

200900017375

Newton County Regional Water and Sewer District

9/10

Newton County, Indiana

Wastewater Collection and Treatment System

Addendum No. 3

August 30, 2009

This Addendum forms part of the Contract Documents and modifies the original Bidding Documents, as noted below. Acknowledge receipt of the Addendum in the space provided in the Bid Form. Failure to do so may subject Bidder to disqualification.

This Addendum consists of four (4) pages plus attachments.

PROJECT MANUAL

1. GENERAL

Bidders shall provide for an undistributed quantity of repairing/replacing drain tiles that may be crossed during construction of the collection system. Bidders shall assume six (6) of these crossings for the purposes of the bid. These costs shall be included in the lump sum price for the collection system. CONTRACTOR shall be required to provide these as a line item in the schedule of values submitted after the contract is awarded.

2. CLARIFICATION

The submittal process will not be waived for this project.

3. CLARIFICATION of "Tabulation of Equipment Items forming the Basis of Bid Table" in the Bid Form:

The installed cost provided for Basis of Bid items in Column 1 and for Substitute items in Column 2 shall include the following:

- a. Cost to purchase and physically install the equipment that exists within the limits of the respective tank walls or equipment pad/foundation limits. If ancillary equipment (e.g. probes, blowers, etc.) changes are needed due to an alternate or substitute item, the additive or deductive costs of ancillary equipment changes shall also be included.
- b. Cost to connect power and control wiring
- c. Cost to connect piping
- d. Cost to install the tank or equipment pad/foundation the equipment resides in or on.

- e. Cost for re-design work by the Owner or Engineer.
4. **ADD** Section 02500 Directional Drilling (attached to this Addendum) to the Project Manual.
 5. **DELETE** the fourth sentence in Paragraph 1.6.C in Section 11400 -- Multi-Stage Activated Biological Process System.
 6. **MODIFY** Paragraph 2.4.A.1 in Section 11400 - Multi-Stage Activated Biological Process System to read as follows:
 1. Air lift pump shall be made of PVC that contains UV resistant compounds or 304L stainless steel.
 7. **REPLACE** the Design Summary requirement for "Effluent Standard to be guaranteed" in Paragraph 1.5.B in Section 11900 Ultraviolet Disinfection System as follows:

E. coli limitations are 125 colonies/100 mL as a monthly average calculated as a geometric mean and 235 colonies/100 mL as a daily maximum.
 8. **REPLACE** the first sentence in Paragraph 1.6.B in Section 11900 Ultraviolet Disinfection System as follows:

The UV system will produce an *E.coli* effluent conforming to the following discharge permit: 125 colonies/100 mL as a monthly average calculated as a geometric mean and 235 colonics/100 mL as a daily maximum.
 9. **DELETE** Section 2.08 Refrigerated Samplers from Section 13630 -- Field Mounted Instruments.
 10. **DELETE** Mechanical line item "15458 -- Water Heaters" from Section 15001 -- Mechanical Bidders List of Materials and Subcontractors.
 11. **ADD** the following manufacturer to Part 2 of Section 15870 -- Power and Gravity Ventilators:

Twin City Fans

DRAWINGS

1. **MODIFY** Sheet C.2 with the Figure No. 1 attached to this Addendum.
2. **MODIFY** Sheets C.14 to C.18 by changing the low pressure force main size from 2" SDR 11 to 1.5" SDR 11.
3. **MODIFY** Sheet C.20 by changing the cascade aerator detail reference from Sheet C.6 to Sheet P.6.

4. **MODIFY** Sheets P.3 and P.4 by changing the airlift pump pipe material to PVC or Stainless Steel.
5. **MODIFY** Sheet P.4 by changing Note 1 to read as follows:
Activated Biological Process System manufacturer as specified in Section 11400 or 11500 to supply covers for the proposed system tank. Covers shall be rated to support 300 lbs per square foot at a minimum. Covers shall be corrosion resistant such as fiberglass, aluminum, stainless steel, etc.
6. **MODIFY** Sheet M.4 as follows:
 1. The 3" sanitary drain line shall drain south rather than north. See Sheet P.2 for reference.
 2. The ¾" DCW nonpotable water line shall come from the screen washwater line inside the building. See Sheet P.2 for reference.
7. **ADD** the following manufacturers to Sheet E.6:
Lumark is an acceptable manufacturer for lighting fixture types J8, P19, and P20.
Crouse-Hinds is an acceptable manufacturer for lighting fixture type RDX1.

