

Addendum III to Request for Bid for Richland Creek Trunk Sewer Upgrades Contractor Project

Posting Date: January 8, 2016

In published Request for Bid (RFB), please note the following updates:

Bid opening date has been extended to January 20, 2016 at 2:00pm

1. Q: Please confirm rock encountered in jack & bore operation is unclassified.
A: Yes, rock encountered in jack and bore operations is unclassified.
2. Q: What is Engineer's valuation of the project?
A: The Engineer's opinion of probable construction cost is \$8.5M
3. Q: Can flow data of existing sewer be provided for bypass pumping requirement determination?
A: Flow data is provided in Section 02145, Paragraph 3.01.A.
4. Q: Are there project specific DBE/WBE percentage goals for the bid and if so, what are they?
A: Please conform to any SRF stipulations in regards to this subject. There are no ReWa specific goals established.
5. Q: Please confirm tree and fence replacement is required on permanent sewer easement behind Richland Creek Animal Clinic at E. Stone Ave and Hilly St.
A: Fence replacement is required within the permanent easement. Tree and fence replacement within temporary easements (reference 02010).
6. Q: Is there a Stream Buffer for this project and if so what is its distance from the center of Richland Creek? The top of Stream Bank is indicated on the plans.
A: A specific stream buffer has not been specified. Utilize the limits of construction shown on the plan sheets.
7. Q: On Drawing # 00-C-003, Detail 16 indicates that the Bd Max, In. is B + 24, B + 36 and B + 42.

What does B represent?

A: B represents the nominal pipe diameter.

8. Q: Will Boulder Removal be accounted for in Rock Excavation Pay Item?

A: See Section 02211, Paragraph 1.04 for the definition of rock. Boulders that cannot be excavated with normal earth excavation equipment without reduction via mechanical or blasting methods will be accounted for in Rock Excavation.

9. Q: Please confirm there are no sod requirements for landscaping replacement, only topsoiling and seeding per Specification 02933.

A: Correct.

10. Q: Will Raeford Farms limit flow each day from 3 pm to 10 pm Sunday through Friday and also the majority of the weekend from 11 pm Friday thru 4 pm Sunday as described in Specification 01014? It appears there are redundant low flow times listed for Sundays and low flow all day Saturday per the second timeframe but not the first timeframe, please clarify.

A: According to the wastewater manager at the facility, Monday 4pm to 10pm is less flow and Friday 9pm to Sunday 9pm there is almost no flow. Please utilize this assumption, but understand that the situation may change between now and the time that work is performed.

11. Q: Are precast inverts and/or transition bases allowed for precast manholes?

A: Yes. Please include configuration in submittals.

12. Q: Can flowable fill and masonry pipe plug/bulkhead pay items be added to the bid form?

A: Yes. A revised bid form and measurement and payment paragraph will be provided via Addendum.

13. Q: What access will be provided at Greenville Zoo STA 0+00?

A: Access this area from the parking lot off Cleveland Park Drive. There is an asphalt driveway from the parking lot to the volleyball court, which will need to be repaired if damaged.

14. Q: Is the only ingress/egress easement available for construction between STA 2+00 and STA 14+60 the existing sewer easement near STA 11+45 since the 714 Pettigru St. ingress/egress shown near STA 14+00 is not available for construction entrance?

A: Correct. It is intended that access will be from the existing easement near Station 14+00; however, the Contractor may propose an alternate method.

15. Q: Bid Items No. 2, 9, 10, 11, 21, etc. show zero quantity on the bid form. In order to calculate the extended total price for each bid item, will a quantity be provided for these zero quantity bid items?

A: See revised Bid Tabulation Form issued via Addendum.

16. Q: Will values for cash allowance items on the bid form be provided for inclusion in our total bid price?

A: See revised bid tabulation.

17. Q: Is access to the 12' wide ingress/egress gravel drive only available through the apartment complex parking lot near STA 73+00? If so, are there any resurfacing requirements of the asphalt parking lot?

A: That is the only access point currently available. However, the contractor may coordinate with property owners for other arrangements. There are no resurfacing requirements specified, however the contractor will be required to repair damaged asphalt.

18. Q: What are the liquidated damage amounts for Substantial and Final Completion?

A: See Article 3.4.1 of the Agreement (Section 00620).

