

**JUSTIFICATION REVIEW DOCUMENT
FOR JUSTIFICATION AND APPROVAL
FOR OTHER THAN FULL AND OPEN COMPETITION**

Supply/Service: FW80 Foundry Sand

Authority: 10 U.S.C. 3204(a)(1)

Prepared by:

[REDACTED]

Contracting Officer:

[REDACTED]

Technical:

[REDACTED]

Requirements:

[REDACTED]

Reviews: I have reviewed this justification and find it adequate to support other than full and open competition.

Program Manager:

[REDACTED]

**Senior Contracting
Official:**

[REDACTED]

Controlled by: Rock Island Arsenal – Joint Manufacturing
Technology Center (RIA-JMTC)
Controlled by: RIA-JMTC
CUI Category: General Procurement and Acquisition
Distribution Statement or LDC: Distribution Statement A
POC: 782-5196

**Department of Army
Justification and Approval
for Other than Full and Open Competition**

1a. Requiring Activity: Rock Island Arsenal Joint Manufacturing Technology Center (RIA-JMTC) Foundry.

1b. Contracting Activity: U.S. Army Contracting Command – Rock Island Arsenal (ACC-RIA), Rock Island Arsenal, Rock Island, IL 61299-8000.

2. Description of Action: Rock Island Arsenal Joint Manufacturing and Technology Center (RIA-JMTC) requests a Blanket Purchase Agreement (BPA) with Badger Mining. ACC-RI projects award for October 2026 and will obligate fiscal year 2027 Army Working Capital Funds. An acquisition plan is not required because this procurement does not meet the threshold at Revolutionary Federal Acquisition Regulation (FAR) Overhaul (RFO) Defense Federal Acquisition Regulation Supplement (DFARS) 207.103-70(a)(2)

3. Description of Supplies/Services: FW80 foundry sand that is to be delivered to the sand hopper in [REDACTED] of the Rock Island Arsenal Joint Manufacturing Technology Center (RIA-JMTC) in support of the Foundry. JMTC estimates that they will need a maximum of roughly [REDACTED] of FW80 per year in order to maintain production.

The anticipated BPA will have an estimate period of performance of 25 October 2026 – 24 October 2031. JMTC estimates a dollar value of [REDACTED], based on the IGCE and is outlined in the table below.

<i>Item</i>	<i>Quantity</i>	<i>Delivery Date</i>	<i>Estimated Unit Price</i>	<i>Estimated Value</i>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

<i>Period</i>	<i>Period of Performance (POP)</i>	<i>Estimated Value</i>
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

4. Authority Cited:

10 U.S.C. 3204(a)(1), as implemented by RFO FAR 6.103-1, Only one responsible source and no other supplies or services will satisfy agency requirements.

5. Reason for Authority Cited:

As described at RFO FAR 6.103-1(c)(2)(i), supplies and services may be deemed as available from only one source when awarding a follow-on contract for the continued development or production of a major system or highly specialized equipment, and, for DoD, NASA, and the Coast Guard, for the continued provision of highly specialized services, would result in substantial duplication of cost to the Government that is not expected to be recovered through competition.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

6. Efforts to Obtain Competition: ACC-RIA shall publish the notices required by RFO FAR 5.101. Because this is a sole source action, effective competition is not applicable. However, RIA-JMTC conducted market research and sought competitive sources for FW80 foundry sand by contacting multiple vendors to determine whether they could provide a comparable material. Although several vendors offered sands with similar characteristics, testing and operational use showed that those alternatives caused clogging and cleaning issues within the foundry sand-hopper system, resulting in production delays. To date, Badger Mining's FW80 sand is the only material demonstrated to provide the required flow and cleaning performance without disrupting foundry operations.

7. Actions to Increase Competition:

Prior to the subsequent acquisition of these items, the Government will conduct additional market research, and issue a new source sought notice to determine if any new vendors will become available in the marketplace that could meet the Government's needs and allow for competition.

8. Market Research: Following a systematic market evaluation and empirical testing process conducted between October 2025 and January 2026, the alternative sand supplies evaluated were determined unacceptable for production. Due to poor output quality, excessive mechanical strain, and high additive requirements caused by alternative materials, it has been definitively determined that our machines and processes are best supported by Badger Mining’s BadgerCast FW80 sand.

In mid-October 2025, technical requests for quotes (RFQs) and material certifications were issued to six primary sand suppliers to evaluate compatibility with our target technical specifications. Responses were evaluated as follows - [REDACTED] responded on [REDACTED] but was rejected because its material did not meet the minimum Grain Fineness Number (GFN) requirement. [REDACTED] responded on 27 October 2025 and was accepted for testing after meeting the GFN requirement; however, its sieve distribution was wider than specified, though still more favorable than [REDACTED]. [REDACTED] responded on 3 November 2025 and met the GFN requirement but was retained as a reserve source because its sieve distribution was wider and less favorable than [REDACTED], [REDACTED], and [REDACTED] were excluded from further consideration because they did not provide the required material certifications.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]

[REDACTED]

9. Interested Sources: To date, no other sources have expressed a written interest in this requirement.

10. Other Facts: N/A

11. Technical Certification: I certify that the supporting data under my cognizance which are included in the justification are accurate and complete to the best of my knowledge and belief.

Date: [REDACTED]

12. Requirements Certification: I certify that the supporting data under my cognizance which are included in the justification are accurate and complete to the best of my knowledge and belief.

Date: [REDACTED]

13. Fair and Reasonable Cost Determination: I hereby determine that the anticipated cost or price to the Government for this contract action will be fair and reasonable based on the IGCE and sources sought for samples from JMTC

Date: [REDACTED]

14. Contracting Officer Certification: I certify that this justification is accurate and complete to the best of my knowledge and belief.

Date: [REDACTED]

Contractor: Badger Mining
Supply/Service: FW80 Foundry Sand
Est Dollar Value: [REDACTED]

Approval

Based on the foregoing justification, I hereby approve the procurement of supply of FW80 Foundry Sand on an other than full and open competition basis pursuant to the authority of 10 U.S.C. 3204(a)(1) as implemented in RFO FAR 6.103-2(c)(2)(i) The estimated value of this action is [REDACTED] for the period of the BPA . The approval is subject to availability of funds, and provided that the services or supplies herein described have otherwise been authorized for acquisition.

Date: [REDACTED]

Signature: [REDACTED]