City of Torrington

ENGINEERING DEPARTMENT (860) 489-2234



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ADDENDUM No. 2

DATE ISSUED: February 12, 2019

RE: FUESSENICH PARK EXTENSION (OAK AVENUE) DRAINAGE PROJECT PHASE 2

BID # FPD-027-022019

All bidders are hereby advised of the following amendments to the Contract Bid Documents, which are hereby made an integral part of the specifications for the subject project, prepared by The City of Torrington, to the same extent as all other documents. All work shall conform to the standards and provisions of same.

Bids submitted shall be deemed to include the Contract Document information as shown in **Addendum No. 2.** General bidders shall notify sub-bidders that may be affected by this addendum as applicable. Bidders shall be required to acknowledge receipt of this Addendum in the space provided on the Bid Proposal Form, Page BP-1. Failure to acknowledge this Addendum by the Bidder may result in the rejection of their bid. Bidders are directed to review changes to all portions of the work as changes to one portion may affect the work of another.

- 1. ADD the attached Detail Section 4.7 "TYPICAL STORM DRAINAGE TRENCH RCP FOR NON-PAVED AREAS" noted as ISSUED 2-12-2019 ADDENDUM 2.
- REPLACE Technical Specification Section 2500 STORM DRAINAGE pages 02500-1 to 02500-03 in its entirety with the attached Technical Specification SECTION 02500 – REVISED FOR ADDENDUM 2 pages 02500-1 ADDENDUM 2 to 02500-03 ADDENDUM 2.

3. The following questions were submitted in writing. Answers are provided below each question.

Q1: Do you have any idea of the construction of the buried MH in the ball field ? ANSWER Q1: Refer to Page IFB-4 - BIDDERS TO INVESTIGATE. The manhole cover is accessible and may be opened for inspection.

Q2: The access road to staging will require some branch clearing etc to gain access for large equipment based on your description we should be allowed to do this ?

ANSWER Q2: Refer to Technical Specifications Section 01005 – Summary of Work Part 1.5 A). Removal of branches to gain access to the site will be permitted and limited to a reasonable width of the road only and must be disposed of off site.

Q3: At one point on the access road water is ponded both sides , we may need to do some improvements such as gravel base etc to get the large equipment, delivery trucks for materials etc , during non frozen conditions in the spring. It would appear in spring conditions with heavy loaded truck traffic this access may degrade quickly. I am assuming this would be allowed? ANSWER Q3: Refer to Technical Specifications Section 01005 – Summary of Work Part 1.5 A). Improvements and modifications to the access road are allowed as may be necessary to gain access to the site. These improvements are limited to a reasonable width of the road only. All areas disturbed due to construction or access including the access road modifications and staging area are to be restored to the same or better condition.

Q4: The 8 ft chain link fence is in very poor condition along the State property 70 feet or so, within the area of the end wall / rip rap installation . It would appear a portion of the fence needs to be removed to install rip rap etc . Is it the intent to with in reason put the fence back to its current state or should we plan on rectifying that section of fence?

ANSWER Q4: Refer to Technical Specifications Section 02607 Part 1.2 - The fence shall be replaced to the same current state or better condition and configuration.

Q5. It appears that dewatering will be a reality based on field conditions and flows possibly back up from the outlet end in the flat sloping pipe. As long as the dewatering discharge is located off a athletic field to a vegetated edge that's acceptable ?

ANSWER Q5: Refer to Technical Specifications Section 02530 Part 1 and 2 in general and Part 2.4 C. Except as noted in Section 02920 Part 1.3 – Paragraph C, D. and E, dewatering flows may be permitted to discharge in vegetated areas as approved by the Engineer and provided there will be no damage to the discharge area or downstream adverse affects. Any areas damaged due to dewatering flows must be restored to same or better condition.

Q6: Pipe replacement sheet C-001. Pipe detail. Does the 8 LF need filter fabric to extend the length of the pipe?

ANSWER Q6: Refer to Detail Section 4.7 "TYPICAL STORM DRAINAGE TRENCH RCP FOR NON-PAVED AREAS" noted as ISSUED 2-12-2019 ADDENDUM 2 and Detail 1 "STORM DRAINAGE TRENCH DETAIL FOR HDPE PIPE IN NON-PAVED AREAS" noted as "REVISED 2-11-2019".