QUESTIONS

1. Q: Will the submittal process be waived?
A: No. All submittals are required. OWNER and ENGINEER will make every effort to expedite critical path submittals.
2. Q: What work is included in the first substantial completion date listed in Section 6.01.A.1 in the Bid form?
A: Only the gravity sewer, manholes, influent pump station wet well, and 4" bypass suction pipe are required to be completed for this item. Influent pumps, controls, etc. are not part of this substantial completion.
3. Q: Would it be possible to do final surface restoration in the spring?
A: This will be considered during construction.
4. Q: Where will the electrical service for the grinder pump station on Sheet C.14 come from and who is responsible?
A: Electrical service for the grinder pump station shall be provided by others. Contractor shall coordinate with Owner's representative.
5. Q: Is insulation required under the entire headworks building as shown on Sheet A3.2?
A: Yes.
6. Q: What is the thickness of the headworks building approach pad and what is the reinforcement required?

A: Pad is 12" thick. Reinforcement shall be 6x6-W2.4xW2.4 W.W.F. Pad shall be doweled into headworks slab using 2' long #4 bars at 12"O.C.

7. Q: Does the blower pad on Sheet P.4 require reinforcing?
A: Yes. Reinforcement shall be 6x6-W1.4xW1.4 W.W.F.
8. Q: Modular building manufacturer is recommending a lifting method of strapping, setting on blocks, and pounding out the blocks. Please advise as to the unloading method required.
A: We do not specify means and methods.
9. Q: Can the overhead door be mounted directly to the CMU by deleting the wood frame?
A: Yes.
10. Q: Please verify the overhead door material and finish.
A: Overhead door shall be aluminum with a clear-anodized finish.

END OF ADDENDUM NO. 3

SECTION 02500 - DIRECTIONAL DRILLING

PART 1 - GENERAL

1.1 SCOPE

- A. Perform all work necessary and required for installing the pressurized sanitary transmission main by the directional boring method.
- B. Directional drilling is an optional installation method for the low pressure sanitary sewer line SS-3 and the effluent force main OP-1 only. This method shall not be used for installation of gravity sewer.

1.2 RELATED WORK

- A. Section 01400 - Quality Control
Section 02720 - Low Pressure Sanitary Sewer
Section 02730 - Sanitary Sewerage

1.3 REFERENCES

- A. American Society of Testing Materials - ASTM.
- B. American Water Works Association - AWWA.
- C. Codes, specifications, and standards referred to by number of title shall form a part of this specification to the extent required by the references thereto. Latest revisions shall apply, unless otherwise shown or specified.

1.4 SUBMITTALS

- A. Submittal procedures shall be as specified in the General Conditions.
- B. Submit the following:
 - 1. Manufacturer's Certificate of Compliance certifying compliance with the referenced specifications and standards.
 - 2. Certified copies of reports of factory tests specified in this Section and required by the referenced standards.
 - 3. Details of equipment and written procedures with working drawings describing in detail the proposed boring method and the entire operation to be used as described in this section.

4. Experience requirements per this section.
- C. Drilling Plan: The CONTRACTOR shall submit a complete drilling plan within two weeks after the bid opening if horizontal drilling is proposed. The drilling plan shall have as a minimum the following information:
1. Carrier pipe must be high density polyethylene. Pipe manufacturer and wall thickness along with design calculations by a registered professional engineer showing pipe is adequate for stresses that will be applied to it during installation and long term operation.
 2. If a casing is needed, provide casing pipe information along with design calculations by a registered professional engineer showing the casing is adequate for the stresses applied during installation and long term operation. Casing material is the CONTRACTOR's option.
 3. Show scale drawing layout of the proposed drilling operation, assembly area and equipment and material laydown area. Operations must be conducted within limits and requirements described on the plans and in these specifications.
 4. Provide a proposed schedule for completion of the work.
- The drilling plan is subject to approval of the OWNER. Failure to produce an acceptable drilling plan is cause for rejection of the bid.
- D. The OWNER reserves the right to review the proposed drilling plan and make discretionary judgment to the adequacy of the plan. The OWNER has the right to approve any plan, reject any plan, request clarifications of any plan, and negotiate modifications to any plan.

