

**AGENDA**

**ENGINEERING COMMITTEE MEETING  
LEUCADIA WASTEWATER DISTRICT**

Wednesday, November 6, 2019 – 10:00 a.m.  
1960 La Costa Avenue, Carlsbad, CA 92009

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1. **Call to Order**
2. **Roll Call**
3. **Public Comment**
4. **New Business**
  - A. Authorize the General Manager to execute an Agreement with Rockwell Engineering & Equipment Company, Incorporated for the purchase of a replacement Emergency Bypass Pump in an amount not to exceed \$71,539.20. (Pages 2 to 6)
5. **Information Items**
  - A. Batiquitos (B3) Discharge Section Replacement Project Update (verbal)
6. **Directors' Comments**
7. **General Manager's Comments**
8. **Adjournment**

**MEMORANDUM**

**DATE:** October 31, 2019  
**TO:** Engineering Committee  
**FROM:** Paul J. Bushee, General Manager *R&D for PTB*  
**SUBJECT:** **Award of Purchase Agreement for a Replacement Emergency Bypass Pump**

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**RECOMMENDATION:**

Staff requests that the Engineering Committee recommend that the Board of Directors:

1. Authorize the General Manager to execute an Agreement with Rockwell Engineering & Equipment Company, Incorporated for the purchase of a replacement Emergency Bypass Pump in an amount not to exceed \$71,539.20.
2. Discuss and take other action as appropriate.

**DISCUSSION:****Tactical Goal: Services / Purchases / Emergency Bypass Pump Replacement**

The Leucadia Wastewater District (District) currently owns and maintains one large portable emergency diesel engine driven bypass pump (diesel bypass pump). This diesel bypass pump enables the District to completely bypass the largest capacity pump stations, Batiquitos and Leucadia. During an event of a loss of pumping capability at either pump station, staff deploys and sets up the diesel bypass pump to maintain collection system operation to prevent a sewer system overflow.

On January 1, 2020, the San Diego County Air Pollution Control District (APCD) will implement stricter requirements on portable diesel engines. When this occurs, the current diesel bypass pump will be out of compliance with APCD regulations. Therefore, the District needs to replace the diesel bypass pump to maintain emergency bypass pumping capability. Additionally, the District's current emergency bypass pump is 21 years old and has exceeded its useful life.

During the development of the replacement emergency bypass pump specifications, staff evaluated whether an electric motor driven pump would be a viable replacement for the diesel engine driven pump. As a result of this evaluation, staff and District Engineer Wilson concluded that an electric motor driven pump can meet the pumping requirements and is a better option for the following reasons:

1. No annual permit required with APCD, a cost savings of \$230 per year
2. Smaller trailer wheel base making it easier to tow, back-up and position
3. Lower maintenance costs associated with an electric motor
4. No limit on the time an electric motor driven pump can be connected at a pump station because it is not a violation of APCD regulations

As you may recall, last month the Board of Directors approved the purchase of two (2) portable emergency generators. During a loss of SDG&E service, these generators will provide emergency electrical power for four satellite pump stations that are not equipped with emergency generators. Additionally, either one of these two new generators can be used to provide electrical power to the new electric motor driven bypass pump (electric bypass pump). Staff used this holistic approach in planning the purchase of the generators and the electric bypass pump.

To procure the new electric bypass pump, the District prepared performance specifications and identified five (5) pump manufacturers that could meet the criteria. On August 20, 2019, the District distributed a Request for Sealed Bid to the manufacturers. Additionally, a Request for Bids was published in the San Diego Union-Tribune. The bids were due on October 17, 2019. The District received three bids with the following results:

Supplier	Bid Submitted
Rockwell Engineering & Equipment Co.	\$71,539.20
Charles King Company	\$97,367.31
Xylem Dewatering Solutions Inc.	\$202,943.00

The bids were reviewed by Dexter Wilson and Kathleen Heitt at Dexter Wilson Engineering Inc. (DWEI). The bid memorandum is attached for your review. Based on their review of the bid documents, DWEI determined that Rockwell Engineering & Equipment Co, Inc. (Rockwell) has the requisite knowledge and experience to provide the electric bypass pump. Rockwell's specified electric bypass pump satisfied all bid specifications. It is important to note that the District will not trade in the diesel bypass pump. Instead, it will be sold at public auction at a later date.

As a result of their evaluation, DWEI recommends that Rockwell be awarded the contract as the lowest responsive and responsible bidder. Staff concurs with DWEI's assessment and recommends that the Board award the purchase of the Emergency Electric Motor Driven Bypass Pump to Rockwell Engineering & Equipment Co, Inc. in an amount not to exceed \$71,539.20.

