



CLARIFICATION NO. 1
OF THE CONTRACT DOCUMENTS

DATE: APRIL 15, 2024
CN NO: 21-345, SWIG 2022-8379

For the construction of

SIGNAL MOUNTAIN INFRASTRUCTURE IMPROVEMENTS – PHASE 1

**HAMILTON COUNTY
WATER AND WASTEWATER TREATMENT AUTHORITY
CHATTANOOGA, TN**

To All Planholders and/or Prospective Bidders:

The following are issued as clarifications of the Contract Documents for the construction of the Signal Mountain Infrastructure Improvements Phase 1 project dated March 2024. Clarifications do not change the language of the Contract Documents but instead clarify the language therein:

Non-Mandatory Pre-Bid Meeting Attendance:

See attached list of attendees to pre-bid meeting held on March 26, 2024. Questions asked during the pre-bid meeting are addressed in Addenda No. 1 or these Clarifications.

Questions and Related Answers:

- 1) Question: Would you consider Quadex Structure Guard an approved epoxy coating per section 33 01 30.83 part 2.02.D, for this project?

Answer: Quadex Structure Guard Epoxy is an approved epoxy coating.

- 2) Question: The Gravity Sewer Rehabilitation Schedules are included in the drawings, but I am unable to export into excel. I was hoping you could provide the excel files with the rehabilitation schedules.

Answer: There is no plan to provide this.

- 3) Question: There is a mention under ITB 4. Bid Submission – form for Statement of Equipment – there is no form in the spec book for this.

Answer: There is not a formal statement of equipment provided in the specifications for this. Refer to Specification 00700 - General Conditions, Section 7, for general equipment requirements. Contractor can provide a list of equipment to fulfill this requirement.

- 4) Question: Will the Owner please consider the approval of Air Inversion/Steam Cure and enhanced resin as an approved installation method and resin for the CIPP on this project? This CIPP installation method has been in use much longer than UV curing, and has a much more successful track record. Using water inversion/water curing methods are critical in certain instances. However, mandating it's use throughout a project potentially

shifts a good portion of the responsibility for any installation issues, resin slugs in service connections, etc. back onto the Owner since its use was mandated. Furthermore, given the probable grade changes on this project, air inversion/steam cure installations will likely be necessary in order to avoid blowing out the end of CIPP on shots that have significant elevation changes. Resin technology has also come a long way since the 1990s and enhanced resins offer significant benefits over neat resins such as: increased strength and more effective curing; not to mention the highest quality AND most cost effective CIPP end product. The current combination of water curing and neat resin is the absolute worst quality and most expensive combination of curing method and resin in the CIPP industry. It creates the most CIPP installation issues, as well as the most resin migration and slugs in service connections of any method. The neat resin heats up and cures the slower due to the lack of heat transfer particles, which keeps the resin less viscous for the longest time period. This leads to the resin running and moving down the sidewalls of the pipe, as well as following the path of least resistance which is into the service connections. This issue is even further exacerbated when using a water installation method, since the water heats up and cures the resin even slower. Therefore, will the Owner please approve the use of air inversion/steam curing as a CIPP installation method and the use of enhanced resin for this project? Currently the verbiage in the specification essentially mandates the use of water inversion/water cure since the Contractor cannot assume air inversion/steam curing will be approved. In the event quality is the concern and air inversion/steam curing is viewed as more problematic, perhaps increasing the installer's experience requirements and/or requiring ISO Certification for the Contractor's installation activities might be a more effective solution?

Answer: Specification Section 33 01 30.70 Paragraph 3.05.E.c, states that steam curing is only to be utilized if approved by Engineer. Approval process for steam cured CIPP would include submittal of a work plan, subject to the Engineer's approval, that includes mitigation of odors generated by the CIPP installation process and minimizing community impact. Additional funds for implementation of these activities beyond the Contractor's submitted Bid price would be at the expense of the Contractor. If the head condition for water-curing is higher than the manufacturer's recommendation, then steam curing and UV curing will be considered.

- 5) **Question:** A lot of the manholes needing rehab work are located on the golf course or may have to be accessed from the golf course. What does access look like for these manholes and will we be limited as to when we can work on or around the golf course?

