

**ADDENDUM NO. 1**

Lower Shannock Falls Dam Removal and Fish Passage  
Shannock Village, RI

**Wood-Pawcatuck Watershed Association**

April 30, 2010

PREPARED BY:  
Fuss and O'Neill, Inc.  
317 Iron Horse Way, Suite 204  
Providence, RI 02908

**NOTICE TO PROSPECTIVE BIDDERS**

**ADDENDUM NO. 1**

**Prospective Bidders and all concerned are hereby notified of the following changes in the Contract Documents of the LOWER SHANNOCK FALLS DAM REMOVAL AND FISH PASSAGE PROJECT in SHANNOCK VILLAGE, RI. These changes shall be incorporated in and shall become an integral part of the Contract Documents. The number (No. 1) and date (04/30/10) of this addendum must be entered into the space provided on Page 00411-01 of the Bid Form.**

**Bidders shall return the attached ACKNOWLEDGMENT OF ADDENDUM form as instructed on that form upon receipt of this addendum.**

## GENERAL INFORMATION

1. Fuss & O'Neill, along with the Wood-Pawcatuck Watershed Association (WPWA) and Project Partners, will evaluate the control of water approach for the lowest qualified bidder, and may review such approach with RIDEM, before awarding the bid. Demonstrated bidder qualifications will be a primary criteria in the bid review and selection process.
2. The selected Contractor shall coordinate site access with respective private property owners to utilize construction access routes to the river or storage/staging areas, as depicted on the drawings or otherwise deemed by the contractor as required for successful completion of the work. The owner of the local AirMetal Works shop has indicated willingness to allow certain equipment and materials to be stored on its property.
3. Throughout the project the Contractor shall coordinate its activities with the Engineer, RI State Historical Preservation Office and the Narragansett Indian Tribe, including advance notification, coordination and periodic cessation of work activities to allow review of channel bottom conditions, conditions of historically/culturally significant features, and documentation of site conditions prior to continuation of respective work activities.
4. The Town of Richmond has indicated to the WPWA that it will accept used riprap at its Department of Public Works facility near Route 138, provided such material is clean. If used, it shall be the contractor's responsibility to transport such material to the site and dump at location(s) on the site as directed by the Town of Richmond.
5. Bidders shall reflect costs for removal of three (3) concrete piers from the channel. Two such piers are depicted on the drawing in the center of the channel on Sheet C-140, and the third pier was pointed out during the pre-bid walk-through on the left side of the channel adjacent to the sluiceway training wall.

## INFORMATION TO BIDDERS

6. ARTICLE 7: ADDENDA AND INTERPRETATIONS; Delete the first sentence of the second paragraph of this section and replace with the following:  
  
"Any and all interpretations, responses to potential bidder's questions, and supplemental instructions, if issued, will be posted on the WPWA website ([www.wpwa.org](http://www.wpwa.org)) by Friday, April 30, 2010, on which date they will also be made available to view with the Bid Package at Fuss & O'Neill's Office."

## BID FORM

7. ARTICLE 6 - TIME OF COMPLETION; Delete Section 6.3 and replace with the following:

“Bidder agrees that field-direct unit bid price items will be completed within the nine-month period following final completion, and that such work will be in quantities, locations and times as solely directed by the Engineer.”

## **SECTION 02360 – ROCK GRADE CONTROL STRUCTURES**

8. PART 3 – EXECUTION, 3.4 IN-STREAM CHANNEL GRADING; Delete Paragraph B and replace with the following:

“B. Excavate existing loose material and form working bed elevations indicated in the contract drawings. Where material to be excavated is no longer loose and stones, rock, concrete, metal reinforcing or bedrock is encountered, mechanical methods shall be used to obtain a stable, uniform channel bottom at the required bed elevations.

1. Remove loose rock, concrete and other materials from excavations and reuse in conformance with material requirements on site or suitably dispose off-site.”