**FISCAL IMPACT:**

The Fiscal Year 2020 Capital Acquisition Budget includes sufficient funding for the purchase of the Emergency Bypass Pump.

jms:PJB

Attachment

# DEXTER WILSON ENGINEERING, INC.

DEXTER S. WILSON, P.E.  
ANDREW M. OVEN, P.E.  
STEPHEN M. NIELSEN, P.E.  
NATALIE J. FRASCHETTI, P.E.  
STEVEN J. HENDERSON, P.E.

## MEMORANDUM

103-500

TO: Jeff Stecker, Leucadia Wastewater District

FROM: Dexter S. Wilson, P.E., Dexter Wilson Engineering, Inc. *DSW*  
Kathleen Heitt, E.I.T., Dexter Wilson Engineering, Inc.

DATE: October 24, 2019

SUBJECT: Trailer Mounted Electric Motor-Driven Pump Bid Review

This memorandum provides a summary of our evaluation of bid results and the responsiveness of the low bid for Leucadia Wastewater District's (LWD or District) October 3<sup>rd</sup>, 2019 Request for Sealed Bids for a trailer-mounted electric motor-driven pump.

### Bid Results

Bids were opened October 17<sup>th</sup>, 2019 and three bids were received. The bids are summarized in Table 1 below.

TABLE 1 BID SUMMARY	
Company Name	Bid Amounts
Rockwell Engineering & Equipment Co, Inc.	\$71,539.20
Charles King Company	\$97,367.31
Xylem Dewatering Solutions Inc.	\$202,943.00

**Review of Apparent Lowest Bidder**

Rockwell Engineering & Equipment Co, Inc. (Rockwell) submitted the apparent lowest bid. Dexter Wilson Engineering Inc. finds Rockwell to be the lowest responsive bidder. The following reviews have been completed:

**Bid Form.** Nick Rockwell, the Senior Sales Engineer, completed and signed the bid form on behalf of Rockwell. The final bid including all options, sales tax, and delivery was priced at \$71,539.20. Relevant vendor information for Rockwell including the address and contact information were also included.

**Delivery Date.** The delivery date on the bid form was stated as 7 weeks from the Notice of Award. This complies with the specified requirement that the delivery occur within 7 weeks or sooner of the Notice of Award.

**Pump Design Requirements.** The pump included in the bid has the hydraulic capacity to meet both the design duty point of 3,200 gpm at 100 feet TDH and the second duty point of 4,600 gpm at 90 feet TDH. It is a fully automatic priming pump with a solids handling capability of 3.75 inches as specified.

**Pump Additional Equipment and Appurtenances.** All pump equipment including the impeller, bearings, shafts, seals, suction and discharge flanges, gaskets, O-rings, priming system, and check valve meet or exceed the specified requirements. Deviances from the specifications include a CA6NM stainless steel impeller and 174PH stainless steel shaft which were both determined to be acceptable. Wear rings pressed into the suction cover of the pump will be utilized rather than wear plates. The seals will have a tungsten carbide stationary seat and a silicon carbide rotating face.

**Motor.** The motor for the generator will be 200 horsepower and will be manufactured by Teco Westinghouse. A soft starter will also be included and will be manufactured by Franklin Control Systems. The predicted supplier of the District's new generator reviewed the proposed motor and said it should work with the generator to be supplied.

**Frame and Trailer.** As specified, Rockwell included a frame and trailer in their bid for the pump with all relevant Department of Transportation running lights, stop lights, reflectors, and license plate holders. The assembled trailer will have a maximum weight less than 20,000 pounds and will include a lifting bail, pintle trailer hitch, spare tire, and spare tire mount.

**Options Included.** Rockwell included the required float switch options. The float switches will be NEC Class 1 Division 1 rated high- and low-level float switches compatible with the provided control panel.

**Warranty.** Rockwell will include a 2-year warranty for all equipment as specified. They did not include an option for an extended warranty. All services will be provided by Rockwell technicians.

**Company and References.** Rockwell is based out of Tustin, California. In addition to trailer-mounted pumps they also a variety of other pumps and other wastewater products with a specialty in chopper pumps. Pioneer Pumps are one of several pump brands they carry.

**Trailer/Engine Construction.** The trailer-mounted pump will be manufactured entirely by Pioneer Pump who has been manufacturing pumps for more than 20 years. Rockwell will coordinate the delivery of the pump package to LWD.

### **Recommendation**

Dexter Wilson Engineering Inc. recommends the purchase of the trailer-mounted electric motor-driven pump be awarded to Rockwell as the lowest responsive bidder based on the bid amount and submitted documentation demonstrating their satisfaction of the bid documents.

DSW:KH:sc