



City of Grand Island

Tuesday, September 22, 2015

Council Session

Item G-19

#2015-263 - Approving Designation of Sole Source for Return Activated Sludge (RAS) Pumps at the Waste Water Treatment Plant

Staff Contact: John Collins, P.E. - Public Works Director

Council Agenda Memo

From: Marvin Strong PE, Waste Water Treatment Plant Engineer

Meeting: September 22, 2015

Subject: Approving Designation of Sole Source for Return Activated Sludge (RAS) Pumps at the Waste Water Treatment Plant

Presenter(s): John Collins PE, Public Works Director

Background

The existing Return Activated Sludge (RAS) pumps for Final Clarifiers #1 & #2 are worn out and limit our operational flexibility because they don't have sufficient capacity. The existing RAS Pumps are manufactured by Fairbanks Morse and have performed well for the last nineteen years. The RAS pumps return sludge collected in the final clarifiers to the head of the aeration tanks.

Discussion

Black and Veatch indicates Fairbanks Morse is one of two known manufacturers of Vertical Turbine Solids Handling (VTSH) pumps and recommends we make Fairbanks Morse the sole source provider of VTSH pumps because they are the market leader and the selected pump matches the existing pump footprint, significantly lowering the installation cost. Pentair/Fairbanks-Nijhuis has the secured sales territory for Grand Island.

The new pumps have more capacity than the old pumps and will increase our operational flexibility

The Waste Water Treatment Plant is seeking approval to purchase the following RAS pumps from Fairbanks Morse Pumps, in the total amount of \$198,697.00.

Pump Type	Unit Cost	Quantity	Total Cost
10" VTSH / 20 HP @ 1200RPM	\$66,567.00	2	\$133,134.00
10" VTSH / 40HP @ 1800RPM	\$65,563.00	1	\$65,563.00

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council approve the Return Activated Sludge (RAS) pumps purchase from Pentair/Fairbanks-Nijhuis of Omaha, Nebraska in the total amount of \$198,697.00, as well as deeming them sole source provide for such pumps.

Sample Motion

Move to approve the resolution.



August 20, 2015

City of Grand Island
3013 E. Swift Road
Grand Island, NE 68801

Attn: Jue Zhoe

Project: VTSH / RAS Pumps

Dear Ms. Zhoe,

We are pleased to propose the following equipment. Pumps proposed are dimensionally equivalent and of the same materials as previously supplied with exception of a couple items listed under Included below.

RATED CONDITION: 2050GPM @ 30' TDH

Quantity Two (2) - Fairbanks Morse model 10" VTSH (Vertical Turbines Solids Handling Pumps) standard fitted complete with cast iron bowl with flanged suction, 316 stainless steel impeller, stainless steel wear rings, 10" flanged column (5FT section maximum), steel enclosed lineshafting, 10" fabricated above ground steel discharge with "Quadra Pod" construction for variable speed with 10" 150lb discharge flange..

- Quantity Two (2) - 20HP @ 1200RPM premium efficient, inverter duty vertical hollow shaft motors complete with WP-1 enclosure, insulated thrust bearing, grounding ring, space heater, steady bushing, non-reverse ratchet rated for 3/60/460V.

One (1) lot of spare parts including:

- o One (1) set of applicable gaskets
- o One (1) complete set of lineshaft bearings
- o One (1) complete set of bowl bearings
- o One (1) complete set of wear rings

RATED CONDITION: 2800GPM @ 40' TDH

- Quantity One (1) - Fairbanks Morse model 10" VTSH (Vertical Turbines Solids Handling Pumps) standard fitted complete with cast iron bowl with flanged suction, 316 stainless steel impeller, stainless steel wear rings, 10" flanged column (5FT section maximum), steel enclosed lineshafting, 10" fabricated above ground steel discharge with "Quadra Pod" construction for variable speed with 10" 150lb discharge flange..

Quantity One (1) - 40HP @ 1800RPM premium efficient, inverter duty vertical hollow shaft motors complete with WP-1 enclosure, insulated thrust bearing, grounding ring, space heater, steady bushing, non-reverse ratchet rated for 3/60/460V.

One (1) lot of spare parts including:

- o One (1) set of applicable gaskets
- o One (1) complete set of lineshaft bearings
- o One (1) complete set of bowl bearings
- o One (1) complete set of wear rings



Included:

- Pump bowl assemblies will receive a certified non-witness factory performance test with factory calibrated dynamometer,
- Discharge heads and pump bowl assemblies will receive a non-witness factory hydrostatic test.
- Each pump will be provided with a Chesterton 442 split mechanical seal in lieu of packing originally provided.
- Each pump will be provided with bronze backed rubber bearing in lieu of all bronze originally provided.
- Each pump will be provided with a thermal flow meter/switch for the seal water. All associated piping, fittings and installation by others.
- Equipment will be designed and constructed not to exceed latest ANSI/HI standards.
- Equipment will be supplied with standard coatings.
- Submittals, instruction and maintenance manuals.
- Supervisory, start-up and instructional services and field testing by Bert Gurney..

Not Included:

Variable Frequency Drive, MCC or related equipment, instrument and controls, sole plates, hydrocones, level sensors, seal flush piping, discharge fittings, piping, valves, pressure gauges, anchor bolts, structural piers or supports, tie rods, templates, lubricants, special tools (none required), tool chest, shims, concrete, bearing or metal supports, mechanical installation or removal, alignment, loading, unloading, storage, field testing or vibration testing.

