Macallen Dam Abutments and Outlet Structure Rehabilitation Project Newmarket, NH <u>ADDENDUM NO. 1</u>

To:	All Prospective Bidders Macallen Dam Abutments and Outlet Structure Rehabilitation Project
Location:	Macallen Dam, Newmarket, NH
From:	Todd E. Monson, Chad W. Cox, James P. Guarente – GZA GeoEnvironmental, Inc.
Re:	Bidder Questions and Responses
Date:	November 20, 2019

Please find the following **ADDENDUM NO. 1** for the Macallen Dam Abutments and Outlet Structure Rehabilitation Project which is to be included as part of the Contract Documents thereof.

General Bidders shall acknowledge receipt of this **Addendum No. 1** by checking the appropriate box on Sheet 2 of the Bid Form.

Item #1: Response to Prospective Bidders' Questions / Clarifications

The following questions pertaining to the meaning and/or the intent of the technical specifications or contract documents were received by GZA GeoEnvironmental, Inc. by the 5:00PM deadline on November 13, 2019:

- Q1) Will high water events be reimbursed by the Town or should the Contractor assume the costs for these events in their proposal?
- A1) As per Section 01565, Paragraph 1.11, the Contractor should assume costs for high water events in their proposed bid price.
- Q2) Is Obermeyer the only approved vendor for the project? And if they are not, when should the Contractors provide the information for alternate vendors; so that this information can be shared with other bidders prior to the bid deadline.
- A2) The current design is based on use of a pneumatic crest gate as shown on the Contract Drawings to be manufactured by Obermeyer Hydro, Inc., who is the only approved vendor for this project. The Contractor may submit an equivalent to that which is specified for Town and Engineer review and approval. Key considerations for approval of an equivalent would be that the alternate vendor product can be installed such that it satisfies the intent of the current design, and in accordance with the project goals and timelines.

- Q3) Will New Hampshire Department of Fish & Game (NHF&G) be willing to modify the drawdown dates, or should the Contractor assume that the dates provided in the bid documents are firm for the purposes of the bid?
- A3) The Contractor shall assume that the dates provided in the bid documents are firm for the purposes of the bid. Email correspondence to GZA dated November 13, 2019 from NHF&G stated they would hold firm against allowing the draw down to occur before September 1st due to concerns with high water temperatures negatively impacting aquatic life.
- Q4) Has the cost of the Obermeyer system changed? And will the new quote be provided to all bidders?
- A4) The cost of the Obermeyer system presented in this bid is quoted from October 15, 2019 as per Specification Section 00810 Project Documents and Permits Secured by Project Owner. A new quote will not be provided to prospective bidders. The provided quote is for information purposes only and the Contractor shall confirm pricing with Obermeyer. Refer to Specification Section 00810 Project Documents and Permits Secured by Project Owner for additional details.
- Q5) From past experiences working with Obermeyer, the details provided in the bid documents are incomplete. Will any further details be provided prior to the bid date? Or are the Contractor's responsible to coordinate all these details prior to the bid deadline?
- A5) No further details will be provided prior to the bid deadline date. As per Section 11288, Paragraph 1.01.B, final details, drawings and technical specifications for the pneumatic gate and required appurtenances shall be coordinated by the Contractor with the manufacturer during the procurement process. The cost of said activities shall be included in the Contractor's bid price.
- Q6) Please verify that a sandbag cofferdam shown in the bid documents is intended to hold back 10' of water.
- A6) The Contractor shall be responsible for designing and implementing an approved temporary dewatering system and cofferdam for installation of the crest gate system. The cofferdam system depicted on the drawing details is for conceptual purposes only. As per Section 02170, Paragraph 1.03, the Contractor shall be responsible for submitting their proposed method of installing, maintaining and removing the temporary cofferdams, and emergency procedures, to the Owner for review. The temporary cofferdam to affect portions of the work shall be designed to elevation 26.5 feet (NAVD88) in accordance with the Contract Drawings

Q7) Maximum movements Section 1.06B states:

Threshold limits 0.1 inch. Very specialized and very expensive equipment exists to measure movement to this level of precision*. The cost of renting such equipment and following the necessary procedures would be shockingly expensive (\$50,000+). As much as we would love to do this for you, we recommend you reach out to who wrote the specs and ask if they can revise to 0.15 inch which is still going to be expensive but can be done with standard equipment and mounted prisms vs. the specified bolts.

*movement is a measurement of the position of a feature relative to the position of another feature. For this reason, you can't simply look at instrument and prism specs for a precision estimate. Instead you must consider angle accuracy, pointing accuracy and accuracy of ability to set directly on a point. Add all errors up to get total error budget.

A7) The threshold limit will be updated to 0.125-inches and the limiting value will be updated to 0.25-inch.

- Q8) Item 30 on the bid form is listed as an allowance. Is there an allowance amount to enter?
- A8) The allowance shall be \$5,000 as determined by the Town.
- Q9) Please provide full resolution photos of the damaged abutments when they had the area draw downed years ago.
- A9) The Town has uploaded the 2013 Drawdown Photos to the Town Bidding website.
- Q10) Is the Contractor expected to keep a certain distance away from the existing walls with cranes and equipment?

A10) Contractor is responsible to maintain integrity of existing walls and structures during entirety of project duration.

