#### VILLAGE OF GILBERTS

#### **RESOLUTION 21-2022**

# A RESOLUTION AUTHORIZING APPROVAL OF THE PURCHASE OF A FSM PERFORATED FILTER SCREEN AND SCREENINGS WASH PRESS FROM SAVECO NORTH AMERICA, INC. IN AN AMOUNT NOT TO EXCEED \$249,280

WHEREAS, the Village of Gilberts ("Village") operates and maintains a wastewater treatment system; and

WHEREAS, monies were included in the FY2023 Budget utilizing ARPA and Water Fund capital funds for the purchase and installation of a mechanical bar screen and was press at the wastewater treatment plant; and

WHEREAS, the FSM system is proprietary to SAVECO North America, Inc.

# THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF GILBERTS, ILLINOIS, as follows:

Section 1. Recitals. The recitals set forth above are hereby incorporated into and made a part of this Resolution as though set forth in this Section 1.

- <u>Section 2</u>. <u>Approval; Authorization</u>. The Village Board of Trustees hereby authorizes the Village Administrator to execute an agreement and other necessary documents with SAVECO North America, Inc. for the purchase of a FSM perforated filter screen and screenings wash press in an amount not to exceed \$249,280.
- <u>Section 3.</u> <u>Waiver of Competitive Bidding.</u> To the extent any competitive bidding requirements apply to the agreements with SAVECO North American., such competitive bidding requirements are hereby waived pursuant to Section 8-9-1 of the Illinois Municipal Code (65 ILCS 5/8-9-1).
- <u>Section 4.</u> <u>Effective Date.</u> This Resolution shall be in full force and effect after its approval in the manner provided by law.

PASSED BY VOI County, Illinois, this	TE OF THE B	BOARD OF TH 2021.	RUSTEES of the	e Village of C	ilberts, Kane
	Ayes	Nays	Absent	Abstain	
Trustee Dave LeClercq Trustee Dan Corbett			; <del></del>		
					Page 1 of 2

Trustee Justin Redfield
Trustee Jeanne Allen
Trustee Lou Hacker
Trustee Brandon Coats
President Guy Zambetti

APPROVED THIS 3 DAY OF May, 2021

Village President, Guy Zambetti

Village President, Guy Zambetti

Courtney Baker, Village Clerk

Resolution No. 21-2022

# Project:

Gilberts, IL

### **Equipment:**

FSM Perforated Filter Screen Model FRSIII 400 x 75/6 FSM Screenings Wash Press Model SPW 200-700

# Represented By:

Drydon Equipment, Inc.

George Argiris - Mitch Hameister

Phone: 630-814-9150 - 847-204-7406

Email: gargiris@drydon.com

# Regional Sales Manager:

SAVÉCO North America, Inc.

Formerly Enviro-Care

Matt Bodwell

Phone: 224-302-0326

Email: mbodwell@savecowaterna.com

Project No.: WEC218377

April 26, 2022





**ITEM: "A"** - One (1) FSM Perforated Filter Screen Model FRSIII 400 x 75/6



#### BASIS OF DESIGN (EACH)

Application: Municipal Wastewater

Peak Flow: 2.5 MGD Screen Perforated Opening: 6 mm

Angle of Screen: 75 degrees from horizontal

Channel Width: 36 inches
Channel Depth: 4.5 feet

Downstream Water Level: 12.0 inches @ Peak flow

Headloss: 11.3 inches @ Peak flow with 0% blinding

15.3 inches @ Peak flow with 30% blinding

Discharge Height: ~3.9 feet (above top of channel)

Wash Water: 10 gpm at 40 - 60 psi

SCR (Screenings Capture Ratio): 85%

#### PERFORATED PANEL TRAVELING BELT SCREEN (EACH)

- Fully automatic self-cleaning FSM screen complete with all appurtenances 304 stainless steel.
- Main frame constructed from type 304 stainless steel.
- Pivoting flanged baseplate for mounting screen assembly to top of channel and to allow screen to pivot out of channel, from type 304 stainless steel.
- Flanged baseplate for mounting screen assembly to top of channel 304 stainless steel.
- Screen support rails from UHMW-PE provided front and back on each side of frame.
- Replaceable UHMW-PE seals mounted to each side of frame.



- Replaceable bottom seals Buna-N rubber and triple layer polyester brush with 304 stainless steel adjustable holder.
- Perforated filter screen elements with 6 mm perforations from 3 mm thick (12 gauge) type 304 stainless steel, bolted to drive chain with 304 stainless steel bolt ny-lock nuts and washers.
- Screen drive chain from 304 stainless steel with specially hardened bushings, and pins from stainless steel.
- Stainless steel chain and screen elements driven by two (2) drive shaft mounted stainless steel sprockets with minimum thickness of 0.75 inches.
- Lower rotating guide sprockets from type 304 stainless steel, wear areas hardened, with life seal bushings, and a stub shaft from type 316 stainless steel.
- Drive tensioners 304 stainless steel.
- Drive system to include 1.0 HP 1760 rpm TEFC-XP (Class I, Division 1, Group D) geardrive motor suitable for 460/3/60 electrical supply.
- Nylon screen cleaning brush, automatic self-adjusting, with stainless steel drive shaft and 2.0 HP 1760 rpm TEFC-XP (Class I, Division 1, Group D) geared motor suitable for 460/3/60 electrical.
- Rotary Deflector from type 304 stainless steel on back side of screen auxiliary driven by screen drive.
- Internal spray system to clean internal surfaces of screen panel from stainless steel with PVDF nozzles, complete with manual ball valve and solenoid valve.
- Removable 304 stainless steel odor control enclosures/covers.
- Screenings discharge chute with hinged hood 304 stainless steel.
- Channel baffle to narrow channel from 36 inches to 24 inches, from type 304 stainless steel.
- Anchor bolts 304 stainless steel.
- Fasteners 304 stainless steel.
- Shop surface preparation, stainless steel full dip passivation.

#### CONTROL PANEL AND INSTRUMENTATION (EACH)

- One (1) NEMA 4X type 304 stainless steel wall mount main control panel suitable for 480/3/60 electrical supply. Control panel shall contain the following control devices for operation of the filter screen.
  - 1. Main disconnect with through door interlock handle.
  - 2. Control transformer 480/120.
  - 3. Branch circuit protection.
  - 4. Screen and brush motor starters (IEC) with overloads.
  - 5. Load monitor for screen motor overtorque/overload protection.
  - 6. Emergency stop pushbutton.
  - 7. HOA switch for each motor.
  - 8. Open-Close-Auto switch for screen wash water solenoid valve.
  - 9. Hour meter for each motor.
  - 10. Run indicating lights.



- 11. Alarm lights indicating overcurrent and starter overload.
- 12. Alarm reset pushbutton.
- 13. Programmable control relay for screen control logic functions.
- 14. Run and alarm auxiliary contacts.
- 15. Barrier relay for safety microswitch.
- 16. UL Label.
- One (1) NEMA 7 Emergency Stop pushbutton station.
- One (1) safety microswitch suitable for area classification, mounted to the hinged hood.
- One (1) NEMA 7 120 VAC, brass body wash water solenoid valve.
- One (1) Ultrasonic Differential Level Controller: A 120V differential level controller shall be provided in a windowed NEMA 4X polycarbonate enclosure suitable for wall mounting, to receive and interpret a 4-20mA scaled signal from an upstream and downstream transducer. The controller shall have 6 internal relays and provide an LCD display.
- Two (2) ultrasonic level transducers shall be provided with type 304 stainless steel mounting brackets and expansion anchors. Each sensor shall have an ETFE housing with an integral sensor to provide compensation for acoustic variations due to temperature. Each sensor shall have a range of 1-33 ft and be supplied with a 33 ft integral cable. Sensor shall be suitable for installation in a Class 1, Division I, Group D area.

#### **SPARE PARTS (TOTAL)**

None.