Total Price FOB Factory KC, KS with freight allowed to jobsite.....\$198,697.00

Individual Breakouts:

- 10" VTSH / 20HP @ 1200RPM, \$66,567.00 EACH or \$133,134 for quantity of two (2) \$133,134.00 total.
- 10" VTSH / 40HP @ 1800RPM, \$65,563.00 EACH

Prices are firm 90 days from the date of this proposal and based all conditions herein

Prices are based on Fairbanks Nijhuis standard terms and conditions attached (KC585) or as mutually agreed. Taxes, duties or special monies have not been included in this proposal.

Warranty is based as stated in KC585.

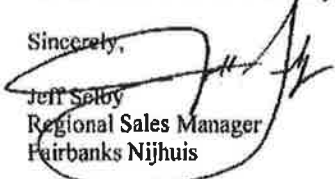
No consideration has been given within this proposal or pricing herein to damages or delivery delay clauses of any kind.

Submittals will be made available 10-12 weeks after receipt of purchase order.

Equipment will be ready for shipment 22-24 weeks after receipt of approved submittals and written release for all equipment detailed above.

Please free to contact us for any questions pertaining to the proposal.

Sincerely,



Jeff Selby
Regional Sales Manager
Fairbanks Nijhuis

Encl: Pentair Flow and Filtration Terms of Sale

Cc: Chris Johnson / Bert Gurney
Bill Biron / DXP



BLACK & VEATCH CORPORATION
8400 WARD PARKWAY, KANSAS CITY, MO 64114
1-913-458-3003 | WHITENW@BV.COM

September 1, 2015

Grand Island, NE
Grand Island WWTP
Headworks Improvements Project

B&V Project 175144
B&V File 98.0000

Ms. Jue Zhao
WWTP Operations Engineer
3013 East Swift Road
Grand Island, NE 68801

Return Activated Sludge Pumps Replacement

Dear Ms. Zhao,

The purpose of this letter is to provide our reasoning for recommending sole-sourcing Fairbanks Morse for replacement of the Return Activated Sludge Pumps. First, the existing pump installation has Fairbanks Morse pumps that have performed well for about twenty years. The physical pumping units will be replaced with essentially identical units to those currently installed. This will reduce anchoring, piping and electrical modifications that are planned to be completed by WWTP staff. Second, the pumps are Vertical Turbine Solids Handling (VTSH) pumps that are not currently available from many manufacturers. Black & Veatch is aware of only one other manufacturer and at this time recommends Fairbanks Morse be sole-sourced for any VTSH installation because they are the market leader.

If you have any questions or comments, feel free to call me at (913) 458-3003 or Gary Schnettgoecke at (913) 458-6558.

Very truly yours,
BLACK & VEATCH CORPORATION

Nathan White
Engineering Manager

cc: Marvin Strong, City of Grand Island
Gary Schnettgoecke, B&V
Derek Cambridge, B&V



September 3, 2015

Ms. Jue Zhao
City of Grand Island WWTP
3013 E Swift Road
Grand Island, NE 68801

Reference: RAS Pump Replacement
Grand Island, Nebraska

Dear Jue,

This letter is a follow up to discussions between Pentair/Fairbanks-Nijhuis and Black and Veatch regarding replacement of the RAS pumps at the Grand Island Wastewater Treatment Facility.

Gurney has been the exclusive distributor for Pentair/Fairbanks-Nijhuis for over 35 years and supplied numerous pumps and services to the City of Grand Island. In most cases, we function as a distributor where we purchase the pumps, parts or services and re-sell to the City.

Our agreement with Pentair/Fairbanks-Nijhuis also allows us to function as an agent in certain circumstances. In this case, there are multiple manufacturers' representatives involved since the engineering work is out of our territory as well as the nature of the product involved make it necessary for the contract to be directly between the City and Pentair/Fairbanks Nijhuis. This arrangement still provides compensation for Gurney and Associates. We will also be directly involved in the commissioning and start-up of the new pumping units.

Please feel free to contact us with any questions.

Cordially yours,
GURNEY & ASSOCIATES

Chris Johnson

cc: Jeff Selby-Pentair/Fairbanks-Nijhuis/Nathan White-Black and Veatch

(402) 551-7995 4428 SOUTH 108th STREET OMAHA, NE 68137 FAX (402) 553-5879

RESOLUTION 2015-263

WHEREAS, with the improvements at the Waste Water Treatment Plant it is necessary to upgrade the Return Activated Sludge (RAS) pumps; and

WHEREAS, such pumps are currently Fairbanks Morse pumps; and

WHEREAS, it is recommended that Fairbanks Morse pumps continue to be used as they have performed well and would not require pipe modifications to replace; and

WHEREAS, it is requested the following pumps be approved for purchase and Pentair/Fairbanks-Nijhuis be deemed sole source provider for such pumps as they represent the secured sales territory for Grand Island.

Pump Type	Unit Cost	Quantity	Total Cost
10" VTSH / 20 HP @ 1200RPM	\$66,567.00	2	\$133,134.00
10" VTSH / 40HP @ 1800RPM	\$65,563.00	1	\$65,563.00

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the purchase of the above noted pumps, in the total amount of \$198,697.00 from Pentair/Fairbanks-Nijhuis of Omaha, Nebraska is hereby approved.

BE IT FURTHER RESOLVED, that Pentair/Fairbank-Nijhuis is hereby designated as the sole source provider for the Return Activated Sludge (RAS) pumps at the Waste Water Treatment Plant.

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Adopted by the City Council of the City of Grand Island, Nebraska, September 22, 2015.

Jeremy L. Jensen, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form ✕ _____
September 18, 2015 ✕ City Attorney