Parkson
Treating Water Right

Quotation

NUMBER: B06100387

DATE: April 12, 2019

TO: Thomas & Hutton
Attn: Mr. Fred Sororian, P.E.

REF.: Savannah, GA
Travis Field WRF
Specification Section 44 43 34-
Influent Drum Screen
Specification Section 44 43 34.1-
Screenings Washer/Compactor

Parkson Corporation is pleased to provide a quotation for the following equipment. The quotation is based upon receipt of Specification Sections 44 43 34 and 44 43 34.1 as well as Plan Drawings M2.0A, M2.0B, M2.1, M2.2 and M2.3. If other specification sections or plan drawings necessitate changes to this quotation, Parkson reserves the right to modify the price listed.

ITEM 1 EQUIPMENT

Three (3) Rotoshear® PF EZ Care internally-fed rotary drum screens model RDS60120DVT

1.A Basis of Design: (Influent Description)

Application:	Raw sewage screening
Peak flow:	7.5 MGD peak flow per unit

Spray wash pressure at the unit must be 80 psi minimum

1.B Equipment Description:

1. Screen cylinder with panels constructed of type 316 stainless steel with 2 mm perforated screen openings.
2. Base frame fabricated with type 316 stainless steel structural members.
3. Headbox assembly fabricated of 10 gauge type 316 stainless steel, with a 24.00" O. D. inlet pipe stub with type 316 stainless steel flanged connection.
4. Drain pan with legs fabricated of 12 gauge type 316 stainless steel, with a 30.00" O. D. bottom outlet pipe stub with type 316 stainless steel flanged connection.
5. Splash guards constructed of 16 gauge type 316 stainless steel.
6. Cover hood to enclose the top of the screen assembly, fabricated of 14 gauge type 316 stainless steel.
7. Discharge end enclosure fabricated of 12 gauge type 316 stainless steel, with chute extension to feed into the screenings wash press inlet chute.
8. Trunnion wheels (4 per unit) made of 8" diameter UHMW polyethylene, fitted with sealed bearings and mounted on stainless steel shafts.
9. Internal and external spray systems made of type 316 stainless steel with 1-1/2" NPT connections.
10. Brass body solenoid valves (2 per unit) in a NEMA 4X enclosure for control of the spray wash systems.
11. Cylinder stabilizing assembly mounted at the discharge end of the cylinder, constructed of type 316 stainless steel bracketing and plastimeric guide.
12. Drive assembly consisting of a 2 HP TEFC gearmotor (230/460/3/60), plastic drive and driven sprockets, and NH78 plastic drive chain.
13. Safety interlock switching mounted on splash guards, rated NEMA 4X.
14. E-stop pushbutton housed in a NEMA 4X polycarbonate enclosure.
15. Zero speed switch in a NEMA 4X enclosure.

16. Main control panel, quantity of one (1), furnished in a NEMA 4X type 316 stainless steel enclosure, housing controls for three (3) rotary drum screens and three (3) wash press units, with space inside the panel for the future addition of controls for a fourth rotary drum screen and wash press. To include motor starters, control transformer, main disconnect, programmable relay, and all other necessary switches, lights, and pushbuttons for a complete operating system.

Three (3) Aqua Wash Press units model AWP8-2

1.C Equipment Description:

1. The Aqua Wash Press units will consist of a spiral, trough, support legs, wash zone, trough flush spray, press zone, drive system and controls.
2. The units will be designed to receive and wash screenings, then reduce the volume and water content by means of a pressing zone.
3. The press will have an inlet capacity of 35 cu.ft./hour, handling wet screenings with an approximate dry weight of not less than 8% solids.
4. The shafted spiral will be constructed of carbon steel, with an O.D. of 8" and having 0.63 inch thick flights. A brush will be bolted to the spiral in the inlet area to scour the perforated sheet.
5. The trough will be fabricated of type 316 stainless steel, having 0.12 inch diameter perforations, chamfered on the outside. It will receive free liquid from the washed solids and direct the flow to a 4 inch O.D. drain tube. A stand will be provided to elevate the unit as shown on the drawings.
6. The inlet area, 11 inches wide by 27 inches in length, will receive incoming materials.
7. The wash zone will include a spray wash system to wash organic residue from the screenings.
8. The press will include a spray wash system to flush organic residue trapped in the trough.
9. The unit's drive system will consist of a motor, gear reducer and drive shaft. The motor will be 3 HP TEFC, 1800 RPM, 230/460 volt, 3 Phase, 60 Hz. The gear reducer is a shaft-mounted worm type gear reducer driven by a direct-coupled motor. The reducer will have a cast iron housing and output speed of 14 RPM and the drive shaft will be direct coupled to the spiral.
10. In addition to the drive motor, the following electrical devices will be furnished:
    -Two (2) 120 volt, single phase, 60 Hz brass body solenoid valves housed in NEMA 4X enclosures.
    - E-stop pushbutton housed in a NEMA 4X polycarbonate enclosure.
11. Inlet chute of 12 gauge type 316 stainless steel construction, to receive screenings from the screen discharge chute.
12. Discharge piping with support of 14 gauge type 316 stainless steel, to direct the washed and compacted screenings to the required location.
13. Screenings bagger attachment.