Answer: Refer to Specification Section 00800, Supplemental Conditions, Section SC-5.05.G.1. Golf Course work will be scheduled with the Golf Course Superintendent during non-tournament times, and non-wet season times.

- 6) **Question:** Who will be responsible to get access to manholes needing rehab if they are in the woods or otherwise inaccessible? Owner, General Contractor, Sub Contractor?

Answer: The Contractor will be responsible to get access to manholes needing rehabilitation if they are in the woods or otherwise inaccessible.

- 7) **Question:** Review of Sherwin Williams Protective Marine Coatings Submission for Specification Section 33 01 30.83, Subsurface Manhole Rehabilitation.

Answer: This is not an approved product as it does not meet the specification.

- 8) **Question:** In the Subsurface Manhole Rehabilitation Spec, is cementitious underlayment required on all manholes or as needed?

Answer: Cementitious materials are not required except to build up invert elevations or repair cracks, voids, holes etc. Refer to specification Manhole Subsurface 33 01 30.83 Paragraph 2.01.B and 3.01.G.

- 9) **Question:** In reference to the Subsurface Manhole Rehabilitation Spec, are the inverts to be lined with the coating system?

Answer: Yes, all inverts are to be coated. Refer to Specification Section 33 01 30.83, Section 3.01.L.

- 10) **Question:** When is the anticipated Notice of Award and Notice to Proceed?

Answer: Anticipated Notice of Award will be posted after the May Board meeting on May 22, 2024. The Anticipated Notice to Proceed will be either 60 days (June 16th) from the April 17th bid opening date or 30 days from the Effective date of the Executed Agreement whichever is earlier.

- 11) **Question:** Please confirm this project is tax exempt.

Answer: Refer to Section 00800 Supplemental Conditions, Section SC-7.10.

- 12) **Question:** Are there any videos and/or CCTV logs available and if so, will you please provide a link or copies?

Answer: The Owner does not plan to share any of the CCTV logs or videos.

- 13) **Question:** Could you please explain the difference in the bid items 10g (CIPP lining service laterals) and 10h (lateral seal connection liner)? Is the difference the length of the rehabilitation product up to the lateral?

Answer: The connection liner is the general term used for lateral joint sealing between the main line and the lateral service connection. CIPP lining service laterals, the main line, and the lateral seal connection liners are three separate pieces or can be built into the lateral liner.

- 14) **Question:** Payment Procedures Section 01 29 00, paragraph 1.09.C states cleaning of the laterals is incidental to these mainline cleaning bid items. Will cleaning of all the laterals remain a requirement? This is typically different equipment and contractors/crews. If so, how far up the lateral do they need to be cleaned and inspected? Please advise.

Answer: Refer to Section 33 01 30.76, Cured-in-Place Lateral Liner, Paragraph 3.03.A.3. As stated in the General Notes in the Drawing set, for segments designated for CIPP lining, the Contractor shall line all the active service laterals to the edge of the property line/right-of-way or edge of easement.

- 15) **Question:** Currently, the spec reads for the post CCTV to occur after all work has been completed on that segment including manhole rehab. Could this be revised to be performed after both mainline and lateral rehab on a particular segment with the manhole rehab inspected visually with the inspector? This would save a trip into the same areas and an unnecessary extra cost to the Owner. Please advise.

Answer: No modification to post-CCTV requirements will be made.

- 16) **Question:** Refer to Section 33 01 30.70, Paragraph 1.06.C mentions a “Warranty” Inspection conducted in the 11th month following final acceptance. Will this remain a requirement? If so, what are the expectations? Post-CCTV inspection of all CIPP lined mains or will there be further testing, launching, manhole rehab inspections, etc. required?

Answer: Yes, this will remain a requirement. The Owner will conduct the post-CCTV inspection during the 11th month following final acceptance.

- 17) **Question:** Refer to Section 33 01 30.70, Paragraph 2.01.C.15 lists CIPP tube manufacturers. Please also accept Pipenology LLC as an approved CIPP manufacturer (see attached Pipenology submittal).

