EMAS system including blocks and anchor beam.
- Replacement with new EMAS system.
- Relocation of a portion of the airport access road to location in front of new EMAS bed.
- Removal and installation of new retroreflective markers around new EMAS bed.

- Rehabilitation of the Runway 16-34 EMAS support asphalt pavement and blast pad.
- Crack sealing of underlying asphalt prior to overlay.
- New pavement markings for the EMAS blocks, support pavement/blast pad, and access road.
- Grooving of asphalt blast pad pavement in front of the EMAS bed.
- Seeding/Mulching of disturbed areas (road removal).

b) Project Funding

- FAA Grant – EMAS Blocks contract only
- State Grant – Installation contract

c) Contract Duration / Phasing

- Contract award anticipated by December 22, 2023
- Administrative Notice to Proceed (NTP)
 - 75 calendar days
 - Anticipated January 8, 2024
 - i. Badging/training
- Mobilization Notice to Proceed (NTP)
 - 30 calendar days
 - Anticipated March 22, 2024
 - i. Major work items to be completed include:
 1. Erosion control items
 2. Contractor survey and stakeout
- Phase 1 - Construction NTP and Runway 16-34 Closure
 - 35 calendar days
 - Anticipated April 22, 2024
 - i. Major work items to be completed include:
 1. Removal of existing retroreflective markers
 2. Removal of existing EMAS system including blocks and anchor beam, and replacement with new EMAS system
 3. Relocation of airport access road to location in front of new EMAS bed
 4. Rehabilitation of the Runway 16-34 EMAS support asphalt pavement
 5. Crack sealing of or asphalt prior to overlay
 6. Half-application pavement markings for the EMAS blocks, support pavement, and access road
- Phase 2 - Runway 16-34 Nightly Closures – 11:00 pm to 7:00 am nightly
 - 30 calendar days
 - Anticipated May 28, 2024
 - i. Major work items to be completed include:

1. Installation of new retroreflective markers
 2. Permanent pavement markings for the EMAS blocks, support pavement/blast pad, and access road
 3. Grooving of EMAS support pavement
- Total Contract duration (including administrative and mobilization time) - 170 calendar days

5. Contract Requirements

- a) Failure to complete the work in each phase by the specified time or date may result in liquidated damages.
 - Full Runway 16-34 Closure - Phase 1 - \$5,000 per calendar day
 - Nightly Runway 16-34 Closures – Phase 2 - \$2,500 per calendar day
 - Nightly Runway 16-34 Closures – Phase 2 - \$500 per 15 minutes after 7am re-opening of the runway to air traffic
- b) DBE Goal & Good Faith Effort
 - The goal established for this project is 10%
- c) Introduction of DBE Firms in attendance
- d) Prevailing Wage Requirements – Refer to the Federal Prevailing Wage Determination included in the bidding/contract documents.
- e) Bidders should review the testing requirements for P-403.
- f) Contractor Quality Control Plan – C-100 Specification

6. Questions and Answers

1. Question on what the anchor beam is made of.
 - a. The concrete anchor beam is concrete and steel and is about 3 feet deep.
2. Who does Runway Safe contract with during construction. Is it Runway Safe or the Airport?
 - a. RS&H will provide an answer in Addendum #1.
3. Runway Safe provided EMAS block production and estimated installation rates, which RS&H will provide.
4. Runway Safe will bring blocks only once the runway is closed and the contractor is nearly ready to install.
5. Not using Federal funding for the installation, only for the block production which is a separate contract.
6. Contractors will need to be badged to access the airfield/site during construction. Badging is done in two phases. One person will be the authorized signatory from the contractor. Once authorized signatory is badged, they will designate others