END OF ADDENDUM No. 2



SECTION 02500 – REVISED FOR ADDENDUM 2 STORM DRAINAGE

PART 1 - GENERAL

1.1 SCOPE OF THE WORK

- A. Storm drainage work includes, but is not limited to, construction of storm sewers, drainage structures, modification of headwalls and end walls, riprap, ditching, backfilling, shoring, and dewatering of trenches for storm sewers as required for safe and workmanlike construction all in conformity with the lines, grades, dimensions and details shown on the Contract Drawings, or as ordered, and in accordance with the provisions of these technical specifications for the various materials and work which constitute the completed structure.
- B. Pipe bedding in accordance with the details shown on the Contract Drawings is included.
- C. The contractor may use HDPE or Reinforced Concrete Pipe. Specific trench details shall apply for each material type as shown in these contract documents and design plans.

1.2 QUALITY ASSURANCE

- A. Storm drain pipe may be inspected at the manufacturing source as well as at the job site by City.
- B. Contractor shall notify City for inspection of pipe and drainage structure installation prior to backfilling trenches.

1.3 JOB CONDITIONS

A. Construction of the drainage system shall proceed as early in the construction program as possible. Maintain adequate drainage of the project area at all times. Prevent flooding of adjacent roads and private properties.

1.4 RELATED DOCUMENTS

- A. Detail Section 4.7 "TYPICAL STORM DRAINAGE TRENCH RCP FOR NON-PAVED AREAS" noted as ISSUED 2-12-2019 ADDENDUM 2.
- **B.** Revised Detail 1 "STORM DRAINAGE TRENCH DETAIL FOR HDPE PIPE IN NON-PAVED AREAS" noted as "REVISED 2-11-2019".

PART 2 - MATERIALS

Materials: The materials to be used in the construction shall be those indicated on the Contract Drawings or ordered by the Engineer and shall conform to CDOT Form 817 Standard Specification, Section M.08. Protective compound material shall conform to CDOT Form 817 Standard Specification, Section M.03.01-11. Pervious material shall conform to CDOT Form 817 Standard Specification, Section M.03.01-11. Pervious material shall conform to CDOT Form 817 Standard Specification, Section M.03.01-11. Pervious material shall conform to CDOT Form 817 Standard Specification, Section M.03.01-11. Pervious material shall conform to CDOT Form 817 Standard Specification, Section M.03.01-11. Pervious material shall conform to CDOT Form 817 Standard Specification, Section M.03.01-11. Pervious material shall conform to CDOT Form 817 Standard Specification, Section M.03.01-11. Pervious material shall conform to CDOT Form 817 Standard Specification, Section M.03.01-11. Pervious material shall conform to CDOT Form 817 Standard Specification, Section M.02.05.

2.1 BEDDING MATERIAL

A. Bedding material shall comply with CDOT Form 817 Standard Specification, Section M.02 and M.01.01 which shall be 3/4" broken stone – No. 6.

2.2 STORM DRAIN PIPE MATERIALS

A. 48" High Density Polyethylene Storm Pipe (HDPE) shall be smooth interior surface (Type N) without perforations, conforming to CDOT Form 817 Standard Specification, Section M.08.01.

B. 48" Reinforced Concrete Pipe Class XX conforming to CDOT Form 817 Standard Specification, Section M.08.01.

2.5 APPURTENANCE MATERIAL

A. Brick:

1. Clay or Shale Brick: Comply with ASTM C32 for sewer brick and manhole brick, grade as selected. Brick dimensions shall be $4" \times 8" \times 2\frac{1}{2}"$ nominal and shall yield the wall thickness as shown on the plans.

- 2. Concrete Masonry Units: Comply with ASTM C139.
- B. Mortar shall conform to CDOT Form 817 Standard Specification, Section M.11.04 and comply with ASTM C270, Type M, for the pipe joints and manhole and inlet brickwork.
- C. Concrete for storm drainage construction shall be in accordance with CDOT Form 817 Standard Specification, Section M.03.01. Strength shall be 4,000 psi at age 28 days.

PART 3 - CONSTRUCTION METHODS

3.1 GENERAL

- A. All pipes will be laid in an open trench of dimensions as shown in Details on the Contract Drawings. No projecting pipe conditions will be allowed.
- B. Lengths of storm drain pipe shown on the Contract Drawings are approximate distances inside wall to inside wall of structures. Contractor shall install pipe based on actual field conditions. Slopes of pipe specified on the Contract Drawings shall be verified by field measurement prior to trenching.

3.2 STRUCTURES

1. The new headwall and manhole openings shall be precast to accommodate for the new 48" HDPE pipe and all existing pipes with watertight connection. The contractor shall place the new 48" HDPE pipe into this opening and provide for a watertight seal to prevent water from entering around the new pipe.

3.3 PIPE LAYING

A. Pipe laying shall proceed upgrade where practicable. Pipe shall be laid true to line and grade with a straight and uniform invert. Pipe shall not be laid in a wet or muddy trench. Trenches shall be dewatered as required and the bottom shall be firm, smooth, and properly shaped as specified.

3.4 BACKFILLING

A. Backfilling above crushed stone bedding shall be done with selected material, free from rocks larger than 3 inches in size and free of debris. Crushed stone shall be carefully placed and tamped around and over the pipe to avoid displacement of the pipe or damage to the joints. All backfill shall be placed in 8-inch lifts and shall meet material and compaction requirements of Section 02220 of the City of Torrington Special Provisions/Technical Specifications.

3.5 APPURTENANCES

- A. All drainage structures are to be constructed as shown on the Contract Drawings. Refer to site plans for location and size.
 - 1. All pipe entering drainage structures shall be cut and ground smooth with the face of the wall. Breaking the pipe will not be acceptable.
 - 2. All joints around pipe and structure walls at the face of the wall shall be packed full with mortar.

- 3. The bottom of drainage structures shall be clean of all debris and walls shall be wiped clean of mortar as work progresses.
- 4. Pipes or drainage structures shall not be broken by impact methods. Cutting of pipe with a pipe saw is required. Alteration or modification of any drainage structure shall be accomplished by means of saw cutting or coring. All reasonable precautions shall be taken to prevent damage to the pipes and drainage structures.

3.6 CLEANUP

A. Pipes and structures shall be left clean and free from mud or debris of any kind. When looked through, each line between structures shall show a full circle of light. Otherwise, Contractor shall be required to remove and replace the defective portion of the work.

3.7 WORKMANSHIP

A. Any pipe which is not in true alignment and grade and properly placed as to the center line of the road or which shows any undue settlement after laying, or is damaged, shall be taken up and re-laid or replaced without extra compensation.

3.8 CONNECTIONS TO EXISTING STORM SEWERS AND STRUCTURES

- A. The CONTRACTOR shall make all connections to the existing facilities as indicated on the Contract Drawings and as herein specified, or as directed.
- B. The CONTRACTOR shall furnish all pipe, fittings and appurtenances. The CONTRACTOR shall do all excavation and backfill as required.
- C. Existing pipelines damaged by the CONTRACTOR shall be replaced by him at his own expense in a manner approved by the ENGINEER.

3.9 INTERFERENCE

- A. The CONTRACTOR shall develop a program for the construction and placing in service of the new works subject to the approval of the ENGINEER. All works involving cutting into and connecting to the existing facilities shall be planned so as to interfere with operation of the existing facilities for the shortest possible time and when the demands on the system best permit such interference even to the extent of working outside of normal working hours to meet these requirements.
- B. The CONTRACTOR shall have all possible preparatory work done and shall provide all labor, tools, material supervision and equipment required to do the work in one continuous operation.
- C. The CONTRACTOR shall have no claim for additional compensation, by reason of delay or inconvenience, for adapting his operations to the needs of the public.

PART 4 – METHOD OF MEASUREMENT AND PAYMENT

This item will not be measured for payment. All costs in connection with this work shall be included in the Contract lump sum bid price.

END OF SECTION