



# PUBLIC WORKS DEPARTMENT

CITY OF PORTSMOUTH  
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ADDENDUM NUMBER 1  
Bid 31-24

## Proposed Repair of Maplewood Avenue Bridge over North Mill Pond

Issued February 20, 2024

This addendum forms part of the original document marked “**BIDDING REQUIREMENTS, CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS FOR THE CONSTRUCTION OF PROPOSED REPAIR OF MAPLEWOOD AVENUE BRIDGE OVER NORTH MILL POND, NHDOT BRIDGE NO. 231/103, CITY OF PORTSMOUTH PUBLIC WORKS DEPARTMENT BID #31-24**”.

Acknowledge this addendum within your proposal. Failure to do so may subject bidder to disqualification.

### **Pre-Bid Meeting:**

- Pre-Bid Meeting Agenda and Meeting Minutes (Attachment) and the information provided within are included in the Contract Documents by this Addendum No. 1.
- Pre-Bid mandatory meeting attendees list is included with the Meeting Notes.

### **Bid Opening:**

The Bid Opening date has changed to March 4, 2024 at 2:00pm. Location of bid opening shall remain the same. The Bid questions due date will also be extended to 1:00pm on February 22, 2024. Addendum #2, and subsequent addenda as necessary, will be posted on or before 4:00pm on February 27, 2024.

### **Questions:**

The following questions were received from prospective bidders separately from those received and answered during the Pre-Bid Meeting. Note that additional questions related to the Special Provision for Item 520.99 – Geopolymer Lining have been received and will be answered via a separate Addendum.

#### **Question #1:**

Would the owner / engineer revise the unit of measure for the soil subsurface stabilization grouting to LBS instead of CF?

#### **Answer #1:**

The unit of measure for this work was discussed with the project team’s geotechnical engineer who recommended this item be measured by volume, not mass, to be consistent with how grouting work is typically quantified for projects following NHDOT Standard Specifications.

Question #2:

Will Vortex's MSF or SSF acceptable alternative to concrete class F flowable fill excavatable for filling the voids before installing GeoPolymer Lining? If so, since this product is expanding, typically we charge per cartridge, will the owner add an alternative item for this?

Answer #2:

Presumably this question is referring to Quadex I&I Guard-MSF (soil stabilization foam product manufactured by Vortex) and Quadex I&I Guard-SSF (structural two-part grout product manufactured by Vortex). Alternative products will be considered for Item 521.421 Concrete Class F, Flowable Fill, Excavatable provided they provide similar or performance to the Item 521.421 at the same, or lower, total installed cost. The decision to approve alternative products will be made after the contract is awarded and will be based on cost as well as product data submitted by the Contractor (including manufacturer data and installer qualifications).

Question #3:

Does the owner / engineer have soil borings that they can share with the contractors?

Answer #3:

Data from the subsurface explorations performed for this project are included in the geotechnical report found in Appendix B.

Question #4:

Since the North coffer dam has to achieve the min peak elevation for safe man entry into the culvert, will the owner / engineer allow for sheet piling?

Answer #4:

Driven steel sheet piling is acceptable to both the Owner and Engineer as an alternative approach for water diversion. However, the NHDES wetland permit application documents depict the PortaDam system for water diversion, and the permit will be issued based on the PortaDam system. Should an alternative water diversion system be proposed, it may require an amendment to the NHDES wetland permit, which would be the contractor's responsibility to coordinate and obtain. Should the Contractor elect to amend the wetland permit, the City and Hoyle Tanner would assist the Contractor in the permit amendment process by providing general consultation on the proposed alternative water diversion system(s), reviewing draft permit amendment documents prepared by the Contractor (or Contractor's engineer), and helping to facilitate discussions with NHDES on the proposed changes.

Final details of the proposed water diversion scheme must be submitted to the Engineer and NHDES for review and approval prior to the start of the work, even if the PortaDam system as conceptually shown on the contract plans is used.

Regardless of which water diversion system is utilized, the work will be paid for with Item 503.1 Water Diversion Structures. No additional payment will be made for any of the work associated with an alternative water diversion system including but not limited to mobilization of pile driving equipment or the installation and removal of steel sheet piling.

Question #5:

Currently the contract states "rusted portions of the corrugated steel shall be removed or sand blasted to white metal and coated with an approved epoxy rust protector, per the manufacturer's recommendations". Will the owner / engineer accept our standard pipe prep process (not sandblasting) due to the potential to blow holes in the existing CMP pipe? Also, the rust

provides a nice friction for the geopolymer to adhere to vs applying it to bare metal.

Answer #5:

Alternative (lesser) levels of steel preparation may be accepted provided that both the manufacturer and installer of the geopolymer liner provide documentation regarding performance of the liner applied to a substrate prepared to a lesser level than required by the specifications. Documentation must be acceptable to the Owner and Engineer, and Owner reserves the right to not allow deviation from the project specifications.

Question #6:

Will the engineer / owner accept a final GeoPolymer CCTV video post rehab using a GoPro camera?

Answer #6:

Final video documentation of the geopolymer liner may be captured with a GoPro camera provided that the video documents the completed liner to the level of detail required by the project specifications.

Question #7:

Where is the 80 LF of pipe that is called out for video inspection located?

Answer #7:

Bid Item 603.0001 Video Inspection is intended to be used for investigating the existing storm drain system, prior to replacing piping and/or drainage structures. Of particular interest is the routing of pipes in the east approach, near Sta. 5+50, where pipes appear to be joined via a tee-  
we connection.

Question #8:

Will the engineer / owner please confirm that this project is non-prevailing, not Davis Bacon, and / or there are no union requirements?

Answer #8:

This project does not include prevailing wage requirements, nor are there any union requirements.

Question #9:

Does the flow need to be bypassed that is running through the pipe?

Answer #9:

Yes, flow through the bridge must be bypassed to complete the portions of the work, including installation of the geopolymer liner. Refer to the Water Diversion Plan on Sh. 11 of the contract drawings.

Question #10:

Is the Geopolymer material to be applied from the concrete slabs and up?

Answer #10:

Geopolymer liner is to be applied to the inside surface of the existing bridge, to the limits as shown on the Proposed Bridge Section detail on Sh. 12 of the contract drawings (Bridge Repair Details).

Question #11:

Would handspraying be an acceptable application method for the Geopolymer lining?

Answer #11:

Handspraying is an acceptable application method, provided that the geopolymer liner can be applied according to the manufacturer's installation requirements with handspraying.

Question #12:

Is the Owner anticipating a platform of some sort needed to apply the Geopolymer Lining?

Answer #12:

It shall be the contractor's responsibility to determine and provide the necessary means for construction access, including for installation of the geopolymer liner.

End of Addendum #1

PREBID CONFERENCE  
MEETING NOTESProject Name: Maplewood Avenue Bridge Rehabilitation Project No. 20.905110.00Date of Conference: 2/8/2024 Location: Portsmouth DPW Training Room1. INTRODUCTIONS & SIGN-IN SHEET

- a. See attached sign-in sheet

2. SCOPE OF PROJECT

- a. The Maplewood Avenue Bridge (NHDOT Bridge No. 231/103):
  - a. Single-span stone arch bridge initially constructed in 1896
  - b. Grouted corrugated metal plate arch liner installed in 1976
  - c. Span length = 25'
  - d. 32' wide paved roadway with concrete sidewalks (rail support slabs) on each side
  - e. AADT 6,603 (2018)
  - f. Currently on the State's 'Red List' - condition rating of 3 (Serious)
- b. Description of Work: Bridge repair project including:
  - a. Installation of a spray-applied geopolymer liner
  - b. Retaining wall reconstruction
    - i. Areas of full-height (top of wall to mudline)
    - ii. Partial height and spot repair areas
  - c. Riprap installation
  - d. Drainage system improvements
    - i. New CB's and piping
    - ii. New outfall
  - e. Rail support slab construction
  - f. Conduit installation (both for future UG relocation and future lighting)
  - g. Bridge rail installation
  - h. Roadway reconstruction / paving / striping
- c. NHDES Permit:
  - a. NHDES Standard Dredge and Fill Wetland Permit Application (FILED)
    - i. RFMI response in progress; do not anticipate permit issues because there has been significant coordination with NHDES
  - b. Army Corps of Engineers Permit
    - i. Will be reviewed by USACE after NHDES permit is issued
  - c. Any permit requirements not addressed in current contract documents will be added via Bid Addendum or Change Order, depending on timing of permit issuance
  - d. City permits
    - i. Contractor must obtain permits, but City will waive fee
      1. Excavation Contractor License
      2. Excavation with Flagging

### 3. BIDDING REQUIREMENTS

- a. NHDOT Prequalification – “Bridge Construction”, “Bridge Rehabilitation”, and/or “Road Construction”
- b. Documents submitted with Bid:
  - i. Bid Guarantee – Section 00430 5% of Bid Amount
  - ii. Bid Form – Must use original form provided in electronic contract documents
- c. Bids due to Finance/Purchasing Department, 3<sup>rd</sup> Floor City Hall, 1 Junkins Avenue, Portsmouth NH, by 2:00PM Tuesday, February 27, 2024.

### 4. CONTRACT REQUIREMENTS

- a. Bonds
  - i. Payment for 100% of contract amount
  - ii. Performance for 100% of contract amount
- b. Insurance
  - i. Levels of Coverage (see Section 00800 Supplementary Conditions, part SC-6.01)
  - ii. Includes requirement for Builder’s Risk Property Insurance

### 5. SPECIAL REQUIREMENTS / CONDITIONS

- a. Funding
  - i. City only funding
- b. No prevailing wage or DBE compliance requirements
- c. Site access
  - a. Work within existing ROW, except:
    - i. NW quadrant
      - 1. Access for water diversion system installation and storm drain outfall work via existing easement
    - ii. NE quadrant
      - 1. On adjacent parcel, within the work area depicted on Wetland Impacts Plan sheet, as necessary for water diversion system, dewatering, riprap installation, and related work
        - a. Per MOU between City and property owner, Tree clearing and access to the shore over ‘unimproved land’
        - b. Property will be restored to like or better condition and restabilized at the conclusion of use
        - c. Make reasonable efforts to minimize inconvenience to business
        - d. At no time will the work interfere with parking operations or occupy any of the parking within Map 123 Lot 10
        - e. Contractor must indemnify and hold harmless the Property Owner from all claims, damages or injuries that may arise directly from use of this property

## 6. TRAFFIC CONTROL

- a. Closed to vehicular traffic for either 30 or 80 calendar days (discussed further as part of Bid Alternates)
- b. Outside of bridge closure period, must be open to unrestricted two-way traffic on minimum 11-foot travel lanes with a minimum of base pavement and appropriate guardrails or barriers.
- c. Pedestrians must be accommodated through the work zone at all times during construction
  - a. See item 1008.251, Alterations and Additions as Needed – Temp. Pedestrian Accommodation
    - i. This item will only be used to pay for accommodating pedestrians through the work zone during the roadway closure period; measures necessary during work outside of the closure period shall be incidental to the Contract
- d. Item 606.417 – Portable Concrete Barrier:
  - a. Only used for isolating the work zone from vehicular traffic for the road closure period (barrier at either end of project, transverse to roadway)
    - i. If barrier or other temporary rail or barrier systems are needed for completion of the work, either during the complete closure period or after, those items shall be incidental to the contract
      - 1. For example, if rail support slab construction occurs outside of the complete closure window, a temporary barrier system would be necessary and not paid for with Item 606.417

