

ADDENDUM NO. 2

MODIFICATIONS TO SUMMITT LANDFILL GAS EXTRACTION SYSTEM ADDITIONS CONTRACT NO. C-13-001-202

The following changes and clarifications shall be made to the Contract Documents, Specifications, and Drawings:

- I. **BID DATE CHANGED:** The date for receiving bids has been revised to Thursday, February 16, 2017. The time and location for receiving bids will remain the same as advertised. The deadline for submitting questions to the City is Wednesday, February 8, 2017, at 4 p.m. EDST.

II. CONTRACTOR QUESTIONS

- A. **Question:** Can you provide details/specs regarding how the 9 existing extraction wells are to be abandoned?

Response: The existing wells will be abandoned by removing the existing wellheads, pumps, monitoring station, and hoses. This equipment will be re-installed on the new wells as specified. Only the 18-inch-thick vegetative layer will be excavated around the outside of the existing vertical 8-inch-diameter PVC well pipe. Care will be taken to prevent damage to the underlying geonet drainage composite and GCL layers. A new PVC end cap will be glued in place over the end of the well pipe in accordance with ASTM D2855. In the Well Abandonment Detail (C-4/4) on Drawing No. 4, the label "NEW HDPE OR PVC END CAP WELD ON WELL RISER" should be replaced with "NEW PVC END CAP - GLUE IN ACCORDANCE WITH ASTM D2855."

- B. **Question:** Are there any pumps, tubing or other items in the 9 existing wells that need to be removed prior to abandoning?

Response: See response to question A above.

- C. **Question:** During the drilling of the "outside water perimeter wells" is rock anticipated to be encountered, or is drilling to be in soil only?

Response: Assuming the question was meant to read "outside waste" instead of "outside water," drilling associated with the exterior wells to be installed outside of the waste will be in soil strata only. Drilling will be terminated upon auger refusal or when the design depth is reached, whichever occurs first.

- D. **Question:** Are there any logs of borings performed in the area where the non-waste extraction wells are to be located?

Response: See attached logs of borings recorded by GEOServices during installation of Piezometers A and B. Piezometer A is located in the immediate vicinity of MW-5 and MW-11. Piezometer B is located approximately 500 lineal feet southwest of the flare and near MW-10. See FIGURE 1 – PIEZOMETERS A&B LOCATIONS included in this addendum.

- E. **Question:** Can you provide more clarification on No. 5 Additive Unit price on Bid Form?

Response: In general, it is anticipated that soil cuttings produced during drilling of the exterior wells will be disposed of on-site. However, if conditions occur which require soil cuttings to be disposed of off-site, this soil will be hauled to and disposed of at the active City Landfill (Birchwood). The Contractor will be paid under SCHEDULE IV – ADDITIVE ITEM No. 5 based on field measurements of the actual volume of soil material removed and the unit price for this item. No fees for disposing of the soil at the landfill will be charged to the Contractor. The address for the Birchwood Landfill is 9327 Birchwood Pike, Harrison, TN 37341.

- F. **Question:** Is the road crossing on the bid form asphalt. How do we repair?

Response: All road crossings will be in gravel. No asphalt paving replacement will be required. Additional information regarding pipe installation and road repairs is shown on FIGURE 2 – ROAD CROSSING DETAIL included with this addendum.

- G. **Question:** When do you want project to start?

Response: At this time it is anticipated that the project will start by the end of March.

- H. **Question:** Is backfill material available at the site?

Response: Suitable excavated materials from construction may be segregated and stored in stockpiles for reuse as backfill materials as directed by the ENGINEER. Additionally, soil backfill materials are available from an on-site borrow source shown on FIGURE 3 – BORROW AREA LOCATION included with this addendum. Stormwater management, installation of erosion control measures, and restoration of disturbed areas related to borrow activities will be provided by the Contractor.

- I. **Question:** Is bedding material available at the site?

Response: No. If installed in waste, pipe bedding materials will be clean, hard, rounded to sub-rounded granular materials that are mechanically stable and chemically inert as approved by the Engineer or sand, relatively free flowing, and sufficiently dry to be placed and shaped in the excavation. Crushed limestone material will not be allowed within the landfill footprint. Bedding and backfill material for road crossings is shown on FIGURE 2 – ROAD CROSSING DETAIL referred to in response to question F above.

- J. **Question:** The way I read it we are supplying dumpsters, we load in dumpsters, we transport to Birchwood and dump, owner pays disposal fees, please verify if this is correct?

Response: Yes. Birchwood Landfill will be available without a tipping fee during normal operating hours, Monday through Friday, 7:30 am to 3:00 pm. Contractor will provide transportation. Alternatively, the Contractor may dispose of waste material at the Bradley County Landfill. Operating hours and tipping fee information can be obtained from Santek Environmental which operates the landfill for Bradley County. If the Bradley County Landfill (or other landfill besides Birchwood) is used, associated landfill fees will be paid by the Contractor. Note that no work shall be done between 6:00 pm and 7:00 am nor on Sundays or locally observed national holidays without the written permission of the Engineer as stated in Paragraph 7.21 on Page 00830-38 of the Project Manual.