## **SECTION 02485 – RIVERBANK STABILIZATION AND VEGETATIVE RESTORATION**

9. PART 1 – GENERAL, 1.6 DELIVERY, STORAGE, AND HANDLING; Delete Paragraph B.2 and replace with the following:

“2. All live stakes cut from local sources shall be planted within 24 hours of cutting. Live stakes shall be kept moist during transport to the site and be promptly protected upon arrival at the site. Protection at the site shall consist of continuous shade, must be sheltered from the wind, and must be continuously protected from drying out by either being heeled into moist soil or stored in uncontaminated water.”

10. PART 1 – GENERAL, 1.6 DELIVERY, STORAGE, AND HANDLING; Delete Paragraph B.4.a and replace with the following:

“a. Protection shall consist of continuous shade, be sheltered from the wind, and must be continuously protected from drying out by either being heeled into moist soil or stored in uncontaminated water.”

## **CONTRACT DRAWINGS**

11. Add the following notes on Sheet C-140:

“1. COFFERDAM AND WATER BYPASS CONVEYANCES SHOWN HEREON ARE EXAMPLES DEPICTED TO RIDEM FOR PURPOSES OF PERMITTING THIS

PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SITE-SPECIFIC WATER CONTROL PLAN ADDRESSING SPECIFIC COFFERDAMMING AND WATER BYPASS CONVEYANCE MEANS AND METHODS, AS REVIEWED BY THE ENGINEER AND APPROVED BY RIDEM.

2. CONSTRUCTION PHASING ITEMS, AND ITEMS OF WORK WITH RESPECTIVE LIMITS SHOWN GRAPHICALLY HEREON ARE FOR GENERAL REFERENCE ONLY IN RELATION TO THE PROJECT'S OVERALL SEQUENCE OF CONSTRUCTION, AS DEPICTED TO RIDEM FOR PURPOSES OF PERMITTING THIS PROJECT. ACTUAL SEQUENCES, ITEMS OF WORK, LOCATIONS, LIMITS, ETC. SHALL GENERALLY CONFORM TO THESE ITEMS, BUT SHALL BE CONSTRUCTED AS SPECIFICALLY DEPICTED ON OTHER CONTRACT DRAWINGS AND SPECIFICATIONS."

12. Delete the "General Controlled Blasting Sequence and Provisions" notes on Sheet C-140 and replace with the following:

- "1. CONTRACTOR SHALL PERFORM BLASTING IN EXCAVATION AREA 'A' AND ONLY AS REQUIRED IN AREA 'B' WHERE BEDROCK CHIPPING CANNOT BE COMPLETED WITHIN PROJECT CONSTRUCTION SCHEDULE.
2. CONTRACTOR'S BLASTING SUBCONTRACTOR SHALL BE LICENSED IN THE STATE OF RHODE ISLAND AND OBTAIN REQUIRED PERMITTING FROM THE STATE FIRE MARSHALL'S OFFICE. NOTICE SHALL BE PROVIDED TO THE TOWN OF RICHMOND'S AND CHARLESTOWN'S CLERK'S OFFICES IN ACCORDANCE WITH PERMIT CONDITIONS.
3. CONTRACTOR SHALL DEVELOP AND IMPLEMENT A WRITTEN CONTROL BLAST PLAN. SUCH PLAN SHALL BE TRANSMITTED TO RIDEM FOR APPROVAL PRIOR TO BLASTING.
4. CONTRACTOR SHALL OFFER A PRE-BLAST SURVEY TO ALL PROPERTY OWNERS WITHIN A 500-FOOT RADIUS OF THE BLAST LOCATIONS, INCLUDING UP TO FOUR (4) PROPERTIES ON SHANNOCK VILLAGE ROAD TO BE IDENTIFIED BY THE OWNER, AT LEAST TWO WEEKS PRIOR TO BLASTING. THIS SURVEY SHALL INCLUDE VIDEO DOCUMENTATION OF ACCESSIBLE INTERIOR AND EXTERIOR PORTIONS OF BUILDINGS AND OTHER STRUCTURES (E.G., RETAINING WALLS, ETC.) TO IDENTIFY EXISTING AREAS OF STRUCTURAL DISTRESS (E.G., CRACKS, MISALIGNMENT, ETC.). POST-BLAST SURVEYS SHALL BE CONDUCTED IF AN ADJACENT PROPERTY OWNER BELIEVES THAT THE BLAST HAS CAUSED DAMAGE TO A STRUCTURE ON ITS PROPERTY.
5. CONTRACTOR SHALL CONDUCT VIBRATION MONITORING USING CALIBRATED SEISMOGRAPH EQUIPMENT INSTALLED AND OPERATED BY TRAINED PERSONNEL. AT LEAST TWO SEISMOGRAPHS SHALL BE USED AND BE PLACED AT INTERMEDIATE POSITIONS TO ADJACENT STRUCTURES TO REMAIN UNDISTURBED (E.G., CAST-IN-PLACE CONCRETE TRAINING WALL ASSOCIATED WITH THE FORMER HYDROPOWER PLANT, BRICK CHIMNEY ON THE FORMER

