

To: All Plan Holders of Record

From: CT Consultants, Inc.
For the Owner

Re: Addendum No. 4
South Interceptor Equalization Facility Improvements
City of North Olmsted, Ohio

Date: November 4, 2024

This Addendum forms a part of the contract documents and modifies the original bidding documents dated October 2024 and all previous addenda, if any. Acknowledge receipt of this addendum in the space provided in the bid forms. Failure to do so may subject the bidder to disqualification.

PRICES TO INCLUDE

In Prices to Include, Page BD.10 – **DELETE** the following from the second paragraph of the Basis of Payment: “a not to exceed total payment of \$2,573,000.00 shall be included in the lump sum price bid”. The Lump Sum Price shall include the cost of all items listed in this paragraph from a price received from Infrapipe.

PLANS

Sheet 3 of 53 – **ADD** the following notes to this Sheet, which shall be considered part of this Sheet:

“ENVIRONMENTAL PROTECTION NOTES:

1. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
2. ALL MATERIALS TO BE DISPOSED OF OFF-SITE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AT A SITE APPROVED BY THE ENGINEER. NO EXCESS MATERIALS ARE TO BE DISPOSED OF IN ANY WETLAND, FLOODPLAIN, SURFACE WATER, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS. EROSION CONTROL MEASURES AT THE DISPOSAL SITE MUST BE INSTALLED AND MAINTAINED UNTIL DISPOSAL IS COMPLETE AND THE DISPOSAL SITE IS PERMANENTLY STABILIZED. GIVING EXCAVATED SOIL AWAY DOES NOT RELIEVE THE CONTRACTOR OR ENGINEER OF THIS RESPONSIBILITY.
3. TREE REMOVAL WILL BE LIMITED TO THAT NECESSARY FOR CONSTRUCTION AND WILL BE LIMITED FURTHER TO THE PERMANENT EASEMENT WHENEVER POSSIBLE. IF THE PROJECT IS LOCATED WITHIN

THE RANGE OF THE FEDERALLY-ENDANGERED INDIANA BAT (MYOTIS SODALIS) AND TREES MUST BE CUT, THIS MUST OCCUR BETWEEN SEPTEMBER 30 AND APRIL 1. INDIANA BATS ARE HIGHLY-DEPENDENT UPON TREES INCLUDING DEAD AND DYING TREES OF SPECIES WITH EXFOLIATING BARK, CREVICES, OR CAVITIES IN UPLAND AREAS OR RIPARIAN CORRIDORS AND LIVING TREES OF THE SPECIES LISTED ABOVE WITH EXFOLIATING BARK, CAVITIES, OR HOLLOW AREAS FORMED FROM BROKEN BRANCHES OR TOPS. IF SUITABLE TREES MUST BE CUT DURING THE PROHIBITED TIME PERIOD, A NET SURVEY MUST BE CONDUCTED TO DETERMINE THE PRESENCE OR ABSENCE OF INDIANA BATS PRIOR TO CUTTING.”

SPECIFICATIONS

Specification 01 11 00 – SUMMARY OF WORK, Article 1.4, Paragraph A – **DELETE** the following from this paragraph: “A not to exceed price and payment therefore of \$2,573,000.00 shall be made for the storage system – see Price to Include.”

Specification 33 05 33.06 – HDPE DRAINAGE PIPING – **ADD** this Specification Section, included with this Addendum, to the Specifications which shall be considered part of these documents.

QUESTIONS

1. Is Strong Fence or Smart fence acceptable in lieu of Super Silt fence? **ANSWER** If these products are an ABACT BMP, they will be considered an acceptable alternative.
2. Please provide layout for wetland fence location? **ANSWER**. This is provided on the SWPPP Drawing, Silt Fence around the non-sensitive areas and Super Silt Fence around wetlands.
3. Please provide size of pipe of the pipe and invert elevations of the pipe coming out of overflow manhole and connecting to water storage system? **ANSWER** 16” overflow pipe with invert elevation of 773.50 from the storage system to an invert elevation of 772.50 at the Manhole.
4. Please provide specification for 3’ amended soil to be installed at the retention pond? **ANSWER** Refer to Addendum No.3, 1-9” mulch, 3” sand, 3” pea gravel and 9” rounded aggregate

5. Earth retention system if installed to support excavation of underground water storage tank, can we leave shoring system in ground , cutting retention system 3' below finish grade? **ANSWER** Yes.
6. Please clarify if on site excavated soil and broken shale can be used as ballast at the water storage system location? **ANSWER** Yes, but the shale should be ground to compactible size pieces.
7. Is the field office required for this project? **ANSWER** As long as the intent of Specification 01 52 13 is met, the means, methods and facilities to accomplish this will be at the discretion of the Contractor.
8. Specification section 200010-17 paragraph 3.16 calls out for temporary site fencing (galvanized steel chain link fence) around the site. Is this fence required around the site, if yes, please provide layout and specification? **ANSWER** The fence requirements shall be per drawings.
9. Please provide detail for stone path (Stone type; depth of stone and if any geotextile fabric required under stone path)? **ANSWER** Compacted subgrade with non-woven geotextile fabric, overlaid with 6" of compacted ODOT 304 aggregate to 95% max. density.
10. Can we use Sherwood Drive as construction entrance to the site? **ANSWER** No.
11. Please provide size and thickness of concrete collars as shown for manhole risers on drawing 20D-02 sheet 36? **ANSWER** Provide a 4 ft OD diam ring, 12" thick with 4 - #5 bar reinforcing , two at top and two at the bottom with 3" cover top and side.
12. Please provide detail for manhole riser castings (depth and size) which will be within the concrete collars as shown on drawing 20D -02 sheet 36? **ANSWER** Castings shall be as recommended by InfraPIPE.
13. Regarding Specification 26 32 00, Article 2.01.M.1, you cannot get a 30-cycle rating on a service rate ATS because a 400 amp breaker installed with ATS is only available for 3-cycles. Please clarify? **ANSWER** Provide an 600 amp ATS to meet the 42kAIC at 30-cycles requirement.
14. The fence specifications have barb wire above fence. The detail on sheet SD-C-05 do not show barb wire above fence. Is barb wire required? **ANSWER** No, defer to the referenced detail.
15. Is there a Backflow Preventor Vault detail? **ANSWER** The precast BF preventer vault and 4" BF preventer shall conform to CWD standard details and requirements.

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16. On sheet 10 of the drawings, there appears to be an existing chain link fence across the front of the property. Does that need to be removed as part of this project? **ANSWER**
Yes, the existing fencing across the front of City property should be removed as part of this project.
17. On sheet 10 of the drawings, which is vault is Note 1 referencing? **ANSWER** This note is referencing the BFP vault.

EF:mep

Enclosure

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SECTION 330533.16 - HDPE DRAINAGE PIPING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: HDPE drainage pipe.

1.2 DEFINITIONS

- A. Slow Crack Growth (SCG): A phenomenon by which a stress crack may form, comprised of a crack initiation phase and a crack propagation phase.
- B. Slow Crack Growth (SCG) Resistance: The primary material property that relates quality and the critical component for assessing service life, measured using the notched, constant ligament-stress (NCLS) test per ASTM F2136.
- C. Stress Crack: An external or internal fracture in plastic caused by tensile stresses less than its short-time mechanical strength.
- D. Virgin Polyethylene (PE): A type of plastic material in the form of pellets, granules, powder, floc, or liquid that has not been subject to use or processing other than required for initial manufacture.

1.3 SUBMITTALS

- A. Product Data: HDPE drainage pipe.
- B. Shop Drawings:
 - 1. Indicate piping plans, elevations, sections, and connection details.
 - 2. Include pipe elevations, invert elevations, pipe-to-pipe coupler connections, connections to stormwater detention structures, bedding, and cover materials.
- C. Material Test Reports.

1.4 SUSTAINABLE DESIGN SUBMITTALS

- A. HDPE resin compound may contain a minimum of 40 percent post-consumer recycled material. Recycled material is subject to a quality assurance program that ensures compliance with cell classification requirements.
 - 1. Product Certificates:
 - a. For recycled material content for recycled HDPE resin products.
 - b. For source for regional materials and distance from Project Site.

1.5 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Company specializing in manufacturing products specified in this Section with minimum three years' experience.
- B. Fabricators Qualifications: Company specializing in fabricating products specified in this Section with minimum three years 'experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's packaging; include installation instructions.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store HDPE piping according to manufacturer instructions.
- D. Protection:
 - 1. Protect materials from moisture and dust by storing them in clean, dry location remote from construction operations areas.
 - 2. Provide additional protection according to manufacturer instructions.
 - 3. Block individual and stockpiled pipe lengths to prevent moving.

1.7 FIELD CONDITIONS

- A. Minimum Conditions: Do not install when the temperature is below 32 degrees F.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Perform Work according to:
 - 1. The State of Ohio Department of Transportation standards.