- Q11) The Town said that there would potentially be small parking lots available to Contractor use. Can a map and size available be provided?
- A11) Three potential locations could be available for Contractor use. The first location is the Beech Street Extension Lot (near 6 Beech Street Ext) which is approximately 130 ft x 60 ft in area. The second location is the Bay Road Municipal Lot (corner of Lamprey Street) which is approximately 70 ft x 70 ft in area. A third potential location is at the Public Works Facility which could potentially be available as needed for storage of specialty items such as the crest gate. Web links to the locations are provided as follows:

Beech Street Extension Lot: <u>https://goo.gl/maps/L3dCkogivBtHRcKV8</u> Bay Road Municipal Lot: <u>https://goo.gl/maps/bdv26TknV8oGMoa49</u> Public Works Facility: <u>https://goo.gl/maps/6GEeETEGdymuipjt7</u>

- Q12) Can contacts for both condo associations and the Book Annex be provided to the Contractors?
- A12) Yes. Coordination with the Condo Associates and the Book Annex should be facility through the Town. The Town has direct contact information for both.
- Q13) Are there workday hours that will be restricted?
- A13) Workday hours will be restricted to 7am to 5pm Monday through Friday. However, EJCDC Section 7.02 allows the Contractor to request work outside regular hours in writing. The Town will coordinate extensions to typical workday hours directly with the awarded Contractor.
- Q14) Do the condos owners understand that there will be deliveries that need to take place through the parking lots? Is there an access agreement for this?
- A14) The Town has discussed and held meetings describing the project with the condo owners. The Town has legal easement access rights through the Condo Association property for use in maintenance and repair o the dam.
- Q15) The Cofferdam has an elevation of 26.5', what storm event is this designed for?
- A15) The elevation of 26.5' is based on restricted flow of Normal Pool operating conditions during left abutment work (i.e. crest gates will not be operating). The flow, and corresponding storm event, which results in an elevation of 26.5' has not been specifically defined and flows vary significantly by season. It is estimated that flows at the dam of approximately 1,400 cfs could reach elevation 26.5'. Flow duration data is provided in Specification Section 01566. Additional monthly flow duration information is presented below.

Historic flow data at the USGS 01073500 LAMPREY RIVER NEAR NEWMARKET, NH stream gage is available at the website below. It is noted that the watershed at the Macallen Dam (1211 square miles) is approximately 114% the size of that at the stream gage (185 square miles).



Monthly Flow Duration Curve of Lamprey River at Macallen Dam *Scaled from USGS Gage 01073500 (1934 to 2019)

Monthly Flow Duration Curve of Lamprey River at Macallen Dam *Scaled from USGS Gage 01073500 (1934 to 2019)



https://waterdata.usgs.gov/usa/nwis/uv?site_no=01073500

Q16) There is power onsite for the new crest gate, but can more details be added about what exists?

A16) The Town has confirmed there is power at the Site. Power access will be worked out with the awarded bidder prior to the Construction Period.

Q17) Compost Filter Sock detail on drawing C-3 calls for an 8" diameter compost filter sock to be used. Spec Section 01560 – Temporary Erosion and Sedimentation Controls Part 2.04 Compost Filter Socks Item A calls for the use of 24" minimum diameter compost filter socks. Please clarify which size compost filter socks will be required by the Project.

A17) The minimum diameter compost filter sock shall be 8-inch diameter in accordance with Drawing C-3.

Q18) Spec Section 01560 – Temporary Erosion and Sedimentation Controls Part 2.06 Turbidity Curtain Item A calls for a Downstream Turbidity Curtain along with an Upstream Turbidity Curtain. However, the contract drawings only show a Downstream Turbidity Curtain on drawing C-1. Please clarify if an Upstream Turbidity Curtain will be required by the Project?

A18) An Upstream Turbidity Curtain is not required on this Project. Specification Section 01560 – Temporary Erosion and Sedimentation Controls Part 2.06 – Turbidity Curtain Item A will be amended as such in the "Conformed Document" Package.

- Q19) The bid documents state that the impoundment drawdown period will be from September 1st to October 15, 2020 and be completely re-watered by October 31st, 2020. Can you clarify if the contractor will be able to start lowering the water prior to September 1st to accomplish a full impoundment drawdown condition on September 1st?
- A19) NHF&G re-confirmed via email correspondence dated November 13, 2019 that stated they would hold firm against allowing the draw down to occur before September 1st due to concerns with high water temperatures negatively impacting aquatic life. As a result, the drawdown will not be allowed to start prior to September 1, 2019. The Contractor shall coordinate with the Owner, Engineer, and NHF&G for drawdown operations. Refer to Specification Section 01565 – Temporary Water Control Part 3.02 – Site Specific Surface Water Control Requirements.

The Town is still in the process of coordinating with NHF&G. However, for bidding purposes, the Contractor shall assume signifigant drawdown cannot occur until September 1, 2020.

- Q20) According to Technical Summary Memorandum Dam Feasibility and Impact Analysis prepared by Gomez and Sullivan Engineers in April 2014, there was a drawdown in October 2013. Are you able to tell us how long that process took?
- A20) The Feasibility Memorandum indicates the drawn down occurred from October 1 to Oct 8 and refilled by Oct 11. The maximum drawdown depth was approximately 6.6 feet.

Item #2: Additional Clarifications

Please note that Section 2 on Sheet C-6 references Wall #1A and #1B Detail provided on Sheet S-5, and new wall should include concrete footing as shown in the detail.