



**WEST BASIN MUNICIPAL WATER DISTRICT**  
17140 S. Avalon Blvd., Suite 210  
Carson, CA 90746

**AGENDA NO. 24**

**JANUARY 14, 2010 – Water Resources**

Little (Chair), Gray

**JANUARY 25, 2010 – Board Meeting**

Prepared by: Roni Young

Submitted by: Wyatt Won

Approved by: Rich Nagel

## ACTION CALENDAR

### BARRIER PUMPS VARIABLE FREQUENCY DRIVE CONSULTANT AWARD

#### SUMMARY:

Highly treated recycled water is pumped to the West Coast Barrier (Barrier) from the Edward C. Little Water Recycling Facility (ECLWRF) through three 150-horsepower and two 300-horsepower constant speed pumps. Flow is controlled using a flow control valve. As part of the Southern California Edison (SCE) Energy Incentive and Rebate Program, West Basin Municipal Water District (West Basin) could save power costs by installing variable frequency drives (VFDs) on two of the larger size Barrier pumps.

Staff issued a "Request for Proposals" (RFP) for consulting services to design VFDs for Barrier pumps at the ECLWRF on December 10, 2009. The scope of the RFP included the following tasks:

1. Develop plans and specifications to install two 300-horsepower VFDs for Barrier pumps P-171304 and P-171305. Include modifications and retrofits needed to accommodate the new VFDs, which includes modifying the existing Motor Control Center (MCC) panel, reconfiguring and rewiring the MCC section, and removing the existing starters;
2. Select necessary PVC coated conduit and shielded analog wiring for speed reference and feedback;
3. Design and select an adequate location for the new MCC cabinet and weather protection. For any new MCC panel, an arch flash analysis must be included;
4. Identify power source for the VFDs;
5. Assist West Basin with review of contractor submittals during construction;
6. Attend progress meetings with West Basin and United Water Services (UWS) during design phase; and
7. Attend meetings with the construction team during the construction phase.

Seven proposals were received in response to the RFP. Of the seven proposals, three firms with the highest initial scores were short-listed and interviewed. A panel consisting of two staff and one UWS staff reviewed the proposals and participated on the interview panel. The three firms were scored on the firm's and project team's experience performing the tasks listed above, their understanding of the "Scope of Work" and West Basin's needs, and the level of effort proposed to accomplish the tasks. A summary of the three proposals is shown in the following table.

Description	Maximum Points	Firm		
		Lee & Ro, Inc. City of Industry	Cannon Santa Monica	ProjectLine Costa Mesa
Proposal completeness	10	9	9	9
Project approach and understanding	25	24	19	22
Professional qualifications of key personnel	25	23	20	21
Experience in similar projects	25	22	20	18
Cost	15	11	9	6
Local Business Enterprise	3	0	0	0
<b>Total Score</b>	<b>100</b>	<b>89</b>	<b>77</b>	<b>76</b>
Mandatory Task Cost		\$39,962	\$44,290	\$62,000
Optional Task (Structural)			\$3,000	
<b>Total Cost</b>		<b>\$39,962</b>	<b>\$47,290</b>	<b>\$62,000</b>

The panel recommends Lee and Ro, Inc. Although all three firms are qualified, the panel rated Lee and Ro, Inc. higher than the other firms because:

- The proposed team is very strong in terms of specific relevant experience;
- The proposed team is knowledgeable of West Basin’s and United Water’s operational processes and issues; and
- The proposed team presented a very practical approach to the design of VFD for the Barrier pumps.

STRATEGIC BUSINESS PLAN IMPLEMENTATION:

Goal 4: Sound Financial and Resources Management – West Basin is committed to efficient business operations, financial planning and asset management.

FISCAL IMPACTS:

Funds are included in the Fiscal Year 2009-10 Capital Budget.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on January 14, 2010 and recommended for approval at January 25, 2010 Board meeting.

RECOMMENDED MOTION:

That the Board authorizes the General Manager to enter into an agreement with Lee and Ro, Inc. for Barrier pumps VFD design consulting services for \$39,962, plus 10% for contingencies, for a total contract amount not-to-exceed \$43,958.

LIST OF EXHIBITS:

None.