1.5 GENERAL PROCEDURES

- A. The CONTRACTOR shall be prepared to attend all meetings and provide any necessary data, reports, information, details, and construction schedules as requested by the ENGINEER.
- B. All work shall be done in a careful, workmanlike manner to the satisfaction of the ENGINEER and OWNER.

PART 2 - PRODUCTS

2.1 PIPE

- A. HDPE for directional drilling shall meet SDR 11 for AWWA C901.

PART 3 - EXECUTION

3.1 SURFACE AND SUBSURFACE CONDITIONS

- A. CONTRACTOR shall verify the size, location and elevation of all utilities prior to any construction.

3.2 EQUIPMENT

- A. The directional drilling systems to be used shall have the following features:
1. The system shall be remotely steerable and permit electronic monitoring of tunnel depth and location. The system shall be able to control the depth and direction of the pipe and must be accurate to a window of ± 2 inches.
 2. The system will utilize a fluid-cutting process, using a liquid clay such as bentonite. This clay shall be totally inert and contain no risk to the environment.
 3. The liquid clay shall remain in the tunnel to provide a lubricant to reduce frictional drag when the pipe is installed.
 4. The spoils shall be recovered by use of a vacuum system mounted on a vehicle for removal of the spoils. Spoils are not to be discharged into sewers and storm drains. The CONTRACTOR is responsible for disposal of all spoil material.
 5. Equipment shall be fitted with a permanent alarm system capable of detecting an electrical current. The system will have an audible alarm to warn the operator when the drill head nears electrified cables within a safe operating distance. Refer to paragraph 3.4. for additional safety requirements.

