

STATE OF LOUISIANA **DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT**

P.O. Box 94245

Baton Rouge, Louisiana 70804-9245

www.dotd.la.gov {put your office/section's telephone number here}



SECRETARY

May 16, 2008

STATE PROJECT NO. 065-30-0041 HOUMA TUNNEL MODIFICATIONS **TERREBONNE PARISH** ADDENDUM NO. 1

Gentlemen:

Attached are pages F-88, F-89 and F-96, REVISED MAY 16, 2008, of the construction proposal on the captioned project for which bids will be received on WEDNESDAY, MAY 28, 2005.

The pages were revised to allow for prior approval of a pump. "Yeoman's Pump Co." is considered an approved manufacturer with respect to the requirements specified in Section 15447 - Tunnel Centrifugal Drainage Pumps and Section 15448 - Tunnel Submersible Drainage Pumps, provided that the proposed equipment meets or exceeds all performance requirements of the Contract Documents and Specifications. The contractor shall bear any and all cost associated with any modifications required to make the proposed equipment fit within the allowable spaces and work with the existing structure.

Please substitute these revised pages for the ones previously furnished to you and bid accordingly.

Very Truly Yours,

Kevin J. Reed, P.E. Maintenance Engineer

Bridge Maintenance Section

Attachments

Paul Lambert, P.E. (District 02) pc:

Keith Angelette, P.E. (District 02)

FOR INFORMATION ONLY

6.	Max. NPSHR @ Run out	23 feet
7.	Min. Efficiency @Run out	70%
8.	Minimum Run out	2000 gpm at 28-ft. TDH
9.	Shutoff Head	65-ft.
10.	Motor Horsepower	25 HP
11.	Electrical Requirements	480 V, 3 Phase
12.	Minimum Solid Size	3-inch sphere
13.	Pump Discharge Size	6 inches
14.	Maximum Speed	1185 rpm

B. Pumps shall be installed in the West pump room as shown on the drawings. Design criteria are as follows:

1.	Number of Pumps	Pumps 4 & 7
2.	Configuration	As shown on drawings
3.	Process Fluid	Runoff
4.	Design Capacity	200 gpm at 45-ft. TDH
5.	Min. Efficiency@ Design	49%
6.	Max NPSHR @ Run out	20 feet
7.	Min Efficiency @ Run out	60%
8.	Minimum Run out	900 gpm at 20-ft. TDH
9.	Shutoff Head	50-ft.
10.	Motor Horsepower	7.5 HP
11.	Electrical Requirements	480 V, 3 Phase
12.	Minimum Solid Size	3 inch sphere
13.	Pump Discharge Size	4 inches
14.	Maximum Speed	1185 rpm

C. Pumps shall be installed in the East pump room as shown on the drawings. Design criteria are as follows:

1.	Number of Pumps	Pumps 8,9 & 10
2.	Configuration	As shown on drawings
3.	Process Fluid	Runoff
4.	Design Capacity	800 gpm at 40-ft. TDH
5.	Min. Efficiency@ Design	71%
6.	Max NPSHR @ Run out	22 feet
7.	Min Efficiency @ Run out	62%
8.	Minimum Run out	1800 gpm at 18-ft. TDH
9.	Shutoff Head	51-ft.
10.	Motor Horsepower	15 HP
11.	Electrical Requirements	480 V, 3 Phase
12.	Minimum Solid Size	3 inch sphere
13.	Pump Discharge Size	6 inches
14.	Maximum Speed	1185 rpm

1.05 QUALITY ASSURANCE

A. The pumps shall be furnished by a manufacturer who is fully experienced for a minimum of five years, reputable and qualified in the manufacture of the pumps to be furnished. The pumps shall be designed, constructed, delivered, and installed in accordance with the best practices and methods. The pumps

- shall be as manufactured by Hydromatic, Fairbanks Morse, Hayward Gordon, Yeoman's Pump Co. or prior approved equal.
- B. Should equipment which differs from these Specifications be offered and determined to be the equal of that specified, such equipment shall be acceptable only on the basis that any revision in the design and construction of the structure, piping, or appurtenant equipment be made at no additional cost to the Owner.
- C. The rated horsepower of the drive unit shall be such that the unit will not be overloaded nor the service factor reduced when the pump is operated at any point on the pump's capacity curve. If, due to the slope of the pump's performance curve, a drive unit of greater horsepower than specified is required to meet this condition, the pump will be considered for approval only if any and all changes in electrical work, etc, required by such a change will be provided at no additional cost to the Owner and be to the satisfaction of the Engineer.
- D. All pumps shall be rated for 24-hour continuous duty.
- E. Complete sets of operating and maintenance instructions shall be furnished in accordance with Section Division 1.
- F. A manufacturer's factory representative who has complete knowledge of proper startup, installation, and operation and maintenance of pumps shall be provided as noted below.

FOR INFORMATION ONLY

SECTION 15448 TUNNEL SUBMERSIBLE DRAINAGE PUMPS

PART 1 – GENERAL

1.1 SCOPE OF WORK

- A. The vendor shall furnish equipment and incidentals required to provide 2 vortex non-clog explosion-proof submersible centrifugal sewage pumps as specified herein.
- B. The vendor shall supply a control panel, which contains all necessary components for proper starting and operation of the pumps. This panel shall also provide a circuit that monitors the seal sensors in the pump.
- C. Pumps shall be equipped with stainless steel nameplate stating the unit is accepted for use in NEC Class 1, division 1, group C, D, hazardous locations with third party, (Factory Mutual,) approval.

1.2 OPERATING CONDITIONS

- A. Each pump shall be rated for 7.5 H.P., 480 volts, 3 phase, 60 hertz, 1150 R. P. M (MAX). The unit shall produce 300 gpm at 30 ft TDH. The pump shall be capable of handling a 3.25@ spherical solid. The pump shall be non-overloading throughout the entire range of operation without employing service factor.
- B. The pump shall also be capable of operating fully submersed with out damage. The pump motor shall reserve a minimum service factor of 1.15.
- C. The performance curve submitted for approval shall state in addition to head and capacity performance, the pump motor RPM, solid handling capacity, and reflect motor service factor.

PART 2 – PRODUCTS

2.1 PUMPS

A. The pump shall be a centrifugal, non-clog, solids handling, submersible, wastewater type, model S4lVX as manufactured by Hydromatic, Yeoman's Pump Co. or prior approved equal. The pump volute, motor and seal housing shall be high quality gray cast iron, ASTM A-48, Class 30. The pump discharge shall be fitted with a 4@ standard ASA 125-lb. flange, faced and drilled. The pump discharge flange shall have drilled holes, slotted flages shall not be allowed.

FOR INFORMATION ONLY