



Town of Ridgeland

June 7, 2023

**PROJECT: Town of Ridgeland Water and Sewer Resiliency Improvements
TOR-2023-02**

ADDENDUM: Two (2)

DUE DATE: June 20, 2023 at 2:00 PM

THIS ADDENDUM IS FOR THE PURPOSE OF MAKING THE FOLLOWING CHANGES OR CLARIFICATIONS:

- 1. Project Specifications have been updated as noted below and are reissued with Addendum 2 in their entirety as a separate document.**
 - a. 00010 Notice to Bidders
 - i. Page 1, 1st Paragraph: Bid date updated to June 20, 2023
 - ii. Page 2 Description of Work
 1. Part I – Pump Station Improvements – Pump Station 3 – updated description of work
 2. Part I – Pump Station Improvements – Pump Station 5 – updated description of work
 3. Part I – Pump Station Improvements – Pump Station 6 – updated description of work
 4. Part I – Pump Station Improvements – Pump Station 8 – updated description of work
 5. Part I – Pump Station Improvements – Pump Station 9 updated description of work
 6. Part I – Pump Station Improvements – Pump Station 12 – updated description of work
 - iii. Page 4 Bid Document Questions: last day for questions updated to June 15, 2023.
 - b. 00100 Instructions to Bidders
 - i. 1. Defined Terms: added EJCDC to C-700

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- ii. 13.2 Updated to clarify information to be included with bid submittal.
 - iii. 18. Contract Security – updated to reconcile with project specification
- c. 00300 Bid Proposal Form
 - i. Schedule for Bids starting on page 4 have been updated to include the Measurement & Payment (M&P) reference to Section 01025 to the schedule.
 - ii. Quantities have been updated and additional items for fittings, A-3 fill, and stone bedding have been added to the Schedule for Bids for Part II Gravity Sewer Rehabilitation
 - iii. Notes on Bid Form Item 4, page 12, has been updated for the list of additional documents to be submitted with the bid.
- d. 00502 Wage Determination – General Decision Number SC220001 01/07/2022 has been updated in its entirety to reflect the latest General Decision SC20230001 01/06/2023
- e. 00503 Wage Determination – Service Contract Act Wage Determination No. 2015-5737 Rev 18 has been removed from the project specifications.
- f. 01025 Measurement and Payment - added
- g. 01100 Summary of Work
 - i. Page 1 Description of Work
 - 1. Part I – Pump Station Improvements – Pump Station 3 – updated description of work
 - 2. Part I – Pump Station Improvements – Pump Station 5 – updated description of work
 - 3. Part I – Pump Station Improvements – Pump Station 6 – updated description of work
 - ii. Page 2 Description of Work
 - 1. Part I – Pump Station Improvements – Pump Station 8 – updated description of work
 - 2. Part I – Pump Station Improvements – Pump Station 9 updated description of work
 - 3. Part I – Pump Station Improvements – Pump Station 12 – updated description of work
- h. 01300 Regulatory Requirements
 - i. 1.04 B. updated to note permits being acquired by Town and requirements of contractor.
- i. 01370 Schedule of Values - added
- j. 01381 Construction Video-Audio Recording - added
- k. 01730 Operating and Maintenance Data - added
- l. 01781 Project Record Documents
 - i. 1.03 H modified to include additional requirements 1 through 10
 - ii. 1.04 A Record Drawings modified to include requirements 1 and 2 for record drawings format
 - iii. 1.04 B Record Drawings modified to remove color coding and clarify requirements of item 4
 - iv. 1.04 D Record Drawings – added to require registered surveyor to provide data gathering
- m. 02640 Sewer System Construction
 - i. 1.1 B added wetwells and forcemain

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- ii. 1.4 References – added items X through FF.
- iii. 1.5 B.3. Payment of Manholes – modified to note installation or removal and replacement
- iv. 1.5 B. 5 Payment of Sand Bedding and Backfill – added reference to A-3 soil
- v. 1.5. B.6 – Payment of Service Connection Restoration – modified to note separate payment will be made for service connection restoration to new gravity sewer main.
- vi. 1.5.B 7 – Payment of Metal Detector Tape – added
- vii. 1.5.B 8 – Payment of Tracer Wire – added
- viii. 1.5.B.9 – Payment of Fittings – added
- ix. 1.5.B.10 – Payment of Forcemains – added
- x. 1.5.B.11 – Payment of Plug & Gate Valves – added
- xi. 1.5.B.12 – Payment of Insert Valves – added
- xii. 1.5.B.15 – Payment of Grassing clarified to note no separate pay item
- xiii. 2.3 Wetwells added to title
- xiv. 2.3 B and C – wetwell added after manholes
- xv. 2.3 D 2 – requirements added for wetwell frames and hatches
- xvi. 2.3 F – adds requirement for wetwell to have coating
- xvii. 2.6 A through E Forcemain – added
- xviii. 2.7 A. Metal Detector Tape – added
- xix. 2.8 A through B Tracer Wire – added
- xx. 2.9 A through C Gate Valves – added
- xxi. 2.10 A Plug Valves – added
- xxii. 2.11 A through C Insert Valves – added
- xxiii. 3.5 H – wetwell added after manholes
- xxiv. 3.9 – wetwell added after manhole
- xxv. 3.9 D.4 – wetwell added after manhole
- xxvi. 3.9 E.5 Wetwell Testing – added
- xxvii. 3.13 C. Forcemain pressure testing requirements – added
- xxviii. 3.21 requirement for bypassing operations to be in accordance with Section 02961 added
- n. 02660 Water Distribution System
 - i. 3.3 E Updated for SCDHEC 61-58 requirements for separation of water mains and sewers; added items (a) – (f); removed items 1. a. – d, 2. a. – c, 3 a. – c.
- o. 02662 Water Treatment Chemical System – added
- p. 02955 Sewer Cleaning and CCTV
 - i. 1.5 C – Measurement and Payment of Sewer Line Root Removal – clarification of tap root.
 - ii. 1.7 A. – Sequencing and Scheduling – clarified Pre-Construction CCTV work (if required).
- q. 02961 Temporary Sewer Bypassing Operations - added
- r. 02970 Sanitary Sewer CIPP
 - i. 1.5 B. Measurement and Payment Traffic Control – modified to clarify no separate bid item for traffic control.
- s. 02975 Sanitary Sewer Pipe Bursting

- i. 1.6 C. Measurement and Payment Traffic Control – modified to clarify no separate bid item for traffic control.
 - t. 05500 Miscellaneous Metals
 - i. 1.2 C Reference South Carolina Building Code
 - ii. 1.2 E Reference South Carolina Building Code
 - iii. 1.3 G Reference South Carolina Building Code
 - u. 09900 Protective Coatings - added
 - v. 11305 Submersible Sewage Pumps
 - i. 2.1 B – Piping Materials reconciled with drawings
 - ii. 2.2 A 6.d. mechanical seal material updated to silicone carbide
 - iii. 2.2 A 6.e. Guide rail bracket options modified to include bolt on universal non-proprietary bracket
 - iv. 2.2 A 6.f Number of guide rails modified to allow single guide rail.
 - v. 2.2 A 7. Pump motor insulation modified to Class H
 - vi. 2.2 A 10 – Level Control naming clarified
 - vii. 2.3 B – Protective Grating Panel manufacturer updated
 - viii. 2.3 C – Flow Meter requirements - added
 - ix. Table 11305-A updated and Tables 11305-B through 11305-E added for pump information
 - w. 16000 Electrical General – added
 - x. 16210 Engine Driven Emergency Power Supply System – added
 - y. Appendix B – SCDOT Encroachment Permit for Part II Sewer Rehabilitation - added

2. The following Project Contract Drawings have been updated and are reissued with Addendum 2 as an attachment. Modified drawings have been added with bubble and numbering. Primary modifications include but are not limited to:

- a. Part III: Well Site 2 Improvements
 - i. E10.1 and E10.2: Electrical improvements updates to address chemical treatment system modifications.

3. Responses to Questions

A. Question: The take-off quantities for CIPP on the plans versus the bid tab do not match. Specifically there appears to be 312LF of 8" less, and 282LF more of 10", identified on the Bid Tab amounts than is shown on the plans. Can the engineer please confirm the correct amounts of 8" and 10" CIPP lining to be performed on the project?

Response: Quantities have been reviewed and updated bid form is included in Section 00300.

