YORK & ASSOCIATES ENGINEERING, INC.

ADDENDUM NO. 1

PROPOSED STORM DRAINAGE CDBG PROJECT

CITY OF BAINBRIDGE

PROJECT # 2022-06

April 14, 2025

Bid Date: Thursday, 04/24/2025

Bid Time: 11:00 A.M.

Bid Location: Bainbridge City Purchasing, 1501 Pierce St, Bainbridge, GA 39817

I. CONTRACT DOCUMENTS

A. Submersible Pump Station, Section 02733, pages 3 and 5, to be replaced with attached revised pages changing 230 volt to **460V**.

B. Pump Station Electrical, Section 16001, Part 3.01 Electric Service, page 2 to be replaced with attached revised page changing the service voltage to 460V**,** and the Main circuit breaker shall be 400 ampere rating.

END OF ADDENDUM NO. 1

2.02 PUMPS, VALVES AND FITTINGS

A. Pumps

The pumps shall be submersible , non clog, sewage pump(s), capable of handling raw unscreened sewage without injurous damage during operation. The pump(s) shall be manufactured by ABS, Chicago, Fairbanks Morse, FLYGT, HOMA, KSB, Smith & Loveless, WILO, Yeomans or approved equivalent. Approved manufacturers means that these companies are well known reputable companies; the pumps provided by the approved manufacturers still have to meet these technical specifications.

Each pump shall be capable of the following minimum following performance points. The pump motor shall not be rated less than 3 phase, 460 volt, 60 Hz.

Flow (gpm)	TDH (Ft.)	RPM	(Min.) HP
1,000	64	1,740	30
-	-	-	-

B. Material

Areas of pump casing and volute which are exposed shall be constructed of ASTM 48, Class 30 gray cast iron or better. All nuts, bolts, washers and other fastening devices coming into contact with the sewage shall be constructed of minimum 304 stainless steel.

C. Internal Passages

All openings, internal passages, and internal recirculation ports shall be capable of passing 3" spherical solids. Internal screens or any internal devices that create a maintenance nuisance or interfere with priming and performance of the pump shall not be permitted. Upon request from the engineer, certified dimensional drawings indicating size and locations of the priming recirculation port or ports shall be submitted to the engineer prior to shipment.

D. Valves and Piping

Sizes of valves and piping shall be as follows:

Pump Discharge size (inch)	Discharge check valve (inch)	Discharge Plug valve (inch)
8	8	8
-	-	-

1. Discharge Lines

tandem set of seals shall operate in an oil chamber located just below the stator housing. This set shall contain one stationary ring and one positively driven rotation ring both of which shall be tungsten carbide or silicon carbide and function as an independent secondary barrier between the pumped liquid and the stator housing. The lower of the tandem set of seals function as the primary barrier between the pumped liquid and the stator housing. This set shall consist of a stationary ring and a positively driven rotating ring both of which shall be tungsten carbide or silicon carbide.

Each interface shall be held in contact by its own stainless steel spring system. The seals shall require neither maintenance nor adjustment, but shall be easily inspected and replaceable.

The pump shall be provided with an oil chamber for the shaft sealing system. The drain and inspection plug, with positive anti-leak seal, shall be easily accessible from the outside.

3. Shaft Bearings

The pump shaft shall supported by anti-friction bearings, designed for minimum 50,000 hours B-10 Life at the pump's Best Efficiency Point, and shall be factory pre-lubricated for life. The lower impeller-side bearing will be a double-row, deep groove ball bearing, axially retained, to sustain both axial and radial loads. The upper motor-end bearing is a single-row, deep groove ball bearing axially floatings, to sustain radial loads only.

F. Serviceability

The pump manufacturer shall demonstrate to the engineer's satisfaction, that due consideration has been given to reducing maintenance costs by incorporating the following features.

1. No special tools shall be required for replacement of any components within the pump.

G. Spare Parts

One spare impeller, wear ring, a set of O-rings, a set of upper and lower bearings, and a set of upper and lower mechanical seals shall be furnished for each pump.

2.03 DRIVE UNIT

A. Motors

Pump motor shall be of the sealed submersible type, with normal starting torque and low starting current characteristics, suitable for 3 phase, 60 hertz, 460 volt. AC electrical current. The unit shall be intrinsically safe as listed or approved by Factory Mutual or Underwriters Laboratories.

Motors shall not be overloaded at the design condition nor at any head in the operating range and shall be capable of operating under the following conditions:

1. 40 degrees C. Maximum ambient temperature.

2. 3300 feet maximum altitude.

E. Conduit shall be rigid galvanized steel, and shall bear the U.L. label. Conduit installed underground shall be coated with two coats of asphaltic paint and be buried not less than 18 inches below finish grade. Conduits shall be supported to meet code regulations.

F. Provide liquid-tight type flexible conduit for final connections to rotating or vibrating machinery or equipment.

G. Install Meyers-type conduit hubs for conduit connections to circuit breaker and controls equipment enclosures.

H. All wires and cables, where the size of the conductors is not otherwise noted, shall be of such size as to conform to the regulations of the current edition of the National Electrical Code.

I. The intent of this contract is to require an installation complete in every detail whether or not shown or covered by the drawings or specifications. Consequently, the contractor will be responsible for minor details or for any special construction which may be found necessary to properly furnish, install, adjust, test and place in successful and continuous operation the electrical system requirements contained herein and the cost of same shall be included in the cost of this item.

PART 3. EXECUTION

3.01 ELECTRIC SERVICE

A. Electric service to the new pumping station shall be arranged by the Contractor, with the utility company for the 60Hz service voltage of 460V, three-phase, 4W.The Contractor shall be responsible for all coordination with the utility company and all costs to furnish electrical service shall be paid by the Contractor as required by the utility company.

B. Main circuit breaker shall be 400 ampere rating. Main breakers shall be 10,000 AIC minimum rated devices furnished with NEMA-4 enclosure solid neutral, and ground lug; and U.L. listed for use as service equipment. Breaker box shall be installed on the power pole in accordance with the National Electrical Code.

C. Service entrance conductors shall be three #1 and one #8 (neutral) in 2 inch conduit.

D. Feeder conductors shall be three #1, one #8 (neutral) and one #8 (ground) in two inch conduit.

E. Arrange and coordinate metering requirements with service electric utility, and install in accordance with utility company’s requirements. Provide separate conduit and weatherhead for metering conductors if required by utility company.

F. Provide system and equipment grounding in accordance with National Electrical Code.