19. Q: Item 84 of the bid tabulation list a 48" x 96" vault. The plans C-010 shows the vault as a 60" x 96" in profile view and 5'8" x 8'8" outside dimensions in plain view. Can you clarify the correct size? Also, the vault is called out to be Polymer on plan sheet C-010 however the specifications (section 03481) address this as a standard concrete vault with an epoxy coating. Can you clarify this? If this vault is a polymer vault then section 03481 would not apply.

A: The vault shall have interior dimensions of 60" x 96" and shall be of polymer concrete material.

20. Q: Items 86, 88 and 90 discuss the riser sections of the larger diameter manholes. However the plans show that the additional VF can be 48" diameter. Will the payment for risers on 96" manholes be paid from item 86 even though they will be 48" diameter?

A: Riser sections will be paid for the manhole to which they apply. For example, if the plans call for a 96" diameter manhole, then the riser section will be paid for from Item 86, understanding that the actual riser dimension may be 48".

21. Q: Plan sheet C-001, the drawing of the standard manhole shows a base thickness "F". For all of the manhole sizes except 96" the base thickness exceeds the standard base thickness (ASTM 478) by 2". Is the extra base thickness required? This differs from specification 02530 2.06-3.

A: Base thickness will be per ASTM C478.

22. Q: This same detail shows an extended base and note # 16 says per manufactures recommendation. Is extended base required and if so what is the criteria for determining if the structure will float? What is the required factor of safety for this determination?

A: Extended bases will be provided where recommended by the manufacturer, depending on the manhole configuration and potential for floatation. Utilize the soils information provided in the geotechnical report. Where groundwater was observed during geotechnical investigation, they were annotated on the bore logs. The required factor of safety is 2.

23. Q: For Specification 2530 2.03, will ReWa accept A-Lok gaskets in lieu of flexible pipe boots?

A: Provide flexible pipe boots as specified.

24. Q: Are T-base manholes allowed on this project? If so, can 48" diameter risers be used on top of 30" T-bases as that is the standard riser size for such bases.
- A: Yes, T-Base manholes are allowed, and 48" diameter risers may be used on 30" T-bases.
25. Q: Are the qualification forms in section 00320 required with the bid?
- A: The qualifications section will be requested from the apparent low bidder within 2 days of bid opening.
26. Q: Based on the measurement and payment for Jack & Bore, rock boring is not included. If a rock Jack & Bore is required, how will that be paid for?
- A: A unit price for rock jack and bore will be added to the bid form.
27. Q: Can you provide a copy of the Geotechnical report from Terracon?
- A: The geotechnical report and soil boring logs have been uploaded to the ReWa webpage. The report is for reference only. The Contractor may elect to conduct additional investigations prior to bid. www.rewaonline.org
28. Q: Can you provide a copy of the SCDOT permit?
- A: The SCDOT Permit has been added to the ReWa webpage.
29. Q: The specifications call for grout filling the annular space around the slip lined pipe. Do you anticipate casing spacers or blocking to be used to prevent floating?
- A: Where the Drawings indicate to slipline an existing pipe with a smaller HDPE pipe, the Contractor shall provide spacers or other such method to prevent carrier pipe from floating. Annular space shall be filled with flowable fill concrete and pipe connections into the manholes grouted.
30. Q: Please confirm that the Blast Monitoring Allowance is for the owner to use, and that the contractor needs to include blast monitoring in our pricing.
- A: Yes, reference 01025.1.36.D.
31. Q: What do bid items 96-101 entail? It looks like manhole drops, but the sizing and compared to the details do not match. The details call for same size pipe for the drop as the incoming pipe, and there isn't any 15" pipe on this job. Please clarify.
- A: See revised bid tabulation. Reference 01025.1.25
32. Q: Is Bid Item 80, 12" DIP Cement-lined or Epoxy-Lined?
- A: Cement lined. Will be clarified by Addendum.
33. Q: Are we to provide a 60" x 96" polymer concrete vault as detailed on Sheet 000-C-010 or a 48" x

96" polymer concrete vault as indicated on the revised Bid Tabulation Form?

A: A 60"x 96" polymer concrete vault. See Question 1 for clarification on dimensions.

34. Q: What type of corrosion resistant grout and epoxy is required for the precast vortex manhole?

A: Utilize the material specified in Section 02603 Paragraph 2.03 for corrosion resistant grout. Utilize a product equal to BASF Master Emaco ADH 327RS for epoxy.

35. Q: Can polymer concrete vault and manhole specification be provided?

A: Guidance will be provided via addendum.

36. Q: Specification 02530, 3.09, D. 1 indicates that we are to provide the same type of material for the drops as the upstream sewer. Can the existing upstream sewer pipe materials be provided beyond the size noted on the drawings?

A: The majority of the upstream line material is unknown. For estimating purposes, assume PVC. However, there are several instances where upstream DIP lines are called out, and those drops will be DIP. Also assume that the upstream pipe at MH400A-598 is DIP.

37. Q: Is mandrel joint deflection testing required for DIP sewer or just PVC and FRP?

A: PVC and FRP.

38. Q: Drawing 000-C-001 Detail 1 chart indicates MH-400A-602 will have 84" diameter since the pipe angle is 0-60 degrees. Drawing 000-C-010 Blowup View 1 indicates MH-400A-602 is 96" diameter. Please advise which diameter is required for MH-400A-602 and whether we use the chart found on Drawing 000-C-001 for all other manholes since the diameters aren't called out on the plans or profiles.

A: Use the table on Drawing 000-C-001 for all manholes except MH-400A-602. Will confirm by Addendum.

39. Q: Are we to include the 96" diameter precast polymer manhole B-2 costs with the 96" diameter precast concrete manhole bid items or can it be separated into another bid item?

A: Manhole B-2 will be separated into another bid item.

40. Q: The Qualification Form Questions 9, 10, 11, and 12 asks for wastewater treatment plant experience. Please clarify that this form is only to be completed post-bid at the request of ReWa and that the treatment plant requirements don't pertain to this gravity sewer pipeline bid.

A: Correct. ReWa will request this post-bid and the treatment plant experience is not applicable.

41. Q: Please confirm that the only DHEC form required to be submitted with the bid is the Debarment form from the contractor and selected subcontractors.

A: Correct. The additional information will be obtained from the apparent low bidder within 2 days of bid opening.

42. Q: Drawing 100-C-004, please clarify if we are removing the exposed piping per Note 2 or performing

CIPP on existing lines between MHs 288X and 289A as shown in plan view.

A: The line between MHs 288X and 289A will be CIPP lined and will remain in service following construction.

43. Q: Drawing 100-C-006, please clarify if we are to rehab MH 302 per Note 1 or abandon since existing In/Out lines for this structure appear to be abandoned in plan view.

A: MH 302 will be rehabilitated. There's an 8" gravity sewer that will continue to go through this manhole.

44. Q: Drawing 200-C-001, can a schedule of flowable fill for pipe abandonment be provided as it pertains to Notes 2 and 3 or is this solely to be determined by the Contractor?

A: A schedule will be provided via addendum.

45. Q: Drawing 100-C-013, is the existing SS not designated for slip-lining under the elevated portion I-385 in the Plan required to be filled with flowable fill?

A: A schedule for those line segments to be filled will be provided via addendum.

46. Q: Can the bid date be postponed one (1) week to allow time for question responses that will be presented in Addendum #3 once issued?

A: Bid date will be extended as outlined in the Addendum.

47. Q: Is CCTV inspection of the existing lines available for use?

A: CCTV inspection of the existing lines is available, with the exception of the line within Rutherford Rd.

48. Q: Will the bypass plan require the seal of a South Carolina registered Professional Engineer?

A: No, reference Section 02145 for submittal requirements.

49. Q: Will shot rock need to be hauled off?

A: Yes. Where not incorporated into the work, excavated rock will need to be removed from the site.

50. Q: How will payment be made for sewer bypassing?

A: Payment will be made based on the estimated percent complete.

51. Q: Will East Jordan frame and covers be considered an equal?

A: Yes. Refer to Section 02530, Paragraph 2.06.C.

Clarifications/ Specifications

1. Bid Tabulation Form, REPLACE the form with the one included in Attachment 2 to this Addendum, dated January 7, 2016
2. Addendum #2, Technical Specifications Item 2, REVISE the stiffness listed in Item 5.c to 72 psi.

3. Project Manual Section 01025, Measurement and Payment, REPLACE Paragraph 1.22 with the following:

“1.22 PLUG AND GROUT EXISTING PIPE CONNECTION

A. Measurement: The bid item for plug and grout existing pipe connection includes all labor, equipment, and materials needed to plug an abandoned sewer line and rework the manhole bench and invert as indicated in the Drawings. Measurement will be made on each pipe plugged, regardless of pipe diameter.

B. Payment: Payment for plug and grout existing pipe connection shall be made at the quantity authorized at the unit price indicated on the Bid Form.”

4. Project Manual Section 02530, Gravity Sewers, Force Mains, and Accessories, ADD the following paragraph:

“2.13 REINFORCED POLYMER CONCRETE MHs & VAULTS

A. Provide acid resistant polymer manhole sections, base sections and related components conforming to ASTM C 478.

B. Provide base riser section with monolithic base slab. Cold joint slabs will not be permitted.

C. Manhole components, to include risers, transition slabs, sections, etc. shall be designed by the manufacturer to meet the intent of ASTM C478, accounting for compositional differences in the materials. Design shall be suitable for H-20 wheel load rating.

D. The polymer mixture shall consist solely of thermosetting resin sand and aggregate. No cementitious materials shall be allowed. The thermosetting resin shall have a minimum of deflection temperature of 158° F when tested at 264 psi (1.820 mPa) following Test Method D 648. The resin content shall not be less than 7% of the weight of the sample as determined by Test Method D 2584. Resin selection shall be suitable for applications in the corrosive conditions to which the structures will be exposed.

E. Each manhole component shall be free of all defects, including resin starved areas that, due to their nature and degree or extent, detrimentally affect the strength and serviceability of the component part.

F. The Manufacturer shall warrant that the product corrodes due to H2S exposure within fifty (50) year period; it shall be subject to a warranty review per the Manufacturer's warranty.

G. The reinforced polymer concrete product shall be manufactured by U.S. Composite Pipe, Geneva Polymer Products, or approved equal.

H. Installation of reinforced polymer concrete products shall be in accordance with manufacturer's recommendations and details.”

Drawings

1. Drawing Number 000-C-001, Detail 1, Precast Concrete Manhole Detail, ADD the following note under the sizing table:

“*MH400A-602 shall be 96” diameter manhole as indicated on the plans.”

2. Drawing Number 000-C-001, Precast Concrete Manhole Detail, ADD the following:

“The following manholes shall have a factory applied epoxy lining system:

| | | | |
|----------|----------|----------|----------|
| 400A-598 | 400A-602 | 400A-621 | 400A-623 |
| 400A-631 | 400A-632 | 400A-633 | 400A-636 |
| 400A-432 | 400A-666 | | |

The lining system shall be as specified in Section 02603, Paragraph 2.05, or approved equal recommended by precast concrete manhole manufacturer. Lining system shall be capable of having field repairs, if needed, following manhole installation.”

3. Addendum #2, Attachment 1, NOTE that the non-woven geotextile fabric should extend around the pipe zone, under the bedding, and overlap on top by 24 inches.
4. Addendum #2, Drawing Item 1, REVISE the 5th listed line segment to “MH400A-623 to MH400A-624”.
5. Drawing Number 000-C-010, Concrete Vault B1 Top Plan, REVISE the interior dimensions of the vault to 5’ x 8’
6. Drawing Number 100-C-005, REVISE the callout in the profile near MH400A-633, to show a 12” SS entering the manhole. REVISE the callout in the plan view to “Install 10 LF of 12” PVC”.
7. Drawing Number 100-C-005, ADD the following note, “Rehabilitate Manhole 428 per spec Section 02603, after the new trunk sewer and new 18” line connecting MH 428 to new MH400-A-631 has been constructed.”
8. Drawing Number 100-C-007, REVISE the line between MH400A-649 and MH-312X, to Install 15LF of 12” PVC @ 1.00%.
9. Drawing Number 100-C-010, REVISE the pipe between MH400A-668 and MH400A-669 to 12” PVC SS.
10. Drawing Number 100-C-013, Profile of MHA-636 to MH435, ADD note that indicates the pipe is Epoxy Lined DIP.
11. Where the Drawings indicate to slipline an existing pipe with a smaller HDPE pipe, the Contractor shall provide spacers or other such method to prevent carrier pipe from floating. Annular space shall be filled with flowable fill concrete and pipe connections into the manholes grouted.

If you have any questions and/or concerns, please do not hesitate to contact Julie Dacus at julied@re-wa.org or Stephanie Selman at stephanies@re-wa.org.