3.3 EXPERIENCE

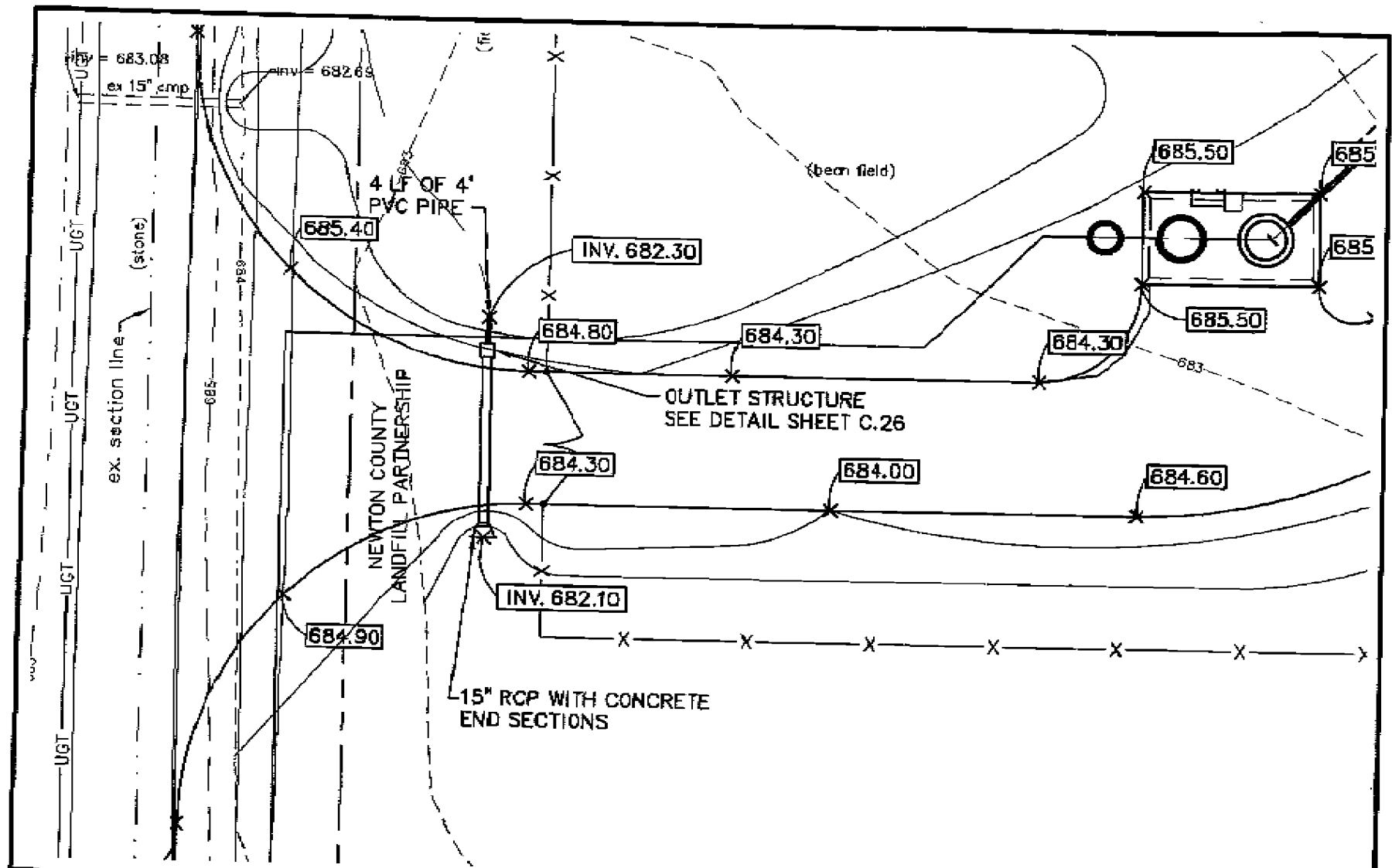
- A. The CONTRACTOR shall demonstrate experience and expertise in trenchless excavation methods by providing a list of six utility references for whom similar work has been performed prior to commencing any work. These references shall include a name and telephone number for contact so OWNER/ENGINEER may verify the claims.

- B. The CONTRACTOR shall also provide documentation showing successful completion of at least 50,000 linear feet of directional boring of pipelines of similar size or greater or shall obtain the services of an experienced directional boring subcontractor to supervise the installation prior to commencing any work. Conventional trenching shall not be considered as applicable experience.
- C. All supervisory personnel shall be adequately trained and shall have an least four years experience in directional boring. The CONTRACTOR shall also submit the names and resumes of all supervisory field personnel by review by the ENGINEER prior to commencing any work.
- D. The CONTRACTOR shall have a registered professional engineer qualified to design and select the materials needed for installation of the pipeline.

3.4 SAFETY

- A. Mechanical, pneumatic or water-jetting methods shall not be acceptable due to the risk of surface subsidence and damage.
- B. Upon completion of boring and pipe installation, the CONTRACTOR shall remove all spoils from all starting and termination pits. The pits shall be restored to their original condition.
- C. Because directional boring may be performed while existing buried electrical cable is energized, the following safety requirements shall be met:
 - 1. All drilling equipment must have a permanent, inherent alarm system capable of detecting an electrical current. The ground system shall be equipped with an audible alarm to warn the operator when the drill head nears electrified cable within a safe operating distance.
 - 2. All crews shall be provided with grounded safety mats, heavy gauge ground cables with connectors, hot boots and gloves.
 - 3. All supervisor personnel shall be adequately trained and have direct supervisory experience in directional boring. Refer to paragraph 3.3.C.

END OF SECTION 02500



AMERICAN STRUCTUREPOINT INC	NEWTON COUNTY REGIONAL WATER & SEWER DISTRICT WASTEWATER COLLECTION & TREATMENT SYSTEM	REFERENCE SHEET DATE: 2008/08/10 SCALE: 1" = 20' JOB NO: 20080702	PROJECT NO. 1
	ADDENDUM No. 3		