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ITEM 2 SERVICES

2.A Drawings and Installation, Operation and Maintenance (IO&M) Manuals:

1. Approval drawings: 6 prints included
2. Certified drawings: 6 prints included
3. IO&M manuals: 6 included

2.B Start-Up Assistance:

Parkson will furnish a factory representative for a total of four (4) days during one (1) trip to the jobsite to assist in installation inspection, start-up supervision, and operator training. Dates of service to be scheduled upon Purchaser's written request. Total is inclusive of all products listed above.

2.C Mechanical Warranty:

Per Section XVI of the Standard Conditions of Sale, with the period not to exceed 18 months from delivery of equipment.

PURCHASE PRICE:

All of the above for ..... $761,127.00.
F.O.B. shipping point, freight allowed to jobsite, taxes excluded.

VALIDITY:

Purchase Price is valid for 60 days from quotation date, for shipment of equipment within the timetable stated below.

PAYMENT TERMS:

90% net 30 days after shipment, 10% not to exceed 120 days after delivery.

TIMETABLE GUIDELINE:

Within ten (10) business days of receiving a written Purchase Order in Parkson's office, if necessary, Parkson will submit a written Request for Additional Information requesting items including, but not limited to, full-scale drawings, specification sections, amendments and other documents necessary for Parkson to begin work on this Project. No work can be done on this Project until all Additional Information is received by Parkson, thus beginning the Submittal Phase. If you do not receive such a Request for Additional Information within the stated ten (10) business days, then the Submittal Phase will begin on the eleventh (11th) business day following receipt of the written Purchase Order in Parkson's office. The Shipment Phase is thereafter contingent upon your final approval of all submitted Approval Drawings. Once said final approval is received in Parkson's offices, the Shipment Phase will begin.

Submittal Phase: Approval drawings will be submitted six (6) weeks from receipt of all requested Additional Information if necessary, or if not necessary, from the eleventh (11th) business day following receipt of a written Purchase Order in Parkson's office.

Shipment Phase: Twenty (20) weeks following receipt of final approval of all submitted Approval Drawings in Parkson's office.

If the Submittal Phase is waived, the Shipment Phase will begin on receipt of all requested Additional Information if necessary, or if not necessary, on the eleventh (11th) business day following receipt of a written Purchase Order in Parkson's offices.

Dates are subject to confirmation upon receipt of written Purchase Order.

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TERMS AND CONDITIONS:

This Quotation is governed by and subject to Parkson's Standard Conditions of Sale, which are incorporated by reference and accessible at: *http://www.parkson.com/files/documents/Sales-conditions.pdf*.

BUYER/OWNER RESPONSIBILITY:

- Spare parts.
- Anchor bolts.
- Washwater booster pump.
- Concrete or steel support structure or pads.
- Local disconnects or junction boxes.
- Control panel mounting.
- Spray wash water connection and piping.
- Heat tracing or power for heat tracing of spray wash piping.
- Drain piping.
- Pressure gauges.
- Isolation and pressure regulating valves.
- Gate valves, check valves, butterfly valves, ball valves, Y-strainers.
- Portable steam cleaner.
- Screenings dumpster.
- Lubricants.
- Shop or field painting.
- Influent and effluent connection: Units are provided with loose flanged connections. Piping should be supported independent of the unit.
- Unloading, uncrating, installation and installation supervision. Installation will, at minimum, require a forklift and possibly a crane/hoist.
- Readiness of the equipment before requesting start-up service. Non-readiness may incur additional charges.
- Electrical connection and interconnecting wiring (including any of the following: E-Stop buttons, solenoid valves, interlock switches, motors, main control panel); wiring and conduit from each unit-mounted electrical device to a terminal box or control panel.
- Interconnecting piping.
- Piping connections, access platforms, ladders, gratings and railings unless stated otherwise.
- Determining the compatibility of equipment materials of construction and process conditions (air and water) is the responsibility of the owner and/or consulting engineer. Note that even relatively low levels of H2S and/or Chlorides can cause corrosion of 304SS and thus it is important for the owner and/or consulting engineer to pay particular attention to materials suitability for the specific water/wastewater in which the equipment will be operated. Higher grades of stainless steel like 316 are options.
- Any other auxiliary equipment or service not detailed above.

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Please return one signed copy of this Quotation, or your Purchase Order, to Parkson Corporation at the address below. Refer to this Quotation, date, and related correspondence.

Issued By:

PARKSON CORPORATION
562 Bunker Court
Vernon Hills, IL 60061

Joseph G. Nagel

Name: Joseph G. Nagel
Title: Municipal Sales
Date: April 22, 2019

Accepted By: (Herein called the Buyer)

Name
Title:
Date: