



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
600 Fifth Street, NW, Washington, DC 20001-2651

AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT

1. AMENDMENT/MODIFICATION A002	2. EFFECTIVE DATE May 26, 2017		
3. ISSUED BY PURCHASING SECTION Frederick R. Voellm JGB Room 301-G Department of Procurement	4. ADMINISTERED BY (If other than block 3)		
5. CONTRACTOR NAME AND ADDRESS (Street, city, county, state, and Zip Code)	6. FORM TYPE (Check only one) <input checked="" type="checkbox"/> AMENDMENT OF SOLICITATION NO. <u>IFB FQ17136</u> DATE <u>May 18, 2017</u> (See block 7) <input type="checkbox"/> MODIFICATION OF CONTRACT/ORDER NO. _____ DATE _____ (See block 9)		
7. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS <input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in block 10. The hour and date specified for receipt of Offers <input checked="" type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended, by one of the following methods; (a) By signing and returning <u>one (1)</u> copies of this amendment; (b) by acknowledging receipt of this amendment on Acknowledgement of Amendments form; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If, by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided such telegram makes reference to the solicitation and this amendment and is received prior to the opening hour and date specified.			
8. ACCOUNTING AND APPROPRIATION DATA (If required)			
9. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS (a) <input type="checkbox"/> This Change Order is issued pursuant to _____ The Changes set forth in block 10 are made to the above numbered contract/order. (b) <input checked="" type="checkbox"/> The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, appropriation data, etc.) set forth in block 10. (c) <input type="checkbox"/> This Supplemental Agreement is entered into pursuant to authority of _____ It modifies the above numbered contract as set forth in block 10.			
10. DESCRIPTION OF AMENDMENT/MODIFICATION: IFB FQ17136/FRV is hereby amended as follows: 1. Attachment A provides responses to questions from interested vendors. 2. Add 'Addendum 1-Weld Testing' to the Scope of Work (SOW). 3. In the SOW, change the word 'vendor' to 'contractor' wherever it appears. 4. SOW 4.4: Delete the words "with the proposal package" and replace with the words "prior to contract award." 5. SOW 6.1.3: Add "See Addendum 1" at the end of the sentence. 6. SOW 6.2.2: Add "Test and Inspection results. See Addendum 1." (Except as provided herein, all terms and conditions of the document referenced in block 6, as heretofore changed, remain unchanged and in full force and effect through the contract period.) END OF AMENDMENT A002			
11. <input type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS MODIFICATION AND RETURN <u>ONE (1)</u> COPIES TO ISSUING OFFICE.	<input type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT		
12. NAME OF CONTRACTOR/OFFICE BY _____ (Signature of person authorized to sign)	15. WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY BY <u>Frederick R. Voellm</u> (Signature of Contracting Officer)		
13. NAME AND TITLE OF SIGNER (Type or print)	14. DATE SIGNED	16. NAME OF CONTRACTING OFFICER (Type or print) Frederick R. Voellm	17. DATE SIGNED May 26, 2017

Contractor Questions/WMATA Responses

Note: In most cases the questions are presented exactly as written by the interested vendors with only minor editing of content, grammar, or spelling. Please read each question and response carefully.

1. What is the minimum weld that would be done per mobilization?

Response: WMATA expects to perform a minimum of 800 welds per mobilization. There will be two mobilizations during the first contract year, and one mobilization for subsequent years.

2. Will the contractor be required to have equipment and manpower to feed the rail to the welding truck and to move and stack the rail strings?

Response: WMATA will place the rail for welding and stack the rail stringers afterward.

3a. What type of testing is required for the three (3) qualification welds?

Response: See 'Addendum 1 – Weld Testing' Section B.

3b. What type of testing is required for the production welds?

Response : See 'Addendum 1 – Weld Testing' Section C.

3c. Will this testing need to be performed in line during the welding process?

Response: Yes. See 'Addendum 1 – Weld Testing' Section C.

4. Can the Authority please specify the Hours per Work Day based on a 40 hour week that they would like us to figure on working? 8 hour days, 10 hour days, 12 hour days?

Response: The Contractor will not be limited to 8-hour shifts, and can work additional hours to meet the daily goals. Shifts must be coordinated with the WMATA lead, and cannot exceed 14 hours per day, or 6 days per week, to remain compliant with WMATA fatigue management policies.

5a. Can the Authority please specify if this job will require the submission of Certified Payroll?

Response: See paragraph (c)(4) of Clause #12, Living Wage, in Chapter IX 'Additional Covenants/Legal Requirements' of the IFB.

5b. Also will this job be a Prevailing Rate Job?

Response: This is not a construction project, so Davis Bacon (prevailing wage law) does not apply, but the Living Wage clause in the IFB is applicable.

5c. If so can the Authority please provide a list of Wage Rates that will apply to this project?