## 7. UTILITIES

- a. General Requirements
  - i. Contractor to assume responsibility for utility coordination upon award of the contract
    - 1. Best available contact information for utilities is on plans (Sheet 5)
    - 2. City and Hoyle Tanner will provide assistance with coordination
- b. Utilities present but not anticipated to be impacted / engaged:
  - i. Telephone
  - ii. Cable
  - iii. Water
  - iv. Sewer
- c. Electricity (Power) - Eversource
  - i. Installation of conduits for the future relocation of overhead utilities underground
    - 1. Future UG relocation plan developed by Eversource includes the utility vault proposed
- d. Gas – Unitil
  - i. Relocation of gas main to install Eversource utility vault
  - ii. Suggest beginning this coordination ASAP upon Award
- e. Drainage
  - i. Storm drainage improvements as detailed on the plans

## 8. CONSTRUCTION SCHEDULE

- a. Anticipated Notice to Proceed Date: 4/1/2024, with contractor taking site on or after 5/1/2024
- b. Substantial Completion: Max of 130 calendar days from taking site; no later than 11/1/2024
- c. Final Completion:
  - 11/1/2024 if Bid Alternate 2 is NOT awarded
  - 6/15/2025 if Bid Alternate 2 IS awarded
- d. Project Shutdown:
  - 11/2/24 to spring 2025, only if Bid Alternate 2 IS awarded
- e. Liquidated Damages are included at \$1,000/day for each day after the substantial completion and \$1,000/day after final completion. Refer to Section 00520, Paragraph 4.03.
  - Also apply to the Milestones associated with Bid Alternate 3

## 9. ADDENDUM

- a. All questions must be submitted in writing by C.O.B. on 2/15/2024.
- b. Addendum, if necessary, will be issued by C.O.B. on 2/22/2024.

## 10. OTHER

- a. Bid Alternates
  - i. Bid Alternate 1
    1. Bid Items for stabilization of the soil backfill over the bridge via chemical soil surface grout injection
  - ii. Bid Alternate 2
    1. Bid Items for the installation of wearing course pavement
      - a. To be completed during the 2025 construction season, if awarded
      - b. Extends Final Completion date to 6/15/2025, if awarded
  - iii. Bid Alternate 3
    1. Bid Item for reducing the allowable bridge closure duration from 80 calendar days to a maximum of 30 calendar days
      - a. Lump sum w/ penalty for non-attainment (currently \$1,000/day)
      - b. Intent: solicit feedback from prospective bidders via the bidding process
      - c. No separate payment for any temporary or permanent measures necessary to satisfy the requirements of Item 999 for re-opening of the bridge that would not otherwise be necessary as part of the work, including but not limited to:
        - i. Temp. vehicular or pedestrian barrier systems
        - ii. Excavation support
        - iii. Etc.
- b. Notable Special Provisions:
  - i. Item 520.99 – Geopolymer Lining



- ii. Item 521. – Chemical Soils Surface Grouting
  - iii. Item 596.3, 596.31 – Stone Masonry Retaining Wall Reconstruction
    - 1. The intent of Full Height and Partial Height items was discussed
  - iv. Section 614 – Electrical Conduit
    - 1. Concrete Utility Vault
    - 2. Lighting Conduit System
      - a. Explained what the design work includes, and why this is the Contractor’s responsibility
      - b. Per City, 2” conduit will be sufficient for conduit runs. Also, a meter pedestal for service connection will not be necessary because this lighting conduit will tie-in with future conduit to be installed in the east approach. Conduit for the project shall be stubbed and capped at the eastern project limits.
  - v. Section 645 - Erosion Control
    - 1. Adds SWPPP qualification requirements and changes SWPPP monitoring events to per each (vs. per hour)
      - a. See Questions / Discussion section for further information on this work.
  - vi. Item 999 – Reduction of Bridge Closure Duration
  - vii. Item 1002.1 – Repairs or Replacements as Needed
    - 1. The \$60k allowance was explained.
  - viii. Item 1008.4 – Utility Adjustment
    - 1. ONLY used for utility work that is required but not covered by other work items
      - a. Examples:
        - i. Water main adjustment if a conflict were encountered
        - ii. Gas main adjustments ONLY IF the City made the decision to have the Contractor assist with some of the gas main relocation efforts
  - ix. Item 1008.251 – Temporary Pedestrian Accommodations
    - 1. When this item is used was discussed (for pedestrian accommodation during bridge closure period)
    - 2. This item would also be used to pay for additional construction signage that is requested by Owner or Engineer
- c. Water Diversion
- i. Minimum water surface elevations for cofferdam are shown on plans
    - 1. Freeboard above these elevations is T.B.D. by contractor based on risk tolerance
    - 2. Elevation of recent storm / tide events was discussed
  - ii. Other systems MAY be acceptable, but may require the environmental permits to be revised which would be the responsibility of the Contractor.

**11. QUESTIONS / DISCUSSION**

**Question #1:** Regarding access to the parcel in the NE quadrant, will the Contractor be permitted to drive through the private parking area to access the site?

**Response #1:** Yes, access to the site via the private drive / parking area is acceptable as long as all construction vehicles and equipment are parked off the pavement and not impacting or limiting parking for this parcel in any way. The Memorandum of Understanding (MOU) between the City and the owner of this property will be provided via addendum.

**Question #2:** Does the City anticipate other work in the project area during construction, such as by any of the private utility companies (Eversource, Comcast, Unital, etc.)?

**Response #2:** No, the City is not aware of any other work planned within the project limits. However, the City is undertaking several other construction projects this construction season including Bartlett Street Reconstruction which is located on the detour route for this project.

**Question #3:** Can the penalty associated with Item 999 of Bid Alternate 3 (reduction of bridge closure duration from 80 days to 30 days) be increased? The low value of the penalty coupled with the way this item is structured creates uncertainty and risk for bidding this item. Suggest considering structuring this as an incentive instead of dis-incentive item.

**Response #3:** This issue was discussed in detail during the meeting. Minimizing the bridge closure duration is important given the upcoming concurrent Bartlett Street Reconstruction project. The City is evaluating how to best structure this item and will address any changes resulting from this discussion in a forthcoming addendum.

**Question #4:** Is the Contractor responsible for the cost of material testing, or is that paid for by the City?

**Response #4:** Material testing will be paid for by the City, subject to the terms of the contract (including but not limited to the cost of additional testing for failed tests shall be paid for by the Contractor, and the Contractor shall be responsible for proper advance notification to the Owner/Engineer of all required testing).

**Question #5:** Would the City consider modifying how the SWPPP monitoring events are paid for (Item 645.72)? It is difficult for the consultants that provide this service to provide a price for this work when structured as 'per each' because the duration of each SWPPP monitoring event will vary based on many factors.

**Response #5:** The City will consider this feedback and make any changes in a forthcoming addendum.

**Question #6:** Is the City aware of any staging areas nearby that the Contractor could use for this project?

**Response #6:** The City is not aware of any staging areas that are close to the project.

**Question #7:** Will the Contractor be permitted to reduce the roadway to a single lane of alternating traffic prior to the bridge closure?

**Response #7:** Yes, reducing to a single lane of alternating traffic during the permitted daytime construction hours will be permitted both before and after the bridge closure.

**Question #8:** The contract includes Item 618.7 Flagger with a unit of HR. Will it be necessary to utilize uniformed officers at certain times, and if so how would that be paid for?

**Response #8:** Flaggers are anticipated to be sufficient to control traffic for most of the work to be performed outside of the bridge closure period. There may be times, however, when uniformed officer(s) are necessary. Bid Item 618.7 will be restructured via a forthcoming addendum to change this to an allowance item to be used to pay for either flaggers or uniformed officers. The City will have final approval on the use of police in lieu of flaggers if deemed necessary.

**Question #9:** Regarding Note 1 on Sheet 8 of the contract drawings, Bid Items 202.42 and 202.31 are not included in the Bid Form. How will removal of the existing abandoned sewer main be paid for?

**Response #9:** The intent of the contract is for physical removal of the existing abandoned sewer main (sawcutting and removal of pipe) to be incidental to Bid Items 596.3 and 596.31. If voids are encountered in the portion of the existing sewer main to remain (beyond the limits of removal), that work shall be paid for with Bid Item 520.421 Concrete Class F, Flowable Fill, Excavatable. Refer also to applicable notes on the elevation view detail included on Sheet 15 of the contract drawings, and the Special Provisions for Bid Items 596.3 and 596.31. Revised language for Note 1 on Sheet 8 clarifying how this work is to be paid for will be issued via a forthcoming addendum.

**Question #10:** Are the tree removal limits firm, or could they be expanded, particularly in the NE quadrant (within the MOU area)? Removal of the 10" maple called out to be retained would aid in the installation of the membrane of the PortaDam system.

**Response #10:** The limits of tree removal will be reviewed and potentially expanded, pending successful coordination with NHDES through the ongoing wetland permit process. Any changes to the allowable vegetation removal limits will be communicated via a forthcoming addendum.

**Question #11:** Did the design team coordinate with PortaDam about this project during the design phase? Coordination by some of the prospective bidders with certain representatives from PortaDam indicates concerns with the viability of this type of water diversion system for this project, in particular because of the short time window during low tide to install the frames and get the membrane sheeting sealed.

**Response #11:** Yes, the design team did coordinate with PortaDam during the design phase. Feedback indicated that installing this water diversion system would be challenging but was feasible for this project. The City and Hoyle Tanner are still evaluating feedback received from prospective bidders during the Pre-Bid meeting regarding this matter. If there are changes to the water diversion system, or if further guidance on the suggested installation procedure is developed, that information will be released via a forthcoming addendum.

**Question #12:** Will it be necessary to treat the water pumped out of the cofferdams during the initial dewatering operations, before bridge construction activities (e.g. excavation, geopolymer liner installation) begin? NHDES has imposed this requirement on other projects that some of the prospective bidders have been involved with.

**Response #12:** This issue was discussed in detail during the meeting. Feedback from prospective bidders was that treating the entire volume of water to be pumped from the cofferdam could be challenging, depending on the Contractor's approach to sealing and dewatering the cofferdam system. Prospective bidders shall review the entire contract document package carefully, but of particular importance regarding this issue are water diversion notes #3 and #4 located on Sheet 4 (Project Notes) of the contract drawings. It is anticipated that NHDES

will address dewatering requirements in the Wetland Permit, when issued, and the permit will reference or build on these requirements since these contract drawings were included in the wetland permit application package submitted to NHDES. If the NHDES wetland permit is issued prior to the bid opening, stipulations of the permit that are not already addressed in the contract documents will be incorporated into the contract via addendum. If the permit is issued after the bid opening, any requirements that the City determines to be in conflict versus the contract documents will be addressed via a Change Order.

**PRE-BID MEETING ATTENDANCE LIST FOR  
Proposed Repairs to Maplewood Avenue Bridge over North Mill Pond  
City of Portsmouth, NH**

Location: Portsmouth DPW – Training Room  
Date: February 8, 2024

Hoyle, Tanner Project No. 20.905110.00

NAME	COMPANY	TELEPHONE	FAX	E-MAIL
Jim Howaz	Cold River Bn.	603 756-9300	9303	jhowaz@ COLDRIVERBRIDGES.COM
Scott Stevens	RS AUDLEY	603 224-7724		SSSTEVENS@AUDLEYCONSTRUCT .COM
Mike Ferroni	Euroas Corporation	603 527-3945	603 527 3947	mferroni@ metrocast.net