Answer: Pipenology meets the requirements of the specification. Approved.

- 18) **Question:** Please confirm UV curing is allowed. If UV curing is allowed, could you please specify the minimum thicknesses for UV cured CIPP liner or at least design parameters? Will the minimum thicknesses be updated/revised on the bid form to account for the UV cured CIPP liner? Please provide a UV specification.

Answer: UV curing is allowed. The UV Specification is provided in Specification Section 33 01 30.70 Paragraph 3.05.E.b. Minimum thicknesses will not be updated. Refer to ASTM F1216 for required minimum thicknesses.

- 19) **Question:** Specification Section 33 01 30.70, Paragraph 3.08.A.5 mentions “Do not reactivate reconnected services until accepted by Engineer. This process shall be completed prior to the work described in Paragraph, Liner Cutting, below and before installation of lateral liner.” This could be interpreted to not reinstate the laterals until the lateral lining contractor performs their work at a later date which obviously isn’t recommended. What is the intent of this statement and when will it be “accepted by Engineer” to reinstate the laterals?

Answer: Do not reactivate abandoned services until accepted by Engineer. All active services shall be reinstated.

20) Question: Specification Section, 33 01 30.70, Paragraph 3.10.C (Gravity Pipe Leakage Testing) mentions a pneumatic test for 18” and smaller diameters. If water inversion and curing is utilized on this project, will the water tightness be allowed to be gauged under positive head during the curing process in lieu of a complete, separate pneumatic or hydrostatic leakage test?

Answer: See Addenda No. 1.

21) Question: Paragraph 3.10.D (Properties Testing) mentions testing requirements but not frequency. What is the required frequency for sampling and testing? Please confirm all CIPP testing will be paid under Allowance bid item 15c (Cured-in-Place Pipe Testing, Laboratory Services).

Answer: Frequency of testing shall be determined by the Owner/Engineer during construction. CIPP testing shall be covered by the Allowance in Bid Item 15c.

22) Question: For post-televising the lateral liners, would push camera from a cleanout and a mainline video showing the wraps be acceptable for final acceptance? Or is a lateral launch required?

Answer: Engineer/Owner prefers the use of a lateral launch.

23) Question: Is a hydro-excavated VAC-A-TEE style acceptable for cleanouts?

Answer: Contractor to submit product for review and/or approval from the Owner.

24) Question: Is the desired length of the lateral liner to the cleanout or are they expected to just be 2’ per the spec? If there is no cleanout and the goal is to line further than 2’, how far are we expected to line?

Answer: Yes, Contractor will line laterals to the edge of the Right-of-way. If there is no clean out at the right-of-way, one needs to be installed.

25) Question: What is the farthest that the lateral liner that would be expected to be lined?

Answer: To the boundary of the easement.

26) Question: Would you be willing to put a maximum footage (ie. 30 ft.) for item 10g as a fixed price and then a LF item for a price thereafter?

Answer: See Addenda No. 1.

27) Question: During our project takeoff, we arrived at CIPP totals differing from those in the Bid Form. We have included below a table showing our totals, the bid form totals and the variance. Therefore, will the Owner please confirm the CIPP bid quantities for the project?

Answer: The CIPP quantities that are shown in the Bid form are correct. They include quantities for the Engineer’s Directive for CIPP lining.

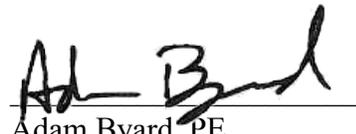
28) Question: Will the Owner please confirm their intent for Bid Items 6c and 6d? There are two referenced thickness for the 15-inch diameter CIPP, yet only one segment of 15-inch pipe totaling 121 feet in length is identified in the plans. This pipe segment is buried between 3.5 feet and 4.6 feet in depth. Based on an ASTM F1216 design and the table in Section 1.02 A for Pipe Liner Thickness, a finished 7.5mm thick CIPP installation would be adequate to rehabilitate the pipe. Therefore, will the Owner please clarify their intent for including a portion of the segment at an increased sidewall thickness?

Answer: See Addenda No. 1.