KNOWLE'S MILL SITE, AND ADJACENT PROPERTY OWNERS ON RAILROAD AVENUE). THIS SEISMOGRAPH EQUIPMENT SHALL DOCUMENT VIBRATIONS DO NOT EXCEED ACCELERATION LIMITS SET FOR THE SITE (NO MORE THAN 1 IN/SEC<sup>2</sup>).

6. CONTRACTOR SHALL USE BLASTING MATS WHERE REQUIRED TO CONTROL EXCESSIVE ROCK MOVEMENT AND TO PROTECT PERSONS AND STRUCTURES ON OR ADJACENT TO THE SITE.
7. CONTRACTOR SHALL IMPLEMENT BLASTING SITE SECURITY PLAN INCLUDING WARNING WHISTLES. SUCH PLAN SHALL IDENTIFY AT A MINIMUM THE BLAST AREA, EQUIPMENT REQUIRING REMOVAL, BLAST AREA ACCESS POINTS, SENTRY LOCATIONS AND DESIGNATED "SAFE AREAS." EACH BLAST SHALL BE PRECEDED BY A SECURITY CHECK OF THE AFFECTED AREAS AND THEN A SERIES OF WARNING WHISTLES. LOCAL FIRE CHIEFS, ADJACENT NEIGHBORS AND RIDEM SHALL BE ADVISED OF THE BLASTING SCHEDULE AT LEAST 48 HOURS IN ADVANCE OF BLASTING.
8. THE CONTRACTOR'S GENERAL BLAST SEQUENCE SHALL BE AS GENERALLY FOLLOWS, UNLESS OTHERWISE REQUIRED BY PROCEDURES OR APPLICABLE CODES, RULES OR REGULATIONS OF AGENCIES OR AUTHORITIES HAVING JURISDICTION:
  - 8.1 DRILL BLAST HOLES TO REQUIRED DEPTHS AND AT REQUIRED SIZE/SPACING TO MINIMIZE SHOCK VIBRATIONS FROM BLASTING.
  - 8.2 LOAD DRILL HOLES WITH EXPLOSIVE CHARGES.
  - 8.3 WIRE CHARGES TO DETONATION CONTROLLER IN DESIGNATED SAFE AREA.
  - 8.4 PLACE PACKED CRUSHED STONE IN DRILL HOLES OVER EXPLOSIVE CHARGES.
  - 8.5 PLACE BLASTING MATS AS REQUIRED OVER BLAST AREA.
  - 8.6 CONDUCT STANDARD BLASTING WHISTLE ANNOUNCEMENTS AS FOLLOWS:
    - 3 WHISTLES - BLASTING IN FIVE MINUTES
    - 2 WHISTLES - BLASTING IN ONE MINUTE
    - 1 WHISTLE - BLASTING IS COMPLETE, ALL CLEAR
  - 8.7 FIRE BLASTING CHARGES
  - 8.8 REMOVE LOOSE ROCK AND OTHER BLASTING MATERIALS (MATS, WIRES, ETC.) FROM BLAST AREA AND LEGALLY DISPOSE OF MATERIALS OFF-SITE. BLASTED ROCK MAY BE INCORPORATED INTO PROJECT WORK WHERE IT MEETS APPLICABLE SPECIFICATIONS REQUIREMENTS."