Response: Not Applicable

6. Is the project prevailing wage (Davis Bacon Wage Rates)?

Response: This is not a construction project, so Davis Bacon (prevailing wage law) does not apply, but the Living Wage clause in the IFB is applicable.

7. Do certified payrolls need to be submitted weekly?

Response: See paragraph (c)(4) of Clause #12, Living Wage, in Chapter IX 'Additional Covenants/Legal Requirements' of the IFB.

8a. Will any qualification welds be necessary?

Response: Three qualification welds will be required.

8b. If so how many and what test will be required for the qualification welds?

Response: Response: See 'Addendum 1 – Weld Testing' Section B.

8c. And who will provide the rail for the qualification welds?

Response: WMATA will provide the rail for qualification welds.

9. What testing will be necessary for the production welds?

Response: See 'Addendum 1 – Weld Testing' Section C.

10. Will an independent testing company be required?

Response: Yes.

11. Can WMATA remove the weld testing from the contractor's scope and WMATA provide the weld testing at no cost to the contractor? Assuming that any welds that fail will be fixed by the contractor at no cost to WMATA.

Response: No...WMATA requires independent testing of the welds.

12. Will all of the welds be performed at the Greenbelt Yard Facility in College Park MD?

Response: WMATA plans to perform all welds at the Greenbelt Yard in College Park. In the event of unforeseen circumstances, the work may be moved elsewhere. (Scope of Work Section 7.2)

13. What is the cost to the contractor for the background check and RWP Training?

Response: WMATA will absorb the cost for background checks and RWP training.

14. Q. When performing the qualification welds on-site how much time will lapse between when we perform the test welds and when welding will begin?

Response: The vendor shall submit test welds to the independent testing agency for analysis. WMATA will authorize the start of production welds upon receipt of successful test results from the independent lab.

15a. Is the vendor responsible for the qualification welds testing?

Response: Yes, the contractor shall acquire the services of an independent weld testing and inspection agency. The independent agency shall perform all weld testing and inspections. See 'Addendum 1 – Weld Testing'.

15b. If so what tests are required?

Response: See 'Addendum 1 – Weld Testing'

15c. If so is it possible to have the Welds performed in our shop with the specific production equipment to be used on this contract to save cost for additional mobilizations that may be required to accommodate the qualification test(s)?

Response: Welds for qualification testing shall be made after the equipment has been installed at the project site.

16a. Is each production weld to be UT and Mag particle tested?

Response. See 'Addendum 1 – Weld Testing' Section C.

16b. Who is doing it and paying for it?

Response: The contractor shall acquire the services of an independent weld testing and inspection agency. The independent agency shall perform all weld testing and inspections. See 'Addendum 1 – Weld Testing'. The costs for testing and inspections must be factored into the unit prices on the Bid/Price Schedule along with all other direct and indirect costs for performing the welding services, including, but not limited to direct labor costs, overhead, general & administrative (G&A) costs, material, travel, and profit. To further clarify, "testing and inspections" and added to the above identified direct and indirect costs cited in the note on the Bid/Price Schedule and in the Note to Bidders #8.

17. We need clarification on 5.7.6. The recorder will be calibrated each day. (We do not calibrate the data screen or recorder, but if they are referring to the string pot then this is set and checked upon start up each day.)

Response: The recorder shall be calibrated as per manufacturer's instructions.

18. We need clarification regarding prevailing or union wage requirements.

Response: This is not a construction project, so Davis Bacon (prevailing wage law) does not apply, but the Living Wage clause in the IFB is applicable.

A. Weld Testing and Inspections

The contractor shall acquire services of an independent weld testing and inspection agency as approved by WMATA for the duration of the contract. All testing and inspections shall be conducted by the independent testing agency.

B. Qualification Weld Testing

Three welds shall be manufactured by the contractor and tested by the independent testing agency. The three qualification welds shall be tested by radiography, Brinell hardness testing, metallurgical testing, slow bend test and ultrasonic testing in the following manner:

1. Radiography:
 - a. Radiographic examination of welds shall be performed on all three samples by a qualified NDT technician.
 - b. Radiography shall be conducted in accordance with ASTM E94 using short wave length radiation. The use of nuclear by products for radiography shall be in accordance with USNRC Rules and Regulations, Title 10, Atomic Energy, Part 20. The transportation, handling and storage of hazardous materials used in the examination of welds shall be performed only by or under the supervision of a person of proven experience and ability, operating under a proper license.
 - c. Film shall be capable of producing sharp images, and be free of processing and mechanical defects. High speed, coarse-grained film is prohibited. Fine films shall be used covering head, web and each side of base as shown on Exhibit 05091-A. Identify each film by contract number, rail identification, date of test, name of testing agency and the view.
 - d. Acceptance of the weld shall be based on the weld having full penetration, complete fusion and being free of flaws. A letter to the Contractor and WMATA shall accompany each film plate bearing information given on the film, certifying compliance with ASTM E94 and stating whether or not the weld satisfies specified requirements.
 - e. Radiograph plates shall be compared to ultrasonic scans to determine the ability of ultrasonic equipment to identify inclusions or other weld defects. If necessary, compare radiograph plates with ultrasonic scans using the ultrasonic reference blocks. Results of this comparison shall be made in a separate report provided to the Contractor and WMATA and include recommended ultrasonic equipment to be used and sensitivity requirements.
2. Brinell Hardness testing:
 - a. Hardness testing shall be conducted on all three welds in accordance with current AREMA "Specification for Fabrication of Continuous Welded Rail" and "Specification for The Quality Assurance of Electric Flash-Butt Welding of Rail".
 - b. The hardness test shall be in accordance with ASTM E10 using a 150kgf diamond sphere conical penetrator. Hardness and location shall be recorded.
 - c. Acceptance Criteria