B. Question: Can the Owner/Engineer please identify/provide a location for the disposal of sand/debris from the pipe cleaning operations?

Response: As long as the material to be disposed of is sand/rock, it can be dumped behind the Town's elevated storage tank behind the high school ballfield. Any other

debris or material to be disposed of will need to go to the Waste Management construction waste site.

- C. Question: I see in the Summary of Work and on the drawings that the wetwells are receiving a protective lining, and I was wondering if the type of coating for this was the cementitious lining indicated in Section 02960 for the manholes on the project or if you were looking to utilize a different type of coating for the wetwells?

Response: The coating for the wetwells shall be the same as for the manholes. The specification section 02640 Sewer System Construction has been updated to reflect this.

- D. Question: Would you consider FerraTex an approved manufacturer for Cured-In-Place-Pipe (CIPP) per section 02970 part 2.1 for this project?

CIPP Liner: FerraTex has manufactured and shipped over 2 Million LF of liner both dry and resin-impregnated (wet-out) and have been surpassing expectations for 30 years. Our support team has worked in the field, thus possessing a true understanding of the challenges that contractors and installation professionals face. We know how to make your job easier and will do everything in our power to ensure your project is completed smoothly and efficiently. FerraTex achieved ISO 9001:2015 certification in 2017 and in 2019 was acquired by Applied Felts Inc. Our liners can be manufactured to any dimension specified and fabricated to virtually any size and thickness while meeting ASTM F1216 and ASTM F1743-17 standards.

Response: Yes, FerraTex is acceptable as an approved manufacturer for Cured-in-Place-Pipe per section 02970 part 2.1 for this project.

- E. Question: Would you consider Quadex AluminaLiner an acceptable Manhole Protective Coating (cementitious Mortar Lining) per section 02960 part 2.1, C for this project?

AluminaLiner is a factory blended, one component, fiber reinforced, 100% calcium aluminate cement designed to provide excellent corrosion resistance against typical hydrogen sulfide gas (microbiologically induced) corrosion, add structural integrity and stop groundwater infiltration in sewer structures with a pH of 2 or greater. This unique formulation allows for a monolithic one-pass application up to three inches in thickness by low pressure spraying or centrifugally spinning.

Response: Yes, AluminaLiner is acceptable as an approved Manhole Protective Coating (cementitious Mortar Lining) per section 02960 part 2.1, C for this project. It is noted that a 10-year warranty must be provided as required in the noted specification section.

- F. Question: Would you consider GeoKrete Geopolymer an alternative coating system and acceptable product for Manhole Protective Coating per section 02960 part 2.1 for this project?

Geopolymer Liner: GeoKrete is an advanced geopolymer mortar (essentially a synthetic stone) that has exceptional corrosion and abrasion resistance properties and can be used in the structural replacement/rehabilitation of manholes, structures, pipes, culverts, tunnels, and other common storm, sewer, and raw water infrastructure. This product is a fully structural and highly corrosion-resistant liner that creates an impervious barrier completely sealing out infiltration while also bonding/forming a shear interface with the host structure. GeoKrete is a one-step solution that is cost-effective and less labor-intensive when compared to composite or multi-layered systems. To further show GeoKrete's superior corrosion resistance, please refer to the submittal packet attached on page 62 (Table 2) ASTM C 267 – 12 weeks without loss when submerged in a sulfuric acid solution with a pH of 1.0. This is significantly more extreme than one would expect to encounter in a sewer system, so in practice represents a very accelerated long-term performance test.

Response: Yes, GeoKrete Geopolymer is acceptable as an approved alternative coating system for Manhole Protective Coating per section 02960 part 2.1 for this project. It is noted that a 10-year warranty must be provided as required in the noted specification section.

- G. Question: We would appreciate it if you add WinCC RT Professional, Siemens S71200 series PLCs and Cradlepoint in the specification to allow for fair opportunity in bidding the project.

Response: All new equipment for the SCADA system must conform to the specification section 16000 which provides the Town of Ridgeland's new standards. For standardization purposes, the equipment noted in the question will not be added to the specification.

4. Acknowledgement:

The Bidder shall include acknowledgement of the Addendum Two (2) in bid by including this form and also acknowledge Addendum Two (2) in Section 00300 Bid Proposal Form.

Signature: _____

Date: _____