13. Delete the following call-out on Sheet C-150:

"REMOVE AND DISPOSE OF CONCRETE PIERS (TYP.)"

And replace with the following:

“REMOVE AND DISPOSE OF CONCRETE PIERS (TYP. OF 3)”

14. Delete Note 1 on Sheet C-503 and replace with the following:

“1. COFFERDAM AND WATER BYPASS CONVEYANCES SHOWN HEREON ARE EXAMPLES DEPICTED TO RIDEM FOR PURPOSES OF PERMITTING THIS PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SITE-SPECIFIC WATER CONTROL PLAN ADDRESSING SPECIFIC COFFERDAMMING AND WATER BYPASS CONVEYANCE MEANS AND METHODS, AS REVIEWED BY THE ENGINEER AND APPROVED BY RIDEM.”

## RESPONSE TO QUESTIONS

Below are answers to the questions asked at the pre-bid meeting held on April 15, 2010. The questions are underlined and the answers follow.

15. How do today's flows compare to normal flows?

Bidders are referred to Section 02260 - Control of Water. Flows during the Pre-Bid meeting were recorded at 632 CFS at 1:00 PM on April 15, 2010 at USGS Gage Station Site No. 1117500 – Wood River Junction.

16. Where can we stockpile channel sediment?

The Contractor can stockpile channel sediment in lined roll-offs, if saturated, or in a dry area in the dewatered river channel until such fluids are drained off, at which time sediment may be loaded into a suitable vehicle or container for off-site disposal. Sediment shall not be stored otherwise in stockpiles at the site or on the Metal Works commercial facility property.

17. Is the Contractor responsible for sediment disposal sampling?

Yes, the Contractor shall sample, test and interpret results to determine disposal requirements for removed sediment.

18. What are the contaminants in the sediment?

Samples have been collected from this area by F&O as well as other federal agencies. The results and locations of these samples have been posted to the WPWA website at [www.wpwa.org](http://www.wpwa.org). Data can also be viewed at the offices of F&O.

19. Will the Contractor be responsible for obtaining Railroad Protective Insurance?

While the WPWA is not requiring this type of insurance, it is the Contractor's responsibility to determine if this insurance is required based on the type and



proximity of work in relation to the railroad, and to purchase such insurance accordingly as part of its compliance with other safety and access requirements of authorities having jurisdiction at no additional cost to the Owner.

20. Where is the liner being installed?

The liner is depicted on the front face of the rock wall on the sluiceway closure detail on Sheet C-502.

21. Can the Contractor get access to the site through Charlestown or private property?

There is no access to the site on the Charlestown-side of the river. The selected Contractor shall coordinate site access with respective private property owners adjacent to the site as required for respective items of work during the contract period. Property owner contact information will be provided to the selected Contractor. WPA noted that property owners through which access or project activities are depicted are aware and are generally supportive of the project.

22. How far does the river restoration go upstream?

Probably areas of river restoration activities are depicted on the contract drawings, and approach the base of the Horseshoe Falls Dam upriver of the Amtrak rail crossing. It will not be determined where such work will specifically be required until river levels are lowered following dam/temporary cofferdam removal.

23. Is sediment paid for by the Ton or Cubic Yard?

Sediment will be paid for by the Ton.

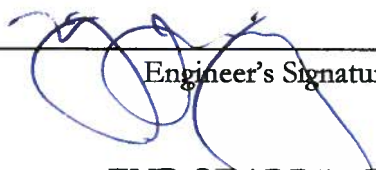
24. What is the depth of the water today where the cofferdam is shown on the drawings?

We do not have this information at this time. The Contractor may take any measurements it needs on the site today or at a later date as preparation of its bid.

25. Where can we clear trees and brush?

The limits of clearing are shown on the drawings.

ISSUED BY: \_\_\_\_\_

  
Engineer's Signature

Date: 4/30/10

END OF ADDENDUM NO. 1