- 1) The BHN in the weld area and adjacent heat affected zones shall be 310 minimum and 400 maximum.
 - 2) Submit the tested rail section to WMATA. Submit reports of the test to the Contractor and WMATA.
3. Metallurgical Tests:
- a. A one foot specimen of each weld shall be sectioned longitudinally through the centerline of the rail. Each specimen shall be etched to enable observation of the hardness pattern, metallurgical properties and the heat affected zone.
 - b. An acceptable weld as determined by the metallurgical test shall meet the following criteria:
 - 1) Steel shall consist of fine-grained pearlite structure with small interlamellar spacing.
 - 2) The hardness pattern in the etched section shall have a uniform distribution.
 - 3) The heat affected zone shall be parallel and fully extended on both sides of the weld.
 - 4) The weld joint shall be planar.
 - 5) Uniform zone of plastic deformation resulting from upset operation shall extend equally on both sides of the weld point.
 - c. An 8x10 black and white photograph and a description of the metallurgical properties including grain structure and distribution shall be submitted to the Contractor and WMATA.
4. Ultrasonic test
- a. Use test technicians holding ASNT Level II or Level III certification to ultrasonically test each of the welds in accordance with ASTM E164.
 - b. Scan the rail in a zigzag pattern to scan the full rail weld at a scanning level of plus 20 dB minimum, twisting the probe on one side of the weld only, and at a rate not exceeding 6 inches per second.
 - c. Scan longitudinally to the rail and overlap each pass a minimum of 10 percent.
 - d. When a reflection of greater amplitude than the acceptance criteria is found, scan the full perimeter of the weld from both sides to ensure full weld coverage and determination of the discontinuity size, type, and location. See table below for acceptance criteria:

Minimum Acceptance Levels (decibels) Weld Thickness (inches) and Transducer Angle					
Reflector	5/16" to 3/4"	3/4" to 1-1/2"	1-1/2" to 2-1/2"	2-1/2" to 4"	4" to 6"
Severity	70°	70°	70° 45°	70° 45°	70° 45°
Large Reflectors	+8	+3	+1 + 4	-4 + 1	-7 - 2
Small Reflectors	+9	+4	+1 + 6	-2 + 3	-5 0
Minor Reflectors	+10	+5	+3 + 8	0 + 5	-3 + 2

- e. Submit reports of the test to the Contractor and WMATA.

5. Magnetic Particle Test

a. Test Procedure

- 1) Magnet particle test each of the three **(3)** welds using the coil method (longitudinal magnetization) and applying the dry powder method described in ASTM E709.
 - 2) Conduct the test only after the rail temperature has cooled below 600 degrees Fahrenheit.
- b. Acceptance Criteria: The weld shall be homogeneous and free from defects, surface irregularities, and internal discontinuities as indicated by particles forming a regular longitudinal pattern.
- c. Submit reports of the test to the Contractor and WMATA.

6. Slow Bend Test

- a. After all qualification weld samples have passed the magnetic and ultrasonic testing, subject one sample to the slow bend test described in the AREMA Manual for Railway Engineering Volume 1, Chapter 4 Rail, Part 3, Section 3.11, Subsection 3.11.2.6, Slow Bend Tests.
- b. Acceptance Criteria:
- 1) Minimum deflection: 3/4 inch before visible failure for 115RE rail.
 - 2) Modulus of rupture: 125,000 pounds per square inch minimum for 115RE rail.
- c. Submit reports of the test to the Contractor and WMATA.

C. Production Weld Quality

- a. Each weld shall be examined by magnetic particle method and by the visual method in accordance with methods and parameters of indicated in AREMA chapter 4, Part 3.11 "Specifications for the Quality Assurance of Electric – Flash Butt Welding of Rail".
- b. An ultrasonic examination shall be performed on each weld prior to the rail stringers being placed into service.
- c. Brinell hardness testing shall be conducted on ten percent of production welds in accordance with current AREMA standards.
- d. Each weld shall be tested for dimensional tolerances as per AREMA chapter 4 specifications.
- e. Submit reports of the tests to the Contractor and WMATA.