#### FIELD SERVICE (TOTAL)

• Site service of one (1) trip for a total of two (2) days for installation inspection, startup and operator training.

#### CLARIFICATIONS/COMMENTS

None.

#### **OPTIONAL ITEMS**

None.

NOTE: ANY ITEM NOT LISTED ABOVE TO BE FURNISHED BY OTHERS



#### **EXCLUSIONS**

Taxes, electrical wiring, conduit or electrical equipment, piping, valves, or fittings, shimming material, lubricating oil or grease, shop or field painting, field welding, erection, hoist or lifting apparatus, detail shop fabrication drawings, performance testing, unloading, storage, concrete work, civil design, grating, platforms, stairs, hand railing, dumpster (except as specifically noted).

This p	proposal section h	as been	reviewed f	for accuracy	$^{\prime}$ and is a	approved :	for issue:
Ву:	Beth Emmelot	Date: _/	April 26, 20	)22	_		



ITEM: "B" - One (1) FSM Screenings Wash Press Model SPW 200-700



#### BASIS OF DESIGN (EACH)

Application: Municipal Headworks

Screenings Capacity: 70 ft3/hr

Inlet Opening: 700 mm (27.6 inches) Screw Diameter: 200 mm (7.87 inches)

Discharged Material Dry Solids: >35%Volume Reduction: 60 - 85%Weight Reduction: 60 - 85%

Fecal Reduction: 90% (<20 mg/g BOD5) Wash Water: 11 gpm @ 20-40 psi

#### **SCREENINGS WASH PRESS (EACH)**

- Screenings wash press from type 304 stainless steel.
- Inlet hopper and spray header 304 stainless steel.
- Screw auger with torque tube and nylon brushes fitted to screw flights to clean drainage trough perforations shaft from high tensile steel with flights from Hardox 400.
- Axial thrust bearing with stainless steel body.
- Wear bars from Hardox® 400.
- 6 mm perforated curved drainage section from type 304 stainless steel.
- Drainage collection pan with 6 inch diameter outlet connection and 1 inch NPT flush water connection from type 304 stainless steel.
- Wash water piping from type 304 stainless steel.
- Inlet and outlet flanges from type 304 stainless steel.
- Discharge piping with 45 degree elbows from type 304 stainless steel. Piping will be extended to discharge at Elevation 897.00.
- Discharge piping to have a manually controlled back pressure device from type 304 stainless steel with integral access box and bolted hatch.



- Wash press electric drive motor 3.0 HP TEFC-XP (Class I, Division 1, Group D) 1760 rpm suitable for 460/3/60 supply with gear reducer mounted directly onto auger drive shaft.
- Support legs, stand and frame from type 304 stainless steel.
- Anchor bolts from type 304 stainless steel.
- Fasteners from type 304 stainless steel.
- Shop surface preparation, stainless steel full dip passivation and painting as required.

#### CONTINUOUS BAGGER ASSEMBLY (EACH)

• Continuous Bagger Assembly to collect dewatered screenings at discharge, including a 304 stainless steel transition piece and refillable bag cassette.

#### CONTROL PANEL AND INSTRUMENTATION (EACH)

- The following control devices will be added to the screen control panel for operation of the screenings wash press.
  - 1. Branch circuit protection.
  - 2. Wash press motor starter (IEC), reversing with overloads.
  - 3. Load monitor for wash press motor overtorque/overload protection.
  - 4. HOA switch for motor.
  - 5. Open-Close-Auto switch for wash press wash water solenoid valve.
  - 6. Hour meter for each motor.
  - 7. Run indicating lights.
  - 8. Alarm lights indicating overcurrent and starter overload.
  - 9. Run and alarm auxiliary contacts.
- One (1) NEMA 7 brass body wash water solenoid valve.

#### **SPARE PARTS (TOTAL)**

None.

#### FIELD SERVICE (TOTAL)

Provided with screen start-up services.

#### **CLARIFICATIONS/COMMENTS**

None.

#### **OPTIONAL ITEMS**

None.

