

## Pump #4 – Repairs

**Location:** Pump Station No. 2 (Bason Marina)  
566 W 107<sup>th</sup> St.  
Galliano, LA 70354

**Bid Opening: August 9, 2018 @ 11:00 A.M.**

### Issues found upon inspection:

Register fits on outer Piping:

Motor register on motor housing which is a male =	34.494/34.481
Motor housing to discharge head (Male) =	49.995/49.996
Discharge head to motor housing (Female) =	50.000/50.025
Discharge head to first section of pipe (Female) =	50.002/50.042
First section of pipe to discharge head (Female) =	50.003/50.022
Spider matting Discharge head to first section of pipe (Male) =	49.972/49.986
First section of pipe to reducer housing (Female) =	50.003/50.023
Reducer housing to first section of pipe (Male) =	50.001/49.970
Reducer housing to upper bowl housing (Male) =	46.487/46.481
Upper bowl housing to reducer housing (Female) =	46.523/46.522
Upper bowl housing to lower bowl housing (Male) =	Washed out completely
Lower bowl housing to upper bowl housing (Female) =	46.516/46.517
Lower bowl housing to suction bell (Male) =	35.496/35.494
Suction bell to lower bowl housing (Female) =	Washed out completely
Shafts and coupling fits:	
Upper shaft (#1) in way of coupling fits =	4.249 Top end
Drive Coupling bore to shaft =	4.250/4.251 Little out of round
Other end of shaft =	4.249 lower end
Coupling to shaft =	4.254
Intermediate shaft (#2) =	4.249 Top ends
Coupling bore to shaft =	4.4.255
Other end of shaft =	4.256
Other end of coupling =	4.255
Intermediate shaft (#3) =	4.250/4.248 Out of round
Coupling bore to shaft =	4.256
Other end of shaft =	4.250/4.248 Out of round

Other end of coupling =	4.253
Impeller shaft top end =	4.249
Coupling to shaft =	4.259
Shaft sleeve to bowl =	4.474/4.4.488
Bushing in bowl =	4.833/5.044
End of shaft to bell =	4.223/4.234
Bushing in bell =	4.830
# 1 tapered shaft sleeve =	4.498/4.489 Broken in two
#1 pipe bushing =	4.526/4.524
#2 tapered shaft sleeve =	4.498/4.496
#2 pipe bushing =	4.533/4.536
#3 tapered shaft sleeve =	4.496/4.486 Has bad scaring
#3 pipe bushing =	4.536/4.534

#1,2,3 inner pipes were saw cut because we were unable to loosen coupling nuts.

## Specifications for Repairs:

1. All outer parts and inner pipes are to be sandblasted, primed and two part black epoxy coating applied.
2. Stitch weld discharge head to motor register and re-machine to match motor housing.
3. Take clean cut on register fits until round on discharge head and first section of pipe.
4. Stitch weld OD of spider; machine to match discharge head and first section of pipe.
5. Take clean cut to round up register fit on first section of pipe to reducer housing.
6. Stitch weld register fit first section of pipe; machine to match reducer housing.
7. Stitch weld reducer housing register to bowl housing; machine to match upper bowl housing.
8. Weld up upper bowl housing register that mates to lower bowl housing; machine to match lower bowl.
9. Weld up suction bell register; machine to match lower bowl housing.
10. Three new shaft couplings should be manufactured new.
11. #2 and #3 shafts rounded up in way of coupling fits.
12. All three shafts need to be polished free from rust.
13. Both bell and bowl bushings need to be replaced.
14. The shaft sleeve to the bowl and the end of shaft needs light clean cut taken.
15. Two tapered shaft sleeves need to be renewed.
16. All three inner pipes need to be replaced.
17. Inner pipe couplings need to have threads chased.
18. Bushings in inner pipes need to be renewed.
19. Need to take a light clean cut in the case ring housing to remove the highs.
20. Weld up the OD of the impeller, re-machine to match housing.
21. Assemble using all new seals, packing, bolts, gaskets, etc.

22. Ship back to South Lafourche Levee District\*.

**Additional work to be performed on pump for repair:**

1. Add grease lines to all bearing-to-shaft points.
2. Add stainless-steel grease lines and protective covers where needed. Grease lines should run through the mounting flange of the pump.
3. Add two (2), 10 pound anodes below the waterline.
4. Provide measurement of total vertical travel of impeller, after unit is completely assembled.
5. Check and replace, if necessary, the lifting eyes of the pump.
6. Pump should be adequately greased before delivery.
7. Delivery to customer.

**\*Successful bidder will include in their bid, the price to pick up pump from Boland Marine & Industrial Co., LLC, located at 1000 Tchoupitoulas (at Andrew Higgins Blvd), New Orleans, LA 70153, and deliver to Pump Station No. 2 (Bason Marina) located at 566 West 107<sup>th</sup> Street, Galliano, LA 70354.**

**The successful bidder will notify the South Lafourche Levee District two weeks prior to delivery to the pump station to give the Levee District adequate time to prepare for the placement of the pump back into the pump station.**