

**WEST BASIN MUNICIPAL WATER DISTRICT**

**JANUARY 7, 2004 - Water Resources**  
McDonald, Little  
**JANUARY 26, 2004 - Board Meeting**  
Prepared by: Phil Lauri/Paul Cook  
Submitted by: Paul E. Shoenberger  
Approved by: Darryl G. Miller

## ACTION CALENDAR

WEST BASIN WELLS - DESIGN AND CONSTRUCTIONSUMMARY:

Staff has identified the need to design and construct two Wells: 1) a new extraction Well at the Brewer Desalter; and 2) a monitoring Well along the West Coast Basin Seawater Barrier. A description of each Project is as follows:

**Brewer Desalter Extraction Well**

The Brewer Desalter was constructed in the early 1990's to remove salt from brackish groundwater in the Torrance area. Two Wells, both constructed over 40 years ago, have been used to extract this brackish water. One of these Wells has failed and the other has essentially reached the end of its useful life. Staff is proposing to replace the two existing extraction Wells with one new Well. The expected production rate of this new Well is 1,500 gpm, which is sufficient quantity of influent water for the Brewer Desalter. This replacement Well will be installed adjacent to one of the existing extraction Wells within the Brewer Desalter Facility. Once the replacement Well is complete, the existing Wells at the Brewer site will be destroyed.

**West Coast Basin Seawater Barrier Monitoring Well**

The purpose of this monitoring Well is to enable staff to take samples of the groundwater quality down-gradient of the West Coast Seawater Barrier on the inland side. The purpose of the monitoring Well is to track the quality of the groundwater as it moves towards the closest domestic water production Wells. The monitoring Well will be designed to a depth of approximately 700 feet. The monitoring Well is proposed in the vicinity of Del Amo Boulevard and Prospect Avenue in the City of Torrance.

**Wells Design and Construction**

Due to the timing of Projects, staff recommends proceeding with the design of both the monitoring Well and the extraction Well under the same design contract. Construction of the two Wells may (or may not) be undertaken by one contractor, depending on the results of the bidding process. All project costs will be tracked separately and coded to the appropriate projects.

A "Request for Proposals" was issued to twenty local engineering firms, including firms that specialize in the design of extraction Wells and monitoring Wells. Proposals were received by the due date, December 19, 2003, from the following consulting firms:

- Daniel Boyle Engineering
- Tetra Tech

Interviews of both submitting firms were conducted on December 23, 2003. The evaluation committee consisted of the following individuals:

- Paul Cook, P.E., Manager of Engineering
- Richard Nagel, P.E., Manager of Water Quality
- Phil Lauri, P.E., Senior Water Resource Engineer
- Uzi Daniel, Water Quality Analyst
- John Foth, P.E., Manager of Engineering - Cal Water

The evaluation Committee reviewed each firm's proposal and participated in the interviews of each proposing firm. Based on the proposals and interviews, firms were scored on the following criteria.

<b>Item</b>	<b>Factor/Consideration</b>	<b>Maximum Points</b>
1	Completeness of Proposal	10
2	Project Approach and Understanding, Including Communication and Coordination	20
3	Team's Experience with Well Design & Construction	20
4	Team's Experience with Pipeline Design and EIC Design	15
5	Professional Qualifications of Key Personnel	15
6	Completeness of Proposed Hours for Project Tasks and Duration	10
7	Total Cost, Reasonable Scale to Services Provided	10
<i>Maximum Allowable Points</i>		100

The evaluation scores from each Committee member were averaged for each firm. The results are as follows:

<b>Consultant</b>	<b>Average Evaluation Score</b>	<b>Proposal Fee</b>
Daniel Boyle Engineering	94	\$239,551
Tetra Tech, Inc.	90	\$228,082

The scores for each criterion are reflected in the Evaluation Matrix attached as Exhibit "A".

The Evaluation Committee determined the team proposed by Daniel Boyle Engineering (DBE) to be the most qualified to perform the professional services to design and monitor the construction of the Brewer Desalter Well and Barrier Monitoring Well. Specifically, DBE provided a balanced approach that the Committee agreed would not only optimize the flow, but also maximize chloride removal of the Brewer Extraction Well. The Committee felt that the field presence included in DBE's "Scope of Services" was most appropriate for the work envisioned. DBE also presented a strategy for integrating the construction of the new Brewer Well with the destruction of the existing Wells. By providing a solid approach to the technical challenges of the project, DBE justified the additional 5% design cost expenditure. The Committee expects that this additional 5% cost expenditure will be offset with savings in the Well development and operation. Reference checks for both firms and their respective subconsultants were very positive.

FISCAL IMPACTS:

Funds for the work are included in the fiscal year 2003-04 and will be included in the fiscal year 2004-05 budget.

ENVIRONMENTAL COMPLIANCE:

Environmental compliance measures will be addressed as part of the project pre-design effort.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on January 7, 2004 and recommended for approval at the January 26, 2004 Board meeting.

RECOMMENDED MOTION:

That the Board authorizes the General Manager to enter into an agreement with Daniel Boyle Engineering to provide professional services for the Brewer Desalter Extraction Well and the West Coast Basin Seawater Barrier Monitoring Well for an amount of \$239,600, plus 10% for unforeseen conditions for a total amount not-to-exceed \$263,560.

EXHIBITS:

Exhibit "A" - Design Services Evaluation Matrix

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