#### NOTE: ANY ITEM NOT LISTED ABOVE TO BE FURNISHED BY OTHERS.



#### **EXCLUSIONS**

Taxes, electrical wiring, conduit or electrical equipment, piping, valves, or fittings, shimming material, lubricating oil or grease, shop or field painting, field welding, erection, hoist or lifting apparatus, detail shop fabrication drawings, performance testing, unloading, storage, concrete work, civil design, grating, platforms, stairs, hand railing, dumpster (except as specifically noted).

This	proposal section h	as been	reviewed	for a	ccuracy	and is	approved	for	issue:
Bv:	Beth Emmelot	Date: /	April 26, 20	)22					



ltem	Equipment	<b>Budget Price</b>
Α	One (1) FSM Perforated Filter Screen Model FRSIII 400 x 75/6	\$169,900
В	One (1) FSM Screenings Wash Press Model SPW 200-700	\$79,380

#### Validity:

Prices are valid for a period of 30 days from the date of this proposal.

#### Warranty Statement and Term:

SAVÉCO North America, Inc. warrants the supplied equipment to the original end user against defects in workmanship or material under normal use and service in compliance with the original design specifications and the maintenance requirements and instructions as found in the Operations & Maintenance Manual. All SAVÉCO North America supplied equipment is warranted for 12 months from date of start-up or 18 months from date of shipment, whichever occurs first.

#### Warranty Exclusions:

This warranty does not cover costs for standard and/or scheduled maintenance performed, nor does it cover consumables and SAVÉCO North America parts that, by virtue of their operation, require replacement through normal wear (aka: Wear Parts), unless a defect in material or workmanship can be determined by SAVÉCO North America. Wear parts are defined as brushes, rollers, spray nozzles, drum seals and other items specifically identified in the Operations & Maintenance Manual.

#### Warranty Coverage:

SAVÉCO North America's liability is limited to the supply or repair of defective parts returned, freight prepaid by buyer to a location specified by SAVÉCO North America. Repaired or replacement parts will be shipped to buyer prepaid via standard ground freight. Express or expedited shipments will be at the expense of the buyer.

#### **Exclusions and Exceptions:**

This Warranty excludes damage or wear to equipment caused by misapplication of product, improper maintenance, accident, abuse, unauthorized alteration or repair, Acts of God, or installation or operation that is non-compliant with SAVÉCO North America installation and operations instructions.

#### Limited Liability:

SAVÉCO North America shall not under any circumstances be liable for any incidental or consequential damages arising from loss, damage to property, personal injury or other damage or losses owing to the failure of SAVÉCO North America's equipment. The liability of SAVÉCO North America, Inc. is limited as set forth above within the time period set forth above.



Term: 15% with Submittal Approval

80% Net 30 Days after Shipment

5% Net 30 days after Startup. Startup not to exceed 180 days from equipment delivery.

Taxes: No sales or use taxes have been included in our pricing.

**Freight:** Prices quoted are F.O. B. shipping point with freight allowed to a readily accessible location nearest jobsite. Any claims for damage or loss in shipment to be initiated by purchaser.

**Submittals:** Full submittals will be supplied approximately **4 to 6 weeks** after receipt and acceptance of purchase order at the SAVÉCO North America offices.

**Shipment:** Shipment time is approximately **20 to 22 weeks** after receipt of approved submittal is received at the SAVÉCO North America offices. Under no circumstances will verbal approval be accepted.

**Additional Field Service:** This service may be scheduled at \$1,250.00 per day plus expenses or is available through a yearly service contract.

Material of Construction: SAVÉCO North America is providing the equipment from the type of material specified for this project. If from 304L stainless steel the concentration of chloride and hydrogen sulfide (H2S) in the equipment operating environment shall be kept below the following values:

- Chloride <200 mg/L</li>
- Hydrogen Sulfide (H2S) <6ppm

If not already done so, SAVÉCO North America can provide the equipment from 316L stainless steel for a price adder for environments that exceed the values noted above.