29) Question: Some of the segments listed in the Plan Sheets indicate depths at or less than one foot in depth. Will the Owner please confirm these depth measurements are accurate?

Answer: This information came from WWTa GIS information and record drawings. The Contractor is to verify in the field prior to Construction activities beginning. Use this information for informational purposes only.

JACOBS

A handwritten signature in black ink, appearing to read "Adam Byard", is written over a horizontal line.

Adam Byard, PE
Engineer of Record

END OF CLARIFICATION



PRE-BID MEETING AGENDA

Signal Mountain Infrastructure Improvements - Phase 1
Contract Number: 21-345, SWIG Grant Number: 2022-8379
March 26, 2024 at 1:00 pm EST
Nonmandatory Virtual Pre-Bid Meeting

1. Introductions
 - a. Mike Patrick, HCWWTA Executive Director
 - b. Eric Brooks, HCWWTA Chief Engineer
 - c. Neeley Langham, Project Manager, Jacobs

2. Project Scope/Description
 - a. The contract entails the rehabilitation of portions of the Signal Mountain sewer collection system. Phase 1 will involve trenchless cured-in-place pipe rehabilitation for gravity sewer with diameters between 6-inch and 15-inch with an approximate total linear footage of 33,300. Approximately 209 laterals will also be rehabilitated using trenchless pipe methods. Approximately 110 manholes will be rehabilitated using either polyurethane/polyurea or epoxy coating methods. Approximately 51 manholes will receive a new watertight frame and cover and approximately 47 manholes will receive a new standard frame and cover. In addition, approximately 11 external point repairs, 3 spot repairs of CIPP liner and 10 lateral seal connection liner installations may be required. Further, approximately 8,900 LF of gravity sewer will be CCTV'd to be evaluated by the Engineer to issue a design directive.

Pre-Bid Conference Agenda

3. Bid Documents
 - a. Refer to Section 00100 Instructions to Bidders for more information about the bidding process.
 - b. Copies of BIDDING DOCUMENTS are available for download. For digital downloads, please contact Neeley Langham at neeley.langham@jacobs.com.
 - c. A Bid bond or certified check for five percent (5%) of the total bid amount must accompany each bid.
 - d. No Bid withdrawn within 120 calendar days of receipt of Bids.

4. Qualifications
 - a. Refer to Section 00100 Instructions to Bidders, and Section 00420 Statement of Qualifications
 - i. Bidder shall maintain permanent place of business
 - ii. Must be licensed by State of Tennessee to perform work under contract

- iii. Bidder shall demonstrate adequate construction experience and sufficient equipment resources to properly perform work.
- iv. Owner reserves the right to reject any bid if bidder fails to satisfy qualifications.

5. Bidding Requirements

- a. Bid Bond in the amount of 5% of Bid with Surety licensed to do business in TN.
- b. No Bid withdrawn within 120 calendar days of receipt of Bids.
- c. Each bid must contain a fully completed Bid Bond, Authorization to Bind, Statement of Qualifications, Statement of Equipment, Subcontractor Bid List, Iran Divestment Act Compliance Certification, Drug-Free Workplace Affidavit, DBE Good Faith Effort Affidavit, Statement of Compliance Certificate Illegal Immigrants, BYRD Anti-Lobbying Amendment Clarification, Non-Boycott of Israel Certification, MWBE Certification and Debarment Certification. The forms of which are bound in the Contract Documents.
- d. A detailed listing of all subcontractors shall be provided by the Bidder. In accordance with the Contract Documents, documentation that the prospective General Contractor and its subcontractors meet minimum qualifications shall be provided and submitted. Subcontractors must also not appear on Sam.gov disbarment list. Mark-ups on subcontractor work or Cost Plus Overhead will be disallowed for reimbursement.

6. Bidder Questions and Addenda

- a. Every request for interpretation of the meaning of the bid documents shall be in writing addressed to Jacobs at neeley.langham@jacobs.com
- b. Any questions concerning the bid documents must be received by **Tuesday, April 9, 2024**.
- c. Responses to questions and any supplemental instructions or changes to the bid documents will be in the form of written addenda to the bid documents.
- d. No addenda within less than 48 hours of the bid opening date, excluding weekends and legal holidays will be issued. All addenda issued shall become part of the contract documents.

7. Bid Opening

- a. Date/Time – **Wednesday April 17, 2024 at 1:00 PM EST**
- b. Location – Room 3B at 1250 Market Street, Suite 3050, Chattanooga, TN 37402

8. Contract Completion Time

- a. Substantial Completion within 605 **Calendar** Days of Notice To Proceed
- b. Final Completion within 635 **Calendar** days of Notice To Proceed

9. Liquidated Damages

- a. \$1,000 for each day after Substantial Completion if work is deemed to not be substantially complete, **and** \$500 for each day after Final Completion if Contractor has not completed the work.

10. Project Specific Requirements

- a. This project is being supported with Treasury, Coronavirus State and Local Recovery Fund grant funding. Therefore, certain restrictions and other federal requirements are attached to this opportunity.

- b. Contractor shall be responsible for all traffic control permits and any applicable work zone permit requirements per WWTa or surrounding authorities.
- c. Contractor is to utilize water curing (OR UV as alternate) for CIPP liner; Steam Curing will not be allowed unless otherwise specified by the Owner.
- d. Contractor is responsible to control styrene odors in accordance with NIOSH and NOSH regulations during CIPP installation. See Specification 33 01 30.70 for specific odor control and air quality control measures.
- e. Contractor shall save frames and covers and relocate them to an agreed upon location by the Owner.
- f. Contractor is responsible for locating all manholes and sewer lines.
- g. If utility relocations are required to perform the work it shall be the Contractor's responsibility to contact the utility owner and coordinate the temporary or permanent relocation.
- h. For segments designate for CIPP lining, the Contractor shall line all active service laterals to the edge of the property line/right of way or edge of easement and same for manholes being lined with active service lateral connections.
- i. Review all general notes in the Drawings for other important project specific details.

11. Site Access

- a. All work to be completed shall be on the Hamilton County Water and Wastewater Treatment property or easements.
- b. Contractor shall stay within 15' prescriptive sewer easement or obtain temporary construction easement.
- c. If needed, the Contractor is responsible for acquiring all required right of entry and temporary construction easements on private properties in order to access existing sewers and preform the required work.
- d. The Contractor shall be responsible for meeting all state, local, and TDOT requirements for all traffic control activities. No additional payment will be made for these activities. Costs associated with traffic control shall be considered incidental to other bid items.
- e. The Signal Mountain Water Utility is point of contact for access to hydrants for potable water.
- f. Contractor must coordinate with the Golf Course superintendent prior to performing work on the Golf Course.
- g. Streams have been delineated within a 100-FT on center buffer to the existing sanitary sewer pipe if labeled "STREAM X" or "WETLAND X". The USGS hydrography dataset (NHD) lines are provided to show the entirety of known watersheds but is less accurate than the delineated data. Contractor shall verify all surface water on site and use appropriate BMPs.

12. Safety

- a. Refer to Section 00700 General Conditions, Paragraph 7.13
 - i. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.

13. Work Hours

- a. Refer to Section 00700 General Conditions, Paragraph 7.03
 - i. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

14. DAVIS-BACON Act

- a. If applicable, bidders must agree to comply with Prevailing Wage Rate provisions per the Tennessee Department of Labor in addition to the Federal Davis-Bacon Act, whichever is higher. Refer to the Implementation guidelines here for more information: https://www.tn.gov/content/dam/tn/environment/arp/documents/arp_implementation-guide.pdf
- b. If questions contact, Southeast Tennessee Development District 423-266-5781 or sedev.org

15. Allowances

- a. The Contractor shall include in the Bid Total all allowances stated in the Contract Documents. These allowances shall cover the net cost of the services provided.

16. Other Items

- a. The items discussed here today are not intended to be all-inclusive. It is the Contractor's responsibility to review the Contract Documents and comply with all provisions.
- b. If you are interested in visiting Signal Mountain project area, please contact Eric Brooks at wwtaeng@hamiltontn.gov prior to your visit.

17. Questions

- 1) Specific epoxy liner in the manhole specs that we are requiring?