- from the company who will be badged.
- a. Not every worker has to be badged. One badged worker can escort non-badged workers. However, badged employees are responsible for all non-badged workers and must be on-site and within voice contact with all non-badged workers.
 - b. 5 to 7 workers are typically badged.
7. Will Runway Safe need to be badged for truck deliveries?
 - a. RS&H will provide answer in Addendum #1.
 - b. Runway Safe person will need to be badged.
 8. DBE Goal is currently 10% in contract. This will be revised in addendum to remove as the project will not be federally funded.
 9. Davis Bacon is currently included in the contract. This will be revised in addendum to remove as will not be federally funded.
 10. A comment was made about the time-consuming nature of sealing all the EMAS blocks.
 11. Are the reflector beams being put back?
 - a. Yes, reflector beams will be installed per FAA guidance.
 12. Who will be inspecting?
 - a. RS&H will have RPR and Runway Safe will also have an inspector onsite to ensure the installation is completed correctly.
 - b. Runway Safe has a warranty with Airport after installation, so they have a vested interest in ensuring the blocks are installed correctly.
 13. It was mentioned Sherwood Industries are a good resource for safety/security items (i.e. barricades).
 14. Will the aggregate also be VDOT standards?
 - a. Yes, Aggregate and Asphalt are per VDOT specifications.
 15. At the end of the 35 day runway closure, the EMAS blocks need to be back in place and complete. The EMAS block storage area on Taxiway A also needs to be restored prior to the Runway reopening. All debris/FOD need to be clear from RSA.
 16. Nightly Runway closures 11pm to 7am.
 17. Logistics question – When crews are out there / bathroom? Site Access?
 - a. Gate 50 is for contractor access
 - b. Gate 51 is for block delivery
 - c. Port-a-johns were allowed on site in a small staging area on last EMAS restoration project.
 18. All Vehicles need logos/beacons.
 19. The localizer is adjacent to EMAS bed and must be protected during construction. It will be shut off during construction.
 20. Once Runway 16-34 is closed, height requirements are essentially obsolete. EMAS storage area was sized to ensure truck height does not impact operations on open Runway 6-24.
 21. Potential employee parking areas will be looked at during the site visit.
 22. What materials do Runway Safe Provide?
 - 23.

7. Procedure for Addendums

- a) Bidding Questions Cut-off: Friday, November 14, 2023 at 5:00pm EST. Send questions to Troy Philpott (Roanoke Regional Airport).
Troy.Philpott@flyroa.com
- b) Site tours: coordinate directly with Airport Operations
- c) Bids Due: Monday, November 30, 2023 at 3:00 p.m. EST
- d) Contract Documents include: Plans, Specifications and Bid Proposal
- e) All Bid Proposals shall include:
 - Bid Form, including Acknowledgment of Receipt of Addenda
 - Bid Guaranty – Each separate proposal shall be accompanied by a bid bond, certified check, or collateral and shall be made payable to City of Manassas. The bid guarantee shall be equal to 5% of the total bid price.
 - All additional documentation as described in the Proposal Forms
- f) Bid Proposal includes one base bid (no alternates or additives)
- g) Award of contract will be based upon lowest, responsive, responsible bid. The award shall be at the discretion of the RRAC.
- h) There will be at least one addendum issued prior to bidding opening to address any changes, bidder questions, and pre-bid meeting minutes and attendance sheet. All issued addenda must be annotated in the Proposal Forms.

8. Other Issues

- City of Roanoke plan review
- Airfield Safety
- Airport Security – all work is within the Airport fence
- EMAS Block Delivery by Runway Safe
- Coordination with Runway Safe (including installation guidance)
- Coordination with Owner and Engineer

9. Closing Comments

Meeting Attendance



2600 Park Tower Drive, Suite 101
Vienna, VA 22180

Date: 01 November 2023
ROA Bid Number: 24-007
Project Name: Runway 16-34 EMAS Replacement
Place: Roanoke-Blacksburg Regional Airport **Time:** 10:00 AM
Subject: Pre-Bid Meeting

<u>NAME</u>	<u>ORGANIZATION</u>	<u>PHONE</u>	<u>EMAIL</u>
Grace Harr	RS&H	(703) 997-3802	grace.harr@rsandh.com
Chad Ackley	RS&H	(703) 774-7972	Chad.ackley@rsandh.com
Travis Cooper	Branch	540-527-8325	Travis.Cooper@BranchBuilds.com
B.J. Nipper	RRAC	540-362-1999	billiejo.nipper@flyroa.com
Frank Caldwell	Rockydale Quarries	540-588-4650	FCALDWELL@ROCKYDALEQUARRIES.COM
David Tickner	ROA	540 293-4432	David.Tickner@Flyroa.com
Scott Webber	Branch	540-797-7903	scott.Webber@BranchBuilds.com