2.2 HDPE DRAINAGE PIPE

- A. Manufacturers:
 - 1. Advanced Drainage Systems, Inc.
 - 2. Crumpler Plastic Pipe, Inc.
 - 3. JM Eagle; J-M Manufacturing Co., Inc.
 - 4. Lane Enterprises Corporation.
 - 5. Pacific Corrugated Pipe Company.
 - 6. Or approved Equal.

- B. Pipe:
 - 1. Comply with AASHTO M294.
 - 2. Interior: Smooth lined.
- C. Joints:
 - 1. Comply with AASHTO M294.
 - 2. Interior: Match pipe.

2.3 MATERIALS

A. HDPE Resin Material Properties:

- 1. Provide material for pipe production from an engineered compound of virgin and recycled HDPE.
- 2. Conform with the minimum requirements of cell classification 424420C (Environmental Stress Crack Resistance (ESCR) Test Condition B) for 4- through 10-inch diameters, and 435420C (ESCR Test Condition B) for 12- through 60-inch diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4 percent.
- 3. Verify compatibility, as determined by design engineer, with overall system, including structural, hydraulic, material, and installation requirements for a given application.

B. HDPE Drainage Piping:

- 1. Comply with ASTM F667/F667M for applications where diameters of 8 to 24 inches are required and where loading conditions permit.
- 2. Comply with AASHTO M294, ASTM F2306/F2306M, and ASTM F2881/F2881M for applications where diameters of 12 to 60 inches are required and where loading conditions permit.
- 3. Select joint requirements to match pipe standards.

C. Pipe Classifications:

- 1. Pipe offerings follow AASHTO M252 classification system for size, spacing, and placement of perforations.
 - a. Type S: Double-wall pipe with a smooth interior and corrugated exterior.
 - b. Type SP: Double-wall perforated pipe.
 - c. Type C: Single-wall pipe with a corrugated exterior and interior.
 - d. Type CP: Single-wall perforated pipe.
 - e. Class 1 Perforations: Subsurface drainage or combination storm and underdrain.
 - 1) Specify Class 2 perforations for fully perforated pipe used for subsurface drainage only.

D. Plastic Underground Pipe Markers:

- 1. Manufacturers:
 - a. Kolbi Pipe Marker Co.

- b. Marking Services, Inc.
 - c. Pipemarket.com; Brimar Industries, Inc.
 - d. Rhino Marking and Protection Systems.
 - e. Seton Identification Products; a Brady Corporation company.
 - f. Or approved equal.
2. Bury underground pipe marking tape over underground utility lines to warn excavators and to prevent damage, service interruption, and personal injury.
 3. Tapes are printed on colors approved by American Public Works Association (APWA) to meet or exceed industry standards.
 4. Provide 5-mil tape with aluminum backing to make it easy to find pipe underground using a nonferrous locator.
 5. 1,000-foot long rolls are available in 2-inch tape widths for maximum 12-inch depth; 3-inch tape widths for 12- to 18-inch depths; or 6-inch tape widths for maximum 24-inch depth.
 6. Message reads "Caution Buried Pipeline Below" in black lettering on a yellow background.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that trench cut is ready to receive Work of this Section.
- B. Verify that excavations, dimensions, and elevations are as indicated on Drawing.
- C. Examine subgrades and conditions for compliance with requirements for installation.
- D. Examine roughing-in of HDPE piping to verify locations of piping connections.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.
- B. Correct over-excavation with coarse aggregate.
- C. Remove large stones or other hard materials that could damage pipe or impede consistent backfilling or compaction.
- D. Protect and support existing storm drainage lines, utilities, and appurtenances.
- E. Utilities:
 1. Maintain profiles of utilities.
 2. Coordinate with other utilities to eliminate interference.
 3. Notify Architect/Engineer if crossing conflicts occur.

3.3 INSTALLATION OF BURIED PIPING SYSTEMS

- A. Verify connection size, location, and invert are as indicated on Drawings.
- B. Establish elevations of buried piping.
- C. Establish minimum separation from other services' piping according to the Drawings.
- D. Excavate pipe trench.
- E. Install pipe to elevation.
- F. Place bedding material at trench bottom to provide uniform bedding for piping and level bedding materials in one continuous layer not exceeding 4 inches compacted depth; compact to 95 percent maximum density.
- G. Install pipe on prepared bedding.
- H. Route pipe in straight line.

3.4 PROTECTION

- A. Protect pipe and aggregate cover from damage or displacement until backfilling operation is in progress.
- B. Cap open ends of piping during periods of Work stoppage.

END OF SECTION 330533.16