- K. **Question:** What is the project duration for liquidated damages?

Response: The time for completion of the work is 90 days, with liquidated damages thereafter of \$500 per day as stated on Page 00500-1 of the Project Manual.

- L. **Question:** Is all of pipeline in final cover above liner?

Response: Whenever possible, pipelines will be installed above the geonet composite and GCL liner materials. If field conditions are encountered which require excavation below the liner materials, these materials will be repaired and paid for under SCHEDULE IV - ADDITIVE UNIT PRICE ITEM No. 1 included in the bid schedule. Repair of the cap over the 24-inch bentonite seal around the newly installed interior wells will be included in the unit price item for constructing the well. Geonet and GCL materials will not need to be installed over the seal.

- M. **Question:** Do we replace the GCL by just overlapping, is there any details?

Response: All edges of GCL panels will be overlapped a minimum of six (6) inches and adjusted to smooth out any wrinkles, creases, or "fishmouths" in order to maximize contact with the underlying panel. Any holes or tears in the GCL will be repaired by placing a GCL patch over the hole. The patch will overlap the edges of the hole or tear by at least 12 inches in all directions.

- N. **Question:** Who does Pre Construction Survey and As-Built Survey and As-Built Drawings?

Response: Prior to the commencement of construction, the Owner will determine planned field locations of the landfill gas pipeline and gas extraction well locations. These locations will be marked with stakes. The Contractor will be responsible for all incidental surveying needed to complete the work and prepare As-Built drawings. The Contractor will submit certified As-Built drawings at the end of the project as specified in Specification Section 01720 - Project Record Documents.

- O. **Question:** Are all outside waste perimeter wells going to be in dirt, what type of soil, sand, rock?

Response: All exterior wells will be installed in soil. Typical soil conditions are provided in the logs of borings prepared during installation of Piezometers A and B referenced in response to question D above.

- P. **Question:** Unit Price form has 2" SDR-17, drawings show 2" Air SDR-9 and 2" FM SDR-11 which is correct?

Response: The 2-inch air lines will be SDR 9, the 2-inch leachate lines will be SDR-11, and the 4-inch gas collection pipe will be SDR 11.

- Q. **Question:** Is there a spec on the leachate pumps?

Response: The air-operated leachate pumps will be QED Model 301881, 4" – Short AP4 Bottom Inlet pump with ¾-inch discharge hose.

- R. **Question:** How far from the work area is the borrow area or backfill soil?

Response: The soil borrow area is shown on FIGURE 3 – BORROW AREA LOCATION referred to in response to question H above.

S. **Question:** Is there a water source onsite for dust control?

Response: A fire hydrant is located just outside the landfill entrance gate. Arrangements to obtain a meter would need to be made with Eastside Utility. Fees associated with meter rental and purchasing of the water will be the responsibility of the contractor. Water may also be pumped from of the ponds located on the landfill property.

T. **Question:** Is Survey by Owner or Contractor? There are conflicts in the specifications.

Response: See response to question N above.

U. **Question:** If we are installing the lateral pipes within the cover soil layer over the GCL, shouldn't excavated material be fine for bedding and backfill? I don't see where imported sand bedding should be needed?

Response: A 2-inch sand bedding will be required for pipes installed in the 18-inch-thick vegetative layer as shown in the Header/Lateral Trench Detail (J-5/5) on Drawing No. 5.

V. **Question:** Assume any recertification of the cap system to be provided by the Owner?

Response: Yes, this will be provided by the Owner.

W. **Question:** Will there be soil onsite for building well benches and backfilling LFG wells?

Response: See response to question H above.

X. **Question:** Please confirm the unit of measure for bid item III-12 and IV-4 should really be LF not Each.

Response: The unit in the bid schedule for SCHEDULE III– ADDITIVE ITEM No. 12 and SCHEDULE IV – ADDITIVE ITEM No. 4 should be lineal feet (LF) in both items.

Y. **Question:** Why does the bid form description for item IV-5 state "not waste" for disposal of drill cuttings? I would expect the drill cuttings inside the waste limits to be mostly waste with sand layers, daily cover, etc. mixed in. Do I understand correctly that bid item IV-5 is where Contractor will be paid for transportation/disposal of all drill cuttings for this project?

Response: SCHEDULE IV – ADDITIVE ITEM No. 5 applies to soil cuttings produced during drilling of the exterior wells. See response to question E above.

Z. **Question:** Can the bid form be furnished in Excel?

Response: This form will not be available in Excel